

#### Procedure

# ECOSYSTEM SERVICES PROCEDURE: IMPACT DEMONSTRATION AND MARKET TOOLS

FSC-PRO-30-006 V2-0 EN



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V1-2	Minor typographical corrections. Approved by the PSU Director in December 2019.	23 December 2019
V2-0	Major revision incorporating changes resulting from Motion 48/2021 and partially from Motion 49/2021 and Motion 53/2021. Approved by FSC Board of Directors in November 2024.	14 November 2024

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# INTRODUCTION

#### Connecting FSC forest managers to ecosystem services markets

The Ecosystem Services Procedure (the/this procedure) offers a voluntary framework to demonstrate the positive impact of responsible forest management practices on ecosystem services, thereby generating verified ecosystem services impacts (ES impacts). It also allows forest managers and sponsors to make ecosystem services claims (ES claims) to promote and communicate about verified ES impacts as part of their broader sustainability strategies.

This procedure can be used to demonstrate the positive impact on seven types of forest ecosystem services:

- biodiversity conservation,
- carbon sequestration and storage,
- water services,
- soil conservation,
- recreational services,
- cultural practices and values, and
- air quality.

Market research carried out by FSC, and the use of this procedure to date, confirms that forest managers are interested in communicating the site-level impacts of FSC certification, and that sponsors are willing to pay for verified ES impacts that build on internationally trusted FSC Forest Management (FSC FM) or Forest Management/Chain of Custody Certification (FM/CoC).

#### 2050 vision

FSC's 2050 vision is 'resilient forests sustain life on Earth': a new forest paradigm is realized where the true value of forests is recognized and fully incorporated into society worldwide as forests being:

- vital ecosystems housing most of the world's terrestrial biodiversity,
- the life-support systems for hundreds of millions of Indigenous Peoples, traditional peoples and local communities, and
- key to the necessary shift to bio-based and low-carbon circular economies.

This version of the procedure reflects FSC's Global Strategy 2021-2026 and 2050 vision by strengthening market solutions to address the climate and biodiversity crises, to support the efforts of the corporate sector and strengthen good practices at the forest level. It helps organizations monitor their impact on nature and report progress towards their sustainability goals, while incentivizing forest managers globally to adopt responsible forest management practices and pursue FSC certification.

This procedure aspires to be the solution many global organizations are looking for. As an impact verification framework, it is well suited for producing the quantitative evidence companies, investors, and governments need to show restoration, maintenance or improvement of ecosystem services in their land and supply chain but also as a contribution to global goals. The procedure supplies third party verified data and enables robust ES claims, thereby unleashing the power of corporate climate and biodiversity action for good, without the fear of greenwashing.

#### Version 2-0 of the procedure

Version 2-0 of the procedure considers FSC FM or FM/CoC certification as a solid foundation for verifying ES impacts. It offers two types of ES impacts: enhancement and maintenance.

- 'Enhancement' refers to the improvement or restoration of ecosystem services.
- 'Maintenance' refers to keeping ecosystem services in a good condition, acknowledging that the protection of ecosystem services requires efforts and investments.

Since version 1 of the procedure was first published in 2018, ecosystem services markets have evolved substantially. Version 2-0 of the procedure provides the robustness and integrity required by today's ecosystem services markets and adds important social safeguards. At the same time, it is improving accessibility for FSC certificate holders, especially those managing small or low-intensity managed forests (SLIMF) or community forests (CF).

The latest eligibility criteria for SLIMF and CF can be found in <<u>FSC-STD-01-003 SLIMF Community</u> <u>Eligibility Criteria</u>>. Version 2-0 of the procedure is fully compatible with the use of the <<u>FSC-PRO-30-011 Continuous Improvement Procedure</u>> and the <<u>FSC-STD-30-005 Forest Management Groups</u>>.

The procedure also unlocks possibilities of digital transformation including connection to technological tools to conduct the Ecosystem Services verification process and standardized data collection.

#### **Uses of ES impacts**

Verified ES impacts and associated ES claims can be used for:

- data-driven storytelling and improved promotion (by The Organization);
- evidence in the form of third-party verification of a positive impact as a criterion to benefit from a nature-related fund (by The Organization and by the manager of the nature-related fund);
- providing third-party verified evidence of positive impacts in mandatory or voluntary non-financial sustainability disclosures (including reporting on a company's ES footprint) and tracking progress towards ecosystem services targets (by The Organization or by a sponsor);
- within value chain mitigation (or within value chain abatement) to incentivize and reward positive action/ impact in its value chain to advance key sustainability targets (by a sponsor);
- beyond value chain contributions, when these are not used to compensate or neutralize residual negative impacts (by a sponsor);
- evidence that an ES impact has happened, triggering or justifying payments for ecosystem services (by a sponsor).

Validated ES impacts and associated ES claims can be used for:

- securing financial support (sponsorship) for future impact verification (by The Organization);
- promoting the plan to reach a future ES impact (by The Organization);
- promoting support for the implementation of the plan to reach a future ES impact (by a sponsor).

The table of contents shows the sections in the procedure that are more relevant for each actor:

The certification body

A sponsor



# CONTENTS

Intro	duction	3		
A. So	соре	7		
B. R	eferences	8		
C. Te	erms and definitions	9		
D. A	obreviations	14		
Part	I: General requirements	15		
1	General requirements	15		
	Requirements for forest management groups	16		
Part	II: Impact demonstration	18		
2	Step 1: Selection of the ecosystem service(s)	18		
3	Step 2: Description of the ecosystem service(s)	19		
4	Step 3: Development of a theory of change and a risk management plan	20		
5	Step 4: Selection of outcome indicators	22		
6	Step 5: Choosing methodologies	22		
7	Step 6: Measurement of outcome indicator(s)	23		
8	Step 7: Statement of results	25		
9	Validation of ES impacts	25		
Part impa	III: Preparing for the use of verified and validated ecosystem services acts	26		
10	Revenue sharing agreement	26		
11	Formalizing sponsorships	27		
	Requirements for The Organization	27		
	Requirements for sponsors	28		
	Requirements for sponsors with material dependence on forests	28		
12	Requirements to add verified ES impacts to product information records	29		

Part IV: Promotion of verified and validated ecosystem services impacts				
13	Requirements to make an ES claim	30		
14	Ecosystem services claims made by The Organization	32		
15	Ecosystem Services claims made by a sponsor	32		
Part	Part V: Evaluation requirements			
16	Frequency and timing of evaluations	34		
17	Preparation for evaluation	35		
18	Evaluation, review and decision making	35		
19	Reporting requirements	36		
Ann	Annex A. Content of the ecosystem services report (ESR)			
Annex B. Impacts, Indicators and Measurements				
20	ES1: Biodiversity conservation	47		
20 21	ES1: Biodiversity conservation ES2: Carbon sequestration and storage	47 53		
21	ES2: Carbon sequestration and storage	53		
21 22	ES2: Carbon sequestration and storage ES3: Water services	53 59		
21 22 23	ES2: Carbon sequestration and storage ES3: Water services ES4: Soil conservation	53 59 61		

# A. SCOPE

This procedure specifies requirements for:

- **The Organization**, who shall conform with the applicable requirements of Parts I, II, III, IV, Annex A, and B to demonstrate the positive impact of their management activities on ecosystem services, and to use ecosystem services claims (ES claims).
- **Sponsors**, who shall conform with applicable requirements of Part III and IV to register their sponsorship in the FSC Registry and use ES claims.
- Certification bodies accredited for FSC forest management certification, who shall conform with Part V when evaluating conformity of The Organization with this procedure.

All aspects of this procedure are considered normative, including the scope, effective and validity dates, references, terms and definitions, footnotes, graphics, tables and annexes, unless otherwise stated.

Notes, information boxes and examples are not considered normative.

As part of the FSC normative framework, this procedure is subject to the review and revision requirements of <<u>FSC-PRO-01-001 V4-0 The Development and Revision of FSC Requirements</u>>.

This standard may be used in conjunction with:

- <<u>FSC-STD-30-005 Forest Management Groups</u>>
- <FSC-PRO-30-011 Continuous Improvement Procedure>

Section 9 (Validation of ES impacts) can be used with <<u>FSC-STD-30-010 Controlled Forest</u> <u>Management</u>>.

Verified or validated ES impacts granted under <<u>FSC-PRO-30-006 V1-2 Ecosystem Services Procedure:</u> <u>Impact Demonstration and Market Tools</u>> (V1-2) remain valid:

- a) for five years after the evaluation date; OR
- b) until the next FM main evaluation if such evaluation falls within the transition period of this revised version (V2-0)

# **B. REFERENCES**

The following referenced documents are indispensable for the application of this document.

For references without a version number, the latest version of the referenced document (including any amendments) applies:

Code	Title
Forest Management	
n.a.	Relevant Forest Stewardship Standard
FSC-STD-30-005	Forest Management Groups
FSC-PRO-30-011	Continuous Improvement Procedure
FSC-STD-01-003	SLIMF and Community Forest Eligibility Criteria
FSC-STD-30-010	Controlled Forest Management
Trademark use	
FSC-STD-50-001	Requirements for Use of the FSC Trademarks by Certificate Holders
n.a.	FSC Trademark Use Guide for Promotional Licence Holders
Accreditation	

FSC-STD-20-001	General Requirements for FSC Accredited Certification Bodies
FSC-STD-20-007	Forest Management Evaluations

# C. TERMS AND DEFINITIONS

For the purposes of this document, the terms and definitions included in <<u>FSC-STD-01-002 Glossary of</u> <u>Terms</u>>, <<u>FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship</u>>, <<u>FSC-STD-60-004</u> <u>International Generic Indicators</u>>, and the following apply.

Additionality of ES impact(s): the implementation of any management activities as part of an ES project leading to ES impact(s) that are additional to what is legally required and that would not have been implemented if there were no (expected) financial support by a sponsor.

**Baseline value**: The measurement value of the outcome indicator reflecting a baseline against which the present value is compared in order to demonstrate an ES impact. Column 4 in the impact tables of Annex B includes a number of different types of baseline values, e.g. at least one previous value of outcome indicator, a relevant standard, and/or a reference value.

**Bundling**: multiple ES impacts from an ES project are packaged and promoted together (as a bundle) to one or more sponsors.

**Compensation and neutralization beyond the value chain**: Mitigation action or investments that fall outside of a company's value chain, where the company claims to compensate or offset its (residual) negative impact on ecosystem services. Commonly referred to as 'offsetting' in global ecosystem services markets.

**Contribution**: Action or investment to support a positive impact on ecosystem services within or beyond a company's own value chain, without claiming to offset or compensate. It represents a complement – and in no way an alternative – to directly taking responsibility for the company's impact(s) on ecosystem services.

(Source: adapted from New Climate Institute (2023): <u>A guide to climate contributions. Taking</u> responsibility for emissions without offsetting. New Climate Institute.)

**Direct beneficiaries:** Any person, group of persons, or entity that uses or is likely to use the benefits from ES provided in the management unit (MU).

NOTE: For example, communities whose drinking water is provided by the water service, or tourists that benefit from areas of importance for recreation. Module 1 of <<u>FSC-GUI-30-006 Guidance for</u> <u>Demonstrating Ecosystem Services Impacts</u>> provides guidance on how to identify beneficiaries for each ecosystem service.

## Ecosystem services (ES):

In the <<u>FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship</u>>, 'ecosystem services' are defined as:

"The benefits people obtain from ecosystems. These include:

- a) provisioning services such as food, forest products and water;
- b) regulating services such as regulation of floods, drought, land degradation, air quality, climate, and disease;
- c) supporting services such as soil formation and nutrient cycling; and
- d) cultural services and cultural values such as recreational, spiritual, religious and other nonmaterial benefits."

(Source: Based on R.Hassan, R.Scholes and N.Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC)."

In the context of this procedure, 'ecosystem services' refers to a specific subset of forest ecosystem services:

- 1. biodiversity conservation
- 2. carbon sequestration and storage
- 3. water services
- 4. soil conservation
- 5. recreational services
- 6. cultural practices and values
- 7. air quality

**Ecosystem services category (ES category)**: One of the seven ecosystem services for which an impact can be demonstrated using this procedure, see list in the definition of 'ecosystem services'. A single ES category contains multiple ecosystem service impacts that can be demonstrated, see Annex B.

**Ecosystem services claim (ES claim)**: Any written, visual or broadcast communication made by The Organization or a sponsor, using FSC trademarks, based on a positive, verified or validated ES impact generated through the use of this procedure.

NOTE: Clause 13.2 specifies the elements of an ES claim.

**Ecosystem services impact (ES impact)**: The maintenance or enhancement of ecosystem services, or benefits derived from them resulting from the implementation of responsible forest management activities.

NOTE: In the context of this procedure, Annex B contains all the impacts that can be demonstrated. See also: verified ecosystem services impact.

**Ecosystem services project (ES project)**: The project which involves the implementation of management activities that contribute to the demonstration of the ES impact in (part of) the MU.

**Ecosystem services project area**: The physical location in the MU where the ES project activities take place, and the ES impact is demonstrated.

**External environmental asset**: A legal commodity or tradable instrument representing an environmental outcome that is certified or generated using a non-FSC scheme, such as a reduced emission or removal of greenhouse gases (e.g., carbon credit), increased populations of threatened species (e.g., biodiversity credit), or a specific volume of water has been sustainably supplied, purified and/or conserved by a project (e.g., verified water benefit certificate).

(Source: Adapted from Richardson, D. et al. [2017] International Encyclopedia of Geography: People, the Earth, Environment and Technology. Wiley-Blackwell).

**Fair distribution**: A distribution of revenue that reflects the role, rights, investments and risks of each of the identified parties in the revenue sharing agreement.

Footprint: The sum of a company's impacts on a specific ecosystem service.

NOTE 1: This usually includes those in the company's value chain.

NOTE 2: For example, a company sourcing timber from an FSC-certified forest is also reporting on its carbon emissions and efforts to reduce carbon emissions using the Greenhouse gas (GHG) Protocol. This company is interested in data for their carbon footprint related to their sourcing.

**Mitigation hierarchy**: A stepwise approach to take responsibility for and mitigate negative impacts on ecosystem services resulting from project and business activities. Often, these include the negative impacts from the project/ business own operations as well as those in the value chain. The 5 sequential steps of the mitigation hierarchy are:

- 1. understand the negative impact;
- 2. avoid the negative impact;
- 3. minimize the negative impact that cannot be avoided;
- 4. restore (or rehabilitate) the negative impact that cannot be minimized; and
- 5. offset the residual negative impact that cannot be restored.

(Source: Adapted from <u>https://www.thebiodiversityconsultancy.com/our-work/our-expertise/strategy/mitigation-hierarchy/</u>, accessed July 2024)

**Outcome**: Ecological or social condition on the ground that has changed as a consequence of the outputs representing results towards achieving the selected ecosystem services impact.

**Outcome indicator**: Measurable variable of an outcome that informs whether a change has happened as a result of the implementation of management activities.

NOTE: Examples of outcome indicators are listed in Column 2 of the tables in Annex B.

**Outputs**: Immediate, direct and quantified consequences from management activities implemented in the MU.

NOTE: It is recommended that the output also includes the period in which the management activities were implemented.

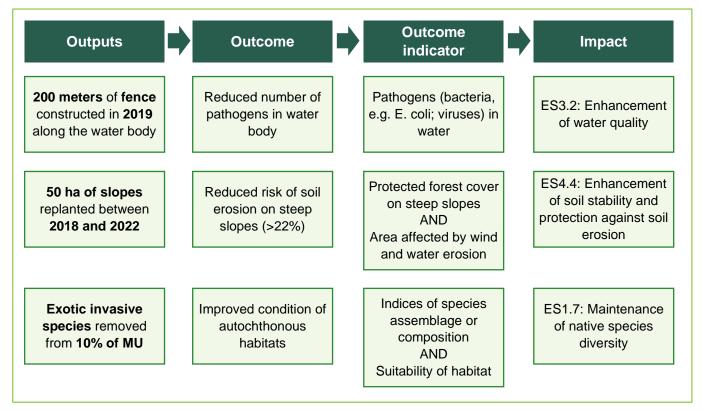


Figure 1 Examples of outputs, outcomes, outcome indicators and impacts (the last two are obtained from Annex B).

**Present value**: The value of the outcome indicator reflecting the present condition of the outcome or impact in the MU. This value is taken as recently as possible and a maximum of 5 years from the date of the verification or validation of the ES impact.

Primary data: Direct measurements or first-hand, original data, from the forest.

NOTE: For example, forest inventories, field assessments, direct questionnaires, sensor-based counts of visitors, model-based approaches derived from direct measurements, or remote sensing-based approaches calibrated using direct measurements.

# **Restoration/ ecological restoration**: In the <<u>FSC-POL-01-007 FSC Policy to Address Conversion</u>>, 'ecosystem services' are defined as:

"Process of assisting the recovery of an ecosystem, and its associated conservation values, that have been degraded, damaged, or destroyed. (Source: adapted from 'International principles and standards for the practice of ecological restoration'. Gann et al 2019. Second edition. Society for Ecological Restoration) (shortened version – refer to the <<u>FSC-PRO-01-007 FSC Remedy Framework</u>> for full definition for full definition)."

**Revenue**: Any payment received from a sponsor for the validated or verified ES impact(s) on ecosystem services, less any charges, taxes or similar fees levied by the host country government and applicable governmental agencies.

**Secondary data**: Data that is not directly collected from the MU of The Organization but provides a suitable proxy.

NOTE: For example, regional average data, data obtained from literature or data collected in a forest that shares the same characteristics in relation to the outcome indicator for which a value is being sought.

**Sponsor**: Company, individual, foundation or donor organization that provides funding for a project or activity leading to the validation or verification of an ES impact within an MU, and which has signed a sponsorship registration agreement with FSC.

NOTE: This financial support helps The Organization to invest in the protection of valuable ecosystem services in the MU and provides a reward and/or an incentive to continue to do so. The sponsor benefits from this transaction through obtaining:

- a) third party verified evidence of the positive impact; and
- b) the ability to promote and communicate about their contribution using FSC trademarks (i.e. making ES claims), when the sponsor has a valid promotional licence agreement with FSC.

**Sponsor with material dependence on forests**: Sponsor that is part of a supply chain of forest-based products or that has dependence on forest products for its business model. This is a company that:

- a) takes legal ownership of forest-based products; and
- b) manufactures or changes the composition (e.g. mixing or adding forest-based materials to the product) or physical integrity (e.g. re-packaging, re-labelling) of forest-based products.

NOTE: For example, the following sectors are normally considered to have material dependence on forests:

- a) Forest and paper products: forestry, timber, pulp and paper, natural rubber, cork, other nontimber forest products.
- b) Consumer goods: containers and packaging, textiles manufacturing and apparel, consumer durables, household and personal products, tyres, building and construction products.

(Source: adapted from 'Forest, Land and Agriculture Science-Based Target-Setting Guidance'. Anderson et al 2022. World Wildlife Fund, Washington, DC)

**Sponsorship**: Transaction between The Organization and a sponsor based on a validated or verified ES impact, in which legal ownership of the validated or verified ES impact remains with The Organization.

NOTE: Part III presents the normative requirements to formalize a sponsorship.

**Stacking**: multiple ES impacts from an ES project are packaged and promoted separately to multiple sponsors.

**Theory of change**: Schematic representation of how the implementation of specific management activities is expected to result in a desired change and lead to a positive impact on ecosystem services.

NOTE: This procedure distinguishes between management activities, outputs, outcomes and ES impacts, see Figure 3 in Section 4.

**Validation**: The evaluation and ex-ante determination by a certification body that an ecosystem services impact is expected to happen in the future based on a feasible plan to achieve this.

NOTE: Where an impact cannot yet be demonstrated, the certification body can validate that The Organization has a feasible plan that is likely to lead to verification of the impact in a future evaluation.

**Verification**: The evaluation and ex-post determination by a certification body that an ecosystem services impact has occurred.

Validated ecosystem services impact: A feasible plan to achieve a positive ecosystem services impact in the future, which:

- a) has been validated by the certification body according to Part V of this procedure;
- b) has a validity of five (5) years from the date of validation;
- c) is registered in the designated FSC system;
- d) serves as a basis to make ecosystem services claims.

Verified ecosystem services impact: Demonstrated positive impact on an ecosystem service which:

- a) has been verified by the certification body according to Part V of this procedure;
- b) is unique, non-transferable and non-tradable;
   NOTE: ES impacts verified through this procedure stay with the legal or customary rightsholder.
   Companies sponsoring ES impacts cannot transfer the right to make ES claims to other parties.
- c) has a validity of five (5) years from the date of verification;
- d) is registered in the designated FSC system;
- e) serves as a basis to make ecosystem services claims.

**Within value chain mitigation**: Mitigation action or investments that fall within a company's value chain. This includes activities within a company's value chain that avoid or reduce negative impacts on ecosystem services, or that create positive impacts on ecosystem services. Also referred to as "within value chain abatement."

(Source: adapted from International Platform for Insetting (2022): International Platform for Insetting.)

#### Verbal forms for the expression of provisions:

[Adapted from ISO/IEC Directives Part 2: Rules for the structure and drafting of International Standards]

"shall": indicates requirements strictly to be followed in order to conform with the standard.

- "should": indicates that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required. A 'should requirement' can be met in an equivalent way provided this can be demonstrated and justified.
- "may": indicates a course of action permissible within the limits of the document.
- "can": is used for statements of possibility and capability, whether material, physical or causal.

# **D. ABBREVIATIONS**

- **CF** Community Forest
- **CFM** Controlled Forest Management
- CIP Continuous Improvement Procedure
- **CoC** Chain of Custody
- ES Ecosystem Services
- **ESR** Ecosystem Services Report
- FM Forest Management
- FM/CoC Joint Forest Management and Chain of Custody certification
- **FPIC** Free, Prior, and Informed Consent
- FSC Forest Stewardship Council
- HCV High Conservation Value
- MU Management Unit
- PLA Promotional Licence Agreement
- SLIMF Small or Low-Intensity Managed Forests

# PART I: GENERAL REQUIREMENTS

Part I applies to The Organization, and to an Organization holding certification against <<u>FSC-</u> <u>STD-30-010 V3-0 Controlled FSC Forest Management</u>>.

This Part presents the general requirements for the use of this procedure, encompassing eligibility and process requirements.

## **1** General requirements

1.1 The Organization shall hold FSC FM, FM/CoC or CFM Certification in order to use this procedure.

NOTE: This includes Organizations using <<u>FSC-PRO-30-011 Continuous Improvement Procedure</u>> and <<u>FSC-STD-30-005 Forest Management Groups></u>.

- 1.2 An Organization that is an applicant for, or holding, CFM Certification shall only be eligible to request the validation of a proposed ES impact, not its verification.
- 1.3 Applicants for certification may combine the verification or validation of a proposed ES impact with the main evaluation.
- 1.4 When requesting the verification or validation of a proposed ES impact, The Organization shall submit to its certification body an Ecosystem Services Report (ESR) with completed part I, II and if applicable III of Annex A, using the template provided by FSC.

NOTE: Annex A specifies the minimum mandatory content of the ESR.

- 1.5 The Organization shall complete the ESR in one of the languages specified in the template.
- 1.6 If an MU included in the ES project is greater than 1.000 ha, the ESR content shall also be made available in at least one of the official languages of the country upon request.
- 1.7 If The Organization collects and transfers personal data of any third party to FSC, The Organization shall collect informed written consent from such third party in accordance with all applicable data protection regulations and provide such written consent to FSC upon request.
- 1.8 The Organization may:
  - a) complete a single ESR including ES impacts from multiple selected ecosystem services, as long as structure and clarity is ensured, or
  - b) complete a separate ESR for each selected ES impact or ecosystem services category.
- 1.9 The Organization shall submit their ESR to the certification body at least 30 calendar days prior to the start of the evaluation.
- 1.10 Once The Organization has validated or verified ES impacts, it shall inform its certification body about the following changes at least 30 calendar days prior to the start of the next evaluation and submit an updated or new ESR:
  - a) changes related to Clauses 2.4-2.8 (related to a geographical overlap with ES assets or claims generated under external frameworks or standards);
  - b) changes related to Clauses 4.6 and 4.7, identifying whether an event has occurred that calls for the implementation of the risk management plan;
  - c) changes related to Section 10 (revenue sharing agreement), including any ongoing revenue sharing agreement negotiations, and requirements applicable to The Organization in

Section 11 when new sponsorships have been concluded based on verified or validated ES impacts;

- d) new ES impact(s) proposed to be verified or validated;
- e) significant changes to the theory of change, for example, a change in management practices;
- f) changes to the selected outcome indicator(s);
- g) changes to the methodologies used to measure the outcome indicator(s); and
- h) changes of scope in the MU(s) for which the ES impact is demonstrated (e.g., in case the ES impact is expanded to other MUs).
- 1.11 The Organization may request a verified ES impact to be reverified before the end of its period of validity. In such cases, The Organization shall update the ESR and submit it to its certification body as per Clause 1.8 above.

NOTE: A verified ES impact is valid for five years from the date of verification.

1.12 When using validation (see Section 9), The Organization may opt for one revalidation of a proposed impact at the end of its period of validity.

NOTE: A validated ES impact is valid for five years from the date of validation.

#### **Requirements for forest management groups**

- 1.13 The verification or validation of an ES impact may be applied across several MUs within a forest management group.
- 1.14 When the requirements of this procedure are applied at the group level, the group rules shall clarify the division of responsibilities between group members and the group entity when proposing an ES impact to be verified or validated.
- 1.15 When only some group members decide to apply this procedure, the group entity shall establish identification systems to differentiate the members applying this procedure from the other members.
- 1.16 For each participating MU, the group entity shall document where an ES impact is verified or validated, including at minimum:
  - a) evidence related to used methodologies and measurements;
  - b) the present value of outcome indicators;
  - c) the baseline value of outcome indicators (only for verification); and
  - d) comparison results (only for verification).
- 1.17 Forest management groups may create a single ESR, valid for all participating group members, provided that it is clearly specified in the ESR which MUs:
  - a) have demonstrated ES impacts for which ecosystem service(s) (see Clause 2.1); and
  - b) participate in which theory of change (see Clause 4.2).
- 1.18 Before expanding the application of this procedure to any members that are new to using the procedure for already validated and/or verified ES impacts, the group entity shall:
  - a) ensure, through internal evaluation, that new members are in conformity with all applicable requirements of this procedure; and

NOTE: This means that new members have measured the relevant outcome indicators using the same methodology and have demonstrated that the proposed ES impact(s) has been achieved.

b) update all applicable sections in the ESR.

NOTE 1: This clause builds on Clause 7.1 of < FSC-STD-30-005 Forest Management Groups>.

NOTE 2: The certification body is asked in Clause 16.6 to evaluate FM groups when the growth of new members to an already verified or validated ES impact exceeds 100%.

NOTE 3: The group entity cannot verify or validate any ES impacts. It is the certification body who verifies or validates ES impacts using sampling requirements as per Clause 17.1 c).

# PART II: IMPACT DEMONSTRATION

#### This part applies to The Organization

This Part describes the seven steps that The Organization must follow to demonstrate the impact(s) of its management activities on one or more ecosystem services.

The <<u>FSC-GUI-30-006 Guidance for Demonstrating Ecosystem Services Impacts</u>> includes tailored guidance for Organizations managing SLIMF or CF to support them in implementing this procedure. The tailored guidance follows the principle of scale, intensity and risk (SIR). Organizations managing SLIMF or CF will then have access to simplified ways to conforming with the requirements of Part II.



Figure 2 Steps to demonstrate an ES impact

## 2 Step 1: Selection of the ecosystem service(s)

- 2.1 The Organization shall select the ecosystem service(s) impact(s) to be demonstrated for each MU in the scope of certification.
- 2.2 For each ES impact, The Organization shall report:
  - a) the boundaries of the ES project area in the ESR; and
  - b) the size of the ES project area in the ESR.
- 2.3 Where The Organization intends to receive or receives payments from sponsors for the selected ecosystem service(s), it shall declare whether it has the legal or customary right(s) to receive payments for ecosystem service(s).

#### Avoidance of double counting/ double claiming

2.4 The Organization shall identify and disclose any geographic overlap between the ES project area and areas in which ES assets or claims are generated/ registered under external frameworks or standards.

NOTE: Only co-benefits that have been certified/ quantified under an external framework or standard (e.g. Verra's Climate, Community and Biodiversity Standards) are considered ES assets and/or claims under an external framework or standard.

- 2.5 Where any ES assets and/or claims generated under an external framework or standard exists in the same MU, The Organization shall record all relevant identifying information and project details in the ESR.
- 2.6 The Organization shall justify how ES impacts to be demonstrated are distinct from ES assets or claims obtained under any external framework or standard.

NOTE: For example, ES impacts may be distinct from ES assets or claims obtained under an external framework or standard because they come from a different ES category (e.g. a carbon project and a recreational services project), cover a different aspect of the same ES category (e.g. water quality and water volume, forest structure and specific RTE species population maintenance) and/or different project period(s) (e.g. ES impact verified 2017-2022, biodiversity credits generated from 2023).

- 2.7 If The Organization does not conform with the requirements in Clause 2.6, The Organization shall not pursue the validation or verification of ES impacts in the ES project area.
- 2.8 The Organization shall not receive sponsorships for ES impacts where there is an overlap with projects or activities which are registered under an external ES program unless the test to determine additionality of the ES impact(s) as specified under Clause 4.4 is conformed with.

#### **FPIC requirements**

2.9 The Organization shall conclude a binding agreement with Indigenous Peoples and traditional peoples through Free, Prior and Informed Consent (FPIC) when the implementation of management activities related to the ES project requires Indigenous Peoples and traditional peoples to delegate control over such management activities to The Organization.

NOTE: If The Organization has already reached an FPIC agreement with Indigenous Peoples or traditional peoples as part of its FSC FM certification, and if such an FPIC agreement covers all management activities related to the ES project, The Organization can refer to the existing FPIC agreement.

2.10 The Organization shall ensure the FPIC agreement introduced in Clause 2.9 conforms with the requirements of Principles 3 and 4 of the <<u>FSC-STD-01-001 FSC Principles and Criteria for Forest</u> <u>Stewardship</u>>.

## 3 Step 2: Description of the ecosystem service(s)

- 3.1 For each selected ecosystem service, The Organization shall describe in the ESR:
  - a) the current condition of the ecosystem service, including:
    - i. a qualitative description of the ecosystem service;
    - any legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, High Conservation Values (HCV));

- iii. principal management objectives and forest management regime (e.g., selective logging, clearfelling, logging cycle, conservation);
- iv. specific management activities to maintain or enhance the ecosystem service.
- b) the past condition of the ecosystem service, based on best available information, including:
  - i. a qualitative description of the ecosystem service;
  - any legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, HCV);
  - iii. any major natural disturbance that affected or posed a major risk to the ecosystem service (e.g. wildfire, insect attack, windthrow);
  - iv. any human-induced pressures which have affected the ecosystem service (e.g. poaching, road construction/maintenance, controlled burning of undergrowth);
  - v. principal management objectives and forest management regime.

NOTE: 'Past' means at least the year when the baseline value was measured (see Clauses 7.6 and 7.7)

- c) how the areas within and outside the MU contribute to the selected ecosystem service; and
- d) the direct beneficiaries of the ecosystem service;

NOTE: Beneficiaries of the declared ecosystem service may or may not include entities participating in the revenue sharing agreement (see Section 10).

- 3.2 The Organization shall provide a summary of culturally appropriate engagement with Indigenous Peoples, traditional peoples, and local communities, as applicable, related to the selected ecosystem service(s), including their access to and use of the selected ecosystem service(s).
- 3.3 The Organization shall describe in the ESR how the FPIC agreement, where required, covers all management activities related to the ES project.

## 4 Step 3: Development of a theory of change and a risk management plan

- 4.1 For each selected ecosystem service, The Organization shall propose one or more of the ES impacts listed in Annex B.
- 4.2 The Organization shall develop a theory of change that depicts the link between the management activities contributing to the ES impact(s), specifying:
  - a) the ES impact(s) proposed under Clause 4.1;
  - b) any management activities that contribute to the ES impact(s), including those to mitigate identified threats (see Clause 4.6);
  - c) outputs that result from the management activities; and
  - d) outcomes that result from the outputs.

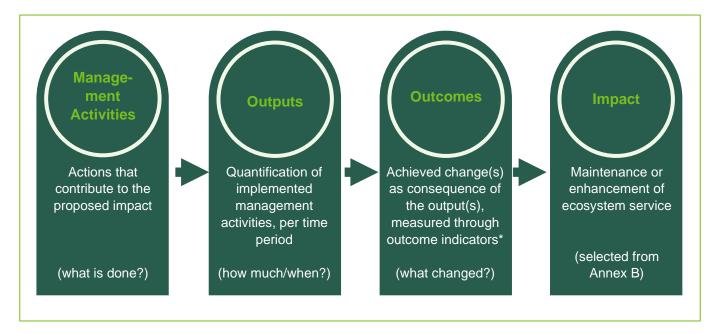


Figure 3 Basic structure of a Theory of Change

NOTE: \*Find examples of outcome indicators to be measured in Annex B.

- 4.3 The Organization shall perform a test to determine additionality of the ES impact(s) when:
  - a) a sponsor wants to attribute the verified ES impact to its financial contribution (see Clause 15.2.c); and/ or
  - b) The Organization wants to get sponsorships for multiple ES impacts based on the same set of management activities from different sponsors.

NOTE 1: The Organization is free to receive payments from multiple ES impacts based on the same set of management activities to the same sponsor(s).

NOTE 2: The <<u>FSC-GUI-30-006 Guidance for Demonstrating Ecosystem Services Impacts</u>> provides further information on stacking and bundling of multiple ES projects and ES impacts.

NOTE 3: Performing a test to determine additionality is voluntary for those Organizations to which Clause 4.3 a) and/or b) does not apply.

- 4.4 In order to demonstrate the additionality of the ES impact(s), The Organization shall identify the management activities and outputs:
  - a) which are additional to legal requirements;
  - b) which are not feasible to be implemented without external funding; and
  - c) for which The Organization did not yet receive payments or subsidies that fully financed the implementation of such management activities and outputs.

NOTE: For example, payments from another sponsor for the same or a different ES impact, or from ES assets or claims registered under an external ES program such as carbon credits.

4.5 The Organization shall identify and implement measures to prevent and mitigate negative impacts that management activities may inflict on other environmental values and/or on affected stakeholders.

NOTE: This Clause builds on Criteria 4.5 and 6.3 of the <<u>FSC-STD-01-001 FSC Principles and</u> <u>Criteria for Forest Stewardship</u>.>

- 4.6 The Organization shall describe in the ESR the risk management plan for each ES impact, in which The Organization:
  - a) identifies threats beyond the control of The Organization that can have a negative effect on an ES impact and influence its permanence;

NOTE: Examples of such threats are a wildfire resulting in a negative impact on forest carbon stocks, an upstream water user that had a major spill affecting water quality, the construction of a tarmac road through or near the MU, weather conditions, land use and land use change of areas surrounding the MU.

- b) specifies the likelihood that a threat will materialize (e.g. indicated as low, medium, high);
- c) specifies the proposed mitigation measures for each identified threat;
- d) describes how The Organization will monitor the threats; and
- e) covers a period of at least five years into the future from the date of the validation or verification of the ES impact.

NOTE: The risk management plan builds on Criterion 6.3 and Criterion 10.9 of the <<u>FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship</u>>.

4.7 The Organization shall implement the risk management plan in case an identified threat that negatively affects a validated or verified ES impact materializes.

NOTE: Depending on the extent to which the ecosystem service has been negatively affected, The Organization might lose its verified or validated ES impact and associated ES claims.

## 5 Step 4: Selection of outcome indicators

- 5.1 For each proposed impact, The Organization shall select one or more outcome indicators according to Annex B column 1 'Type of outcome indicator required.'
- 5.2 The Organization shall select outcome indicator(s) that are consistent with the outcomes of the theory of change developed according to Section 4 (step 3).
- 5.3 For the selection of outcome indicators (with the exception of outcome indicators for ES2), The Organization shall:
  - a) select outcome indicators from the examples provided in Annex B (see column 2 'Examples of outcome indicators'); or
  - b) if the examples provided in Annex B do not fit with the outcomes of the theory of change, select indicators that are better suited, based on best available information.

## 6 Step 5: Choosing methodologies

- 6.1 To measure the present value and baseline value of the selected outcome indicator(s), The Organization shall either:
  - a) select an applicable methodology from <<u>FSC-GUI-30-006 Guidance for Demonstrating</u> <u>Ecosystem Services Impacts</u>>; or
  - b) use another methodology that conforms with Clause 6.2.

- 6.2 If using a methodology not provided in <<u>FSC-GUI-30-006 Guidance for Demonstrating Ecosystem</u> <u>Services Impacts</u>>, The Organization shall ensure that the methodology is:
  - a) relevant to the local context and the outcome indicator(s) to be measured;
  - b) based on best available information (e.g., scientific publications that support the use of the methodology, endorsed by experts or by traditional knowledge); and
  - c) yielding similar results when applied by different observers in the same site under similar conditions.
- 6.3 In forest management groups, when different methodologies are used by different group members to measure the same outcome indicator, the group entity shall justify the reasons for this in the ESR.
- 6.4 If according to Annex B column 4 (Baseline Requirement(s)) "at least one previous value of the outcome indicator" is required, The Organization shall use the same methodology to measure the baseline value and the present value (see Section 7 (step 6)).
- 6.5 To ensure replicability, The Organization shall describe in the ESR the collection and analysis of data, including:
  - a) the methodology that was used;
  - b) the data sources that were used (e.g., literature, interviews, field measurements, modelling, etc.);
  - c) sampling methods, including frequency and/or intensity;
  - d) any equipment used to measure the outcome indicator(s);
  - e) assumptions in data collection and analysis (e.g., default values, conversion factors used, extrapolation from proxies, calculation assumptions); and
  - f) a summary of any data analyses performed.

NOTE: Guidance for the collection and analysis of data is provided in <<u>FSC-GUI-30-006 Guidance</u> for Demonstrating Ecosystem Services Impacts>.

# 7 Step 6: Measurement of outcome indicator(s)

- 7.1 The Organization shall conform with the requirements presented in Annex B column 3 'Measurement required' of the respective impact tables.
- 7.2 The Organization shall measure the present value for each outcome indicator.
  - 7.2.1. The data used to measure the present value should be as recent as possible.
  - 7.2.2. If data older than five years is used, The Organization shall provide a justification for why the data provides a reliable basis for measuring the present value.
- 7.3 The Organization shall use primary data to measure the present value of each outcome indicator.
- 7.4 If The Organization manages SLIMF or CF, it may use secondary data in combination with, or instead of, primary data.
- 7.5 If The Organization chooses to measure the present value more frequently than every five years (e.g., annually) it shall register such new values in the ESR.

NOTE: Companies sourcing materials harvested by The Organization can use updated values verified by a certification body to report upon their ES footprint, when the materials come from MUs included in the project area.

- 7.6 The Organization shall conform with the requirements presented in Annex B column 4 'Baseline requirement(s)' of the respective impact tables.
- 7.7 When column 4 'Baseline requirement(s)' in Annex B requires 'at least one previous value of outcome indicator', The Organization:
  - a) should use a baseline value(s) based on data that is collected no more than 10 years ago; or
  - b) shall otherwise provide a justification of the applicability of the data; and
  - c) shall report all previous values of outcome indicator undertaken.
- 7.8 When using a reference value as a baseline, The Organization shall justify how the chosen reference value is adequate for comparison against the present value in the MU, considering:
  - a) geographic location (e.g. national or regional reference);
  - b) legal and political situation;
  - c) forest ecology;
  - d) land characteristics;
  - e) land use and management history; and
  - f) other relevant factors, such as proximity to infrastructure.

#### **Uncertainty and conservativeness**

- 7.9 For any outcome indicator value, The Organization shall identify sources of uncertainty and explain how they are mitigated.
- 7.10 The Organization shall ensure outcome indicator values are presented conservatively by:
  - a) calculating and reporting the uncertainty range based on a specified confidence interval; and

NOTE: Confidence intervals measure the degree of uncertainty or certainty in a sampling method. The uncertainty of measurements can be expressed by a standard deviation, standard error or variance, or another interval which should have a stated level of uncertainty, for example a 95% (or 0.05) or a 99% (or 0.01) confidence level or an interquartile range (25%-75%).

b) applying a deduction factor based on the uncertainty range of the outcome indicator values.

NOTE: For example, using the upper limit of the confidence interval for the baseline value and the lower limit of the confidence interval for the present value.

7.11 When an uncertainty range cannot be calculated, The Organization shall describe how the outcome indicator values are presented as conservative as possible, taking into consideration the sources of uncertainty identified in Clause 7.9.

NOTE: A description would be used, for example, when a methodology does not provide quantitative data.

7.12 An Organization managing SLIMF or CF may choose to apply Clause 7.11 instead of Clause 7.10.

## 8 Step 7: Statement of results

- 8.1 The Organization shall present and compare the outcome indicator values of Annex B column 3 'Measurement required' (e.g., present value of outcome indicator) with the outcome indicator values of Annex B column 4 'Baseline requirement(s)' (e.g., at least one previous value of outcome indicator).
- 8.2 For each proposed impact, The Organization shall interpret the results and provide evidence that demonstrates conformity with the requirements presented in column 5 'Required result' of the respective impact tables in Annex B.

# 9 Validation of ES impacts

Validation allows The Organization to demonstrate its credible plan to implement management activities and use this procedure to demonstrate a positive impact on ecosystem services in the future and get this verified.

- 9.1 The Organization shall conform with all applicable requirements from Section 2 (step 1) to Section 7 (step 6), except Clauses 7.6, 7.7, and 7.8.
- 9.2 The Organization shall have a documented plan, including an intended verifiable target, personnel and financial resources, to conform with the applicable requirements of this procedure.

# PART III: PREPARING FOR THE USE OF VERIFIED AND VALIDATED ECOSYSTEM SERVICES IMPACTS

#### This part applies to The Organization and a sponsor.

This Part outlines the requirements for the formalization of a sponsorship between The Organization and a sponsor.

# 10 Revenue sharing agreement

#### This section applies to The Organization

Requirements in this section only apply if The Organization obtains payment(s) from a sponsor for validated or verified ES impacts. Through the revenue sharing agreement, FSC aims to ensure a fair distribution of revenue between relevant entities from the sales of verified or validated ES impacts.

This section introduces two potential actors:

- a) A 'project developer' refers to a company (e.g., a consultancy company) that supports The Organization in implementing this procedure, by, for example, identifying what ES impact(s) to demonstrate, collecting data to demonstrate an ES impact and/or preparing the ESR.
- b) An 'intermediary' refers to a company (e.g., a consultancy company) that supports The Organization with the marketing and matchmaking of verified or validated ES impact(s) with the objective to find sponsorships. Note that a company might have the role of both project developer and intermediary.
- 10.1 If The Organization obtains revenue, it shall establish a revenue sharing agreement with parties identified in Clause 10.2.
- 10.2 The Organization shall identify all parties that participate in the revenue sharing agreement, including but not limited to:
  - a) those parties that contributed to realize the validated or verified ES impact on any ecosystem service (e.g. The Organization and/ or project developer, group members, Indigenous Peoples, traditional peoples and local communities);

NOTE: Other parties, for example, subcontractors and the certification body, with whom The Organization has agreed on a fee for their services, are not required to be considered as a party in the revenue sharing agreement.

b) the landowner and other rights holders with legal and customary rights to the ES project area, or part of it; and

NOTE: Revenue sharing is independent of the compensation required by Criteria 3.6, 4.6 and 4.8 of <<u>FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship</u>>.

- c) any intermediary involved in the matchmaking of the validated or verified ES impact(s).
- 10.3 The Organization shall specify in each revenue sharing agreement the share of revenue that the identified parties in Clause 10.2 will receive from The Organization.
- 10.4 The Organization shall write the revenue sharing agreement(s) in a language understood by each of the parties to the revenue sharing agreement.

- 10.5 The Organization shall ensure the revenue sharing agreement(s) is signed by The Organization and all identified parties.
- 10.6 The Organization shall report in the ESR the shares of revenue allocated to each type of party identified in Clause 10.2.

NOTE 1: The "type of party" could be "Indigenous Peoples", "traditional peoples", "local community", "intermediary", "project developer", "The Organization". The Organization can also choose to group together "Indigenous Peoples", "traditional peoples", and "local community".

NOTE 2: In case the revenue share fluctuates through time, The Organization may report in the ESR the average share over the past year. Annual updates of this information are recommended.

- 10.7 The Organization shall justify how the revenue sharing agreement reached with all identified parties reflects a fair distribution.
- 10.8 The Organization shall provide the revenue share in a transparent manner to Indigenous Peoples, traditional peoples and local communities, aiming to ensure that all members, including women, youth and other potentially marginalized groups, benefit fairly.
- 10.9 In case a revenue sharing agreement has not yet been reached with a party identified in Clause 10.2, The Organization shall engage in a mutually agreed process with the identified party and ensure the process is advancing in good faith and keeps the involved parties satisfied.
- 10.10The revenue sharing agreement shall be reviewed and, if deemed necessary, revised with the identified parties at least every five years.

NOTE: For forest management groups, the revenue sharing agreement between the group entity and group members may be agreed upon as part of the group rules or through any other agreement between the group entity and the group members applying this procedure.

## 11 Formalizing sponsorships

#### **Requirements for The Organization**

- 11.1 The Organization shall have a written agreement with the sponsor(s) outlining the scope and financial conditions of the sponsorship.
- 11.2 The Organization shall disclose to their certification body that it has received sponsorship. NOTE: See part III of Annex A.
- 11.3 In case of multiple sponsorships for an ES impact, The Organization shall disclose to their certification body what proportion (share) of the ES impact each sponsor can communicate in their ES claims.
- 11.4 To prevent double claiming, The Organization shall ensure that the sum of the shares of ES impacts assigned to each sponsor does not surpass the total (100%) of the ES impact demonstrated.
- 11.5 The Organization may agree with its sponsors to communicate about the full ES impact collectively. The Organization shall disclose such an agreement to its certification body.
- 11.6 The Organization shall inform its sponsors within 30 days of the issuance date about any major non-conformity identified by the certification body that threatens the verified or validated ES impact, and thus the ability to make ES claims.

#### **Requirements for sponsors**

FSC will assess if a sponsor conforms with requirements in this section. Such requirements will be regulated through the sponsorship registration agreement and the promotional licence agreement (PLA) to be signed between a sponsor and FSC.

- 11.7 A sponsor shall sign a sponsorship registration agreement with FSC to register the sponsorship in the FSC Registry.
- 11.8 A sponsor that wishes to make an ES claim shall:
  - a) sign a PLA with FSC; and
  - b) demonstrate that they follow the mitigation hierarchy to address negative impacts relevant for the verified ES impact sponsored.

NOTE 1: FSC reserves the right not to sign a PLA with sponsors that do not align with FSC's mission, are not committed to apply the mitigation hierarchy, or may threaten the reputation and/or integrity of FSC.

NOTE 2: Organizations holding FSC Chain of Custody Certification are also required to sign a separate licensing agreement, since ES claims are not within the scope of their trademark licence agreement (TLA).

NOTE 3: In relation to the mitigation hierarchy requirement, for example, if a sponsor invests in an ES impact under ES3 Water Services, it shall address through a mitigation hierarchy approach the negative impacts relevant for ES3 (e.g., identify negative impacts, set a target, and implement actions to avoid, minimize, reduce their negative impacts).

#### Requirements for sponsors with material dependence on forests

11.9 Sponsors with material dependence on forests shall obtain a PLA from FSC.

NOTE: This means that sponsors with material dependence on forests cannot just have a sponsorship registration agreement. A PLA will always be required.

- 11.10 Sponsors with material dependance on forests should:
  - a) adopt and make public a procurement policy expressing preference for FSC-certified product; or
  - b) obtain FSC Chain of Custody certification (when applicable) within 12 months from signing the agreement as per Clause 11.1.

# 12 Requirements to add verified ES impacts to product information records

#### This section applies to The Organization

This section enables the (future) promotion of FSC 100% products that come from a MU where ES impacts were verified. This option would be further developed in the (revised) <<u>FSC-STD-40-004 Chain</u> <u>of Custody Certification</u>>

This section cannot be used with validated ES impacts.

- 12.1 If The Organization chooses to promote forest products harvested from an MU where an ES impact was verified, The Organization shall:
  - a) include ES impact information in the track and trace system defined for FM certification;
  - b) compile and document ES impact information; and
  - c) include ES impact information in sales invoices or similar documentation.

NOTE: This clause builds on Criterion 8.5 of < FSC-STD-60-004 International Generic Indicators>.

- 12.2 Verified ES impact information consists of:
  - a) MU where the ES impact was demonstrated; and
  - b) verified ES impact code; and

NOTE: Find the impact code in the title of the ES impacts in Annex B.

- c) year when the certification body granted the verified ES impact; or
- d) years when the baseline value and present value were measured.

# PART IV: PROMOTION OF VERIFIED AND VALIDATED ECOSYSTEM SERVICES IMPACTS

# This part applies to The Organization, and to a sponsor with a promotional license agreement (PLA).

FSC enables The Organization and a sponsor with a PLA to make ecosystem services (ES) claims. An ES claim is the communication and promotion of validated or verified ES impact(s).

Part IV distinguishes ES claims based on validated and verified impacts, which can be made by both The Organization and a sponsor with a PLA. ES claims based on <u>validation</u> (Section 9) are limited to communicating details of the plan and objectives that The Organization is implementing. On the other hand, ES claims from <u>verified impacts</u> can communicate their achieved and demonstrated impacts.

Requirements for making ES claims vary depending on the actor making the ES claim (i.e., The Organization or a sponsor with a PLA). Possible uses of ES claims are outlined in the introduction of this procedure.

ES claims require approval before being used. Such approval is done by a certification body (for The Organization) or by an FSC trademark service provider (for a sponsor).

Unless explicitly stated otherwise, references to 'ES claim(s)' refer to ES claims that are based on verified or validated ES impacts.

## 13 Requirements to make an ES claim

#### This section applies to The Organization and the sponsor

- 13.1 The period within which ES claims can be made shall not exceed five (5) years after the ES impact(s) have been verified or validated.
- 13.2 The elements of an ES claim shall include:
  - a) FSC registered trademarks (as defined in <<u>FSC-STD-50-001 Requirements for Use of the</u> <u>FSC Trademarks by Certificate Holders</u>>);
  - b) the licence code of The Organization or a sponsor making the ES claim;

NOTE 1: The licence code is granted to The Organization by their CB, and to a sponsor by their FSC trademark service provider.

NOTE 2: FSC provides an online platform to download FSC trademarks and high-resolution artwork files.

- c) FSC website address; and
- d) an impact statement that includes:
  - i. the specific ES impact (e.g., conservation of species diversity); and
  - ii. geographical location of the MU (at minimum the name of the country); and
  - iii. the year of validation/ verification by the certification body; OR
  - iv. the years covered in the impact demonstration process (only applicable for verified impacts).

NOTE 1: An example of an ES claim is presented in Figure 4.

NOTE 2: Impact statements vary according to the type of user. Examples of impact statements are presented in Tables 1 and 2.

NOTE 3: Year of verification of the impacts means the year when the certification body performed the audit of the verified ES impacts. Years covered in the impact demonstration process means the years when the baseline value(s) and present value(s) were measured.

FSC Registered Trademark (in this case, the Logo) (see clause 13.2.a) Licence Code of sponsor 'AB' (see clause Sponsor 'AB' supported forest 13.2.b) 'ABC' in Country 'FGH', Link to FSC Website (see clause 13.2.c) contributing to the Impact Statement (see clause 13.2.d): maintenance of Intact Forest www.fsc.org Landscapes from year 2015 to ES Impact • FSC\* N000000 2023. Years covered in the impact demonstration process The mark of responsible forestry geographical location of the management unit

Figure 4: Example of an ES claim by a sponsor.

Note 1: The arrangement and colours presented here are for illustrative purposes only. Note 2: These elements may also be presented separately, for example, on different parts of a web page or communication piece, as long as all elements are presented in full.

13.3 The impact statement of an ES claim based on validated ES impacts (see Section 9) shall contain:

- a) the intended verifiable target used by The Organization in the validation of ES impacts; or
- b) the activities in the plan to achieve the validated ES impacts.
- 13.4 When The Organization holds Controlled Forest Management (CFM) certification (see Clause 1.2), ES claims shall state that The Organization is working towards full certification.
- 13.5 The impact statement of an ES claim may contain:
  - a) more than one ES impact, when the MUs and years of demonstration are the same;
  - b) any other elements that are included in the latest version of the ESR (e.g. key features of the forest, beneficiaries of the ecosystem service); and
  - c) updated quantitative values for outputs that are already included in the theory of change of verified ES impacts.

NOTE: If The Organization or a sponsor wishes to include in ES claims new outputs (i.e., not included in the latest theory of change) or updated values for outcome indicators, they must be verified by the certification body before including them.

- 13.6 The Organization and/or a sponsor using an ES claim as part of a broader communication piece shall:
  - a) clearly separate the ES claim from other statements that are not verified under the FSC system; and
  - b) avoid exaggeration, misuse and/or misrepresentation of, and/or false information in relation to the verified or validated ES impacts.

NOTE: The Organization and a sponsor making an ES claim are responsible for their own compliance with national consumer protection laws in those countries in which the ES claim will be communicated.

13.7 A verified or validated ES impact or ES claim shall not be used to claim compensation or neutralization of impacts beyond the value chain.

NOTE: A sponsor can use verified ES impacts to claim a contribution beyond its value chain.

## 14 Ecosystem services claims made by The Organization

- 14.1 The Organization may make an ES claim based on a verified or validated ES impact as indicated in Section 13 13and this section.
- 14.2 The Organization may use the validated ES impacts to promote its plan (as referred to in Clause 9.2) and intended outcomes.
- 14.3 The Organization may add an ES claim as additional information to the registries of external environmental assets, when
  - a) the ES claim is based on verified ES impacts; and
  - b) the external environmental assets are issued from the same MU as the verified ES impact.
- 14.4 The Organization shall obtain approval from its certification body prior to the use of an ES claim.
- 14.5 The Organization shall conform with all applicable requirements for use of the FSC trademarks in <<u>FSC-STD-50-001 Requirements for use of the FSC® trademarks by certificate holders</u>>.

ES impact generated by The Organization	Possible impact statements within the ES claim of The Organization
(1.1) Verified ES impact	Organization ABC's FSC-certified forests in Durango (Mexico) has increased the volumes of water regulated by its forests from 2014 to 2020.
(1.2) Verified ES impact with demonstrated additionality	Biosphere Reserve ABC (Uganda) created a new project to enhance by 5% the connectivity of the network of conservation areas from 2018 to 2023 thanks to its increased investments in community outreach & training, patrolling and additional set aside areas.
(1.3) Validated ES impact	Forestry Company ABC (China) is working towards improving the natural structure of its FSC-certified forests since 2019, by retaining mature native trees and enhancing the number of different native species planted. The results of this project will be verified in 2024.

Table 1 Examples of impact statements within ES claims for The Organization (see Clause 13.2.d and Figure 4)

## **15 Ecosystem Services claims made by a sponsor**

15.1 A sponsor with a PLA (see Clause 11.8) may make an ES claim related to a verified or validated ES impact it has supported, as indicated in Section 13 and this section.

- 15.2 In addition to the requirements presented in Clause 13.2.d, a sponsor of verified ES impacts may add to the impact statement of an ES claim:
  - a) the name of The Organization;
  - b) references to value chain contributions/investments (e.g., within value chain mitigation / contribution) only when the sponsor can demonstrate that it sources materials from the MU of The Organization receiving the sponsorship;
  - c) words to imply attribution of a verified ES impact, only when The Organization has demonstrated the additionality of the verified ES impact (Clause 4.4); and

NOTE: See Table 2 for a possible statement in which a sponsor implies attribution (example 2.3).

- d) the duration of the sponsorship.
- 15.3 A sponsor of validated ES impacts may promote its support for the plan and objectives that The Organization has set up to reach a future ES impact.
- 15.4 Sponsors of validated ES impacts shall not claim to have achieved progress towards sustainability targets.

NOTE: Such type of claim can only be made once the ES impact has been demonstrated and verified.

- 15.5 A sponsor shall obtain approval from its FSC trademark service provider prior to publication and/or use of an ES claim.
- 15.6 A sponsor shall conform with all applicable requirements for use of the FSC trademarks in <<u>FSC</u> <u>Trademark Use Guide for Promotional Licence Holders</u>>.

ES impact generated by The Organization	Possible impact statements within the ES claim of a sponsor
(2.1) Verified ES impact	<u>Sponsor XYZ</u> has contributed to maintaining cultural and ancestral knowledge, practices and language in the forests of West Kalimantan (Indonesia) between 2018 and 2023.
(2.2) Verified ES impact + demonstration of sourcing by a sponsor	By supporting Organization ABC in West Kalimantan (Indonesia), an important supplier of tropical timber for <u>Sponsor XYZ</u> , <u>Sponsor XYZ</u> has contributed to enhancing forest carbon stocks by 100.000 tC from 2014 to 2020.
(2.3) Verified ES impact + demonstrated additionality by The Organization	<u>Thanks to a new project funded by Sponsor XYZ's, Biosphere Reserve ABC</u> (Guatemala) has seen an increase in the presence of threatened species DEF from 2018 to 2023.
(2.4) Validated ES impact	Since 2021, <u>Sponsor XYZ</u> is collaborating with Organization ABC in Ouesso (Republic of Congo) with the objective of maintaining native species diversity in their forests, by establishing 308.000 hectares of areas for conservation and integral protection. These impacts will be verified in 2026.

Table 2 Examples of impact statements within ES claims for a sponsor (see Clause 13.2.d and Figure 4)

# **PART V: EVALUATION REQUIREMENTS**

#### This part applies to the certification body.

This Part contains the requirements a certification body needs to conform with when evaluating The Organization that is implementing this procedure. Part V builds on existing requirements for certification bodies presented in <<u>FSC-20-001 General Requirements for FSC Accredited Certification</u> <u>Bodies</u>> and <<u>FSC-STD-20-007 Forest Management Evaluations</u>>.

If The Organization conforms with the <<u>FSC-PRO-30-011 Continuous Improvement Procedure</u>> (CIP), then the certification body evaluation requirements included in the CIP apply.

# 16 Frequency and timing of evaluations

- 16.1 The certification body shall conduct a main evaluation on-site to assess conformity of The Organization with all applicable requirements in this procedure.
- 16.2 The certification body may use the remote or on-site audit method to evaluate Clauses 16.3 and 16.5.
- 16.3 The certification body shall evaluate conformity of The Organization with the requirements in the clauses/sections specified below at least once per rolling year within the period of validity of the ES impact:
  - a) Clause 2.4-2.8 (related to a geographical overlap with ES assets or claims generated under external frameworks or standards);
  - b) Clauses 4.6 and 4.7, identifying whether an event has occurred that calls for the implementation of the risk management plan;
  - c) changes related to Section 10 (revenue sharing agreement), including any ongoing revenue sharing agreement negotiations,
  - d) requirements applicable to The Organization in Section 11 when new sponsorships have been concluded based on verified or validated ES impacts; and
  - e) requirements applicable to The Organization in Part IV when The Organization decides to make ES claims.
- 16.4 If The Organization manages SLIMF or CF, the certification body may evaluate 16.3 a) to d) at least during every FSC FM evaluation.
- 16.5 The certification body shall carry out an additional evaluation in any of the following cases:
  - a) to assess significant changes in part I of the ESR, which include:
    - i. the addition of a new ES impact;
    - ii. the addition of a new MU;
    - iii. significant changes to the theory of change, e.g. a change in management practices;
    - iv. changes to the selected outcome indicator(s); or
    - v. changes to the methodologies used to measure the outcome indicator(s);
  - b) to assess complaints received related to the verified or validated ES impact; and
  - c) to assess the implementation of the risk management plan, when a disturbance event has happened that affected the verified/ validated ES impact.
- 16.6 The certification body shall carry out an additional evaluation to assess the inclusion of new group members to an ESR with already validated or verified ES impacts, in case the number of new group members being added to the ESR exceeds a 100% increase.

NOTE 1: See Clause 1.18.

NOTE 2: For growth lower than 100%, the certification body is able to approve new group members to an ESR without an additional evaluation.

16.7 The certification body should conduct the ES evaluation(s) in conjunction with the scheduled forest management evaluation(s).

## **17** Preparation for evaluation

- 17.1 The certification body shall take into account the selected ecosystem services and the requirements in Clause 16.1 in:
  - a) the stakeholder consultations conducted as per Clause 1.6 of <<u>FSC-STD-20-007 Forest</u> <u>Management Evaluations</u>>;
  - b) the audit planning; and
  - c) the sampling carried out as per Section 8 of <<u>FSC-STD-20-007 Forest Management</u> <u>Evaluations</u>>.
- 17.2 At least one member of the audit team shall have demonstrated competence and skills to evaluate The Organization's conformity with this procedure and the ES impact(s).

NOTE: This requirement builds on Annex 3 (Audit teams) of <<u>FSC-STD-20-001 General</u> requirements for FSC accredited certification bodies>.

## 18 Evaluation, review and decision making

18.1 Audit findings and granting of a verified or validated ES impact shall be evaluated in accordance with <<u>FSC-STD-20-001 General Requirements for FSC Accredited Certification Bodies</u>>.

NOTE 1:'(Re)certification' is to be interpreted as the verification or validation of an ES impact.

NOTE 2: In the context of this procedure, a requirement is considered to be at the clause level (e.g. 1.2, 5.6), which may include several sub-clauses.

- 18.2 The certification body shall evaluate and make decisions on each proposed ES impact individually.
- 18.3 For each verified ES impact, the certification body shall:
  - a) include the term 'ecosystem services' in the scope of the FSC FM or FM/CoC certification; and
  - b) include the verified ES impact in the formal certification documentation (e.g. the certificate).
- 18.4 Non-conformities identified in relation to this procedure shall not affect the FSC FM, FM/CoC or CFM certification status.
- 18.5 A verified ES impact is valid for a period of five years from the date of verification, as long as The Organization maintains FSC FM or FSC FM/CoC certification.
- 18.6 A validated ES impact is valid for a period of five years from the date of validation, as long as The Organization maintains FSC FM, FSC FM/CoC or CFM certification.
- 18.7 When The Organization's FSC FM, FM/CoC or CFM certification is suspended, withdrawn or terminated, all verified and validated ES impacts and ES claims related to that certification shall be suspended or withdrawn within 3 days in the FSC Registry.

## **19** Reporting requirements

19.1 The certification body shall fill in part IV of the ESR in the template provided by FSC.

NOTE: Annex A specifies the minimum mandatory content of the ESR.

- 19.2 The certification body shall upload the ESR to the FSC Registry as soon as possible following the certification decision and latest within the following timelines:
  - when the ecosystem services evaluation is combined with the main FSC FM or FM/CoC evaluation: 13 months from the closing meeting;
  - when the ecosystem services evaluation is not combined with the main FSC FM or FM/CoC evaluation: 4 months from the closing meeting.
- 19.3 The certification body shall review and, if needed, upload the updated part III of the ESR to the FSC Registry at least once per calendar year.

# ANNEX A. Content of the ecosystem services report (ESR)

#### This annex applies to The Organization and the certification body.

All content in this annex will be made publicly available in the FSC Registry, unless the field is marked with a (\*).

Reminder: If The Organization collects and transfers to FSC personal data of any third party, The Organization is required to collect informed written consent from such third party in accordance with all applicable data protection regulations and provide such written consent to FSC upon request.

#### ESR part I: Project description – To be filled in by The Organization

#### Select ES impacts and project area

- 1 Reported ES impacts Table with:
  - a) group member(s), when applicable
  - b) MU(s)
  - c) selected ES Impact per MU (from Annex B)
  - d) selected outcome indicators
  - e) whether the impact is being verified or validated
- 2 ES project area
  - a) total size (in ha):
  - b) boundaries provided through geospatial data or, if no geospatial data are available, the coordinates with latitude of site(s) and longitude of site(s).
     NOTE: The Organization can indicate if the project boundaries should not be published in the FSC Registry (thus kept accessible only to the certification body and FSC).

#### Step 1: Selected ecosystem service(s)

- 3 Description of the legal or customary right to receive payments for demonstrating positive impacts on the selected ecosystem service(s).
- 4 When the project area overlaps with areas in which ES assets or claims are generated under external frameworks or standards:
  - a) external framework/ standard
  - b) ecosystem services category covered by the external standard
  - c) external project registration number
  - d) link to external registry
  - e) type of project (e.g. afforestation, reforestation and revegetation / improved forest management / reduced emissions from deforestation or forest degradation, biodiversity restoration or conservation, water quality improvement)
  - f) justification of how ES impact(s) are distinct from ES assets or claims obtained under the external framework or standard (e.g. different ES category, different aspect of same ES category and/or different project period)

#### Step 2: Description of the ecosystem service(s)

- 5 Current condition of the ecosystem service(s).
  - a) qualitative description of the ecosystem service;

- b) any legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, High Conservation Values (HCV));
- c) principal management objectives and forest management regime (e.g., selective logging, clearfelling, logging cycle, conservation);
- d) specific management activities to maintain or enhance the ecosystem service.
- 6 Past condition of the ecosystem service(s).
  - a) qualitative description of the ecosystem service;
  - b) legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, High Conservation Values (HCV));
  - c) major natural disturbance that affected or posed a major risk to the ecosystem service (e.g. wildfire, insect attack, windthrow);
  - d) human-induced pressures which have affected the ecosystem service (e.g. poaching, road construction/maintenance, controlled burning of undergrowth);
  - e) principal management objectives and forest management regime.
- 7 Areas within and outside of the MU(s) that contribute to the selected ecosystem service(s).
- 8 Direct beneficiaries of the selected ecosystem service(s).
- 9 Summary of culturally appropriate engagement with Indigenous Peoples, traditional peoples, community forests and local communities related to the selected ecosystem service(s).
- 10 Description of how an FPIC agreement covers all management activities related to the ES project (when applicable).

#### Step 3: Development of a theory of change and a risk management plan

- 11 For the selected ES impact, outlined theory(ies) of change clearly linking:
  - a) management activities;
  - b) outputs;
  - c) outcomes; and
  - d) selected ES impact.
- 12 If The Organization chooses to demonstrate the additionality of the ES project, description of how the activities and outputs outlined in (11):
  - a) go beyond legal requirements; and
  - b) would not be feasible to implement without financial support from a sponsor.
- 13 Identified actions to prevent and mitigate negative impacts of management activities contributing to the ES impact on other environmental values and on affected communities, and level of implementation for each.
- 14 Risk management plan (Clause 4.6). A table including:
  - a) threats to the ecosystem service(s), both induced by human activity and of natural origin within and outside of the MU.
  - b) likelihood that a threat will materialize (indicated as low, medium, high);
  - c) proposed mitigation measures;

d) monitoring activities.

#### Step 4: Selected outcome indicators

- 15 Selected outcome indicators per ES impact.
- 16 Then any selected outcome indicators are not found in Annex B, justification of their choice (Clause 5.3.b).

#### Step 5: Chosen methodologies

- 17 A table indicating:
  - a) management units;
  - b) selected outcome indicator; and
  - c) chosen methodology.
- 18 For any methodology not included in the <<u>FSC-GUI-30-006 Guidance for Demonstrating</u> <u>Ecosystem Services Impacts</u>>, a justification of the chosen methodology/ies used to measure the values of the selected outcome indicator(s) (see Clause 6.2), including how it is:
  - a) relevant to the local context and the outcome indicator(s) to be measured;
  - b) based on best available information; and
  - c) objective and replicable.
- 19 When different methodologies are used in different management units, a justification for this (also applicable for different group members. See Clause 6.3)
- 20 A description of the collection and analysis of data, including:
  - a) description of the methodology that was used;
  - b) the data sources that were used;
  - c) sampling methods, including frequency and/or intensity;
  - d) any equipment used to measure the outcome indicator(s);
  - e) assumptions (e.g., default values, conversion factors used, extrapolation from proxies, calculation assumptions);
  - f) a summary of any data analyses performed.

#### Step 6: Measured value(s) of outcome indicator(s)

- 21 To report present value (Clause 7.2), baseline value (Clause 7.6), and any other previous measurements (Clause 7.7), create a table for each ES impact indicating:
  - a) outcome indicator;
  - b) unit of measurement;
  - c) measured value for the whole ES project area;
  - d) conservativeness in reported value (calculation or description see Clause 7.10)
  - e) month (when applicable) and year of measurement; and
  - f) whether the measurement is the present value, the baseline value, or another previous value of the outcome indicator.

- 22 For Organizations managing SLIMF or CF, indicate if the measurements are based on secondary data.
- 23 If the data used to measure the <u>present value</u> is older than 5 years, a justification of the applicability of the data.
- 24 If the data used to measure the <u>baseline value</u> is older than 10 years, a justification of the applicability of the data.
- 25 If baseline value is based on a reference value, justification of how the chosen reference value is adequate for comparison against the present value in the MU(s), considering:
  - a) geographic location (e.g. national or regional reference);
  - b) legal and political situation;
  - c) forest ecology;
  - d) land characteristics;
  - e) land use and management history; and
  - f) other relevant factors, such as proximity to infrastructure
- 26 <u>Only for ES2 carbon sequestration and storage</u>: Carbon pools included in the measurement of the present value and the baseline value.
- 27 <u>Only for ES2 carbon sequestration and storage</u>: Explanation of how ES Project is not negatively affecting carbon pools excluded from measurement.
- 28 For validated ES impacts, indicate the intended verifiable target for each outcome indicator (Clause 9.2).
- 29 Identified sources of uncertainty in the measurement and explanation how they are mitigated.

#### Step 7: Statements of results

- 30 For each outcome indicator, statement of the difference between the present value and the baseline value.
- 31 Justification of how the result reported in (30) conforms with the required result for the outcome indicator (stated in Annex B)
- 32 Justification of how the reported values do not overestimate the result(s) of the comparison between the present value and the baseline value.

#### Validation of ES Impacts

33 For validated ES impacts, optional disclosure of documented plan (see Clause 9.2).

# ESR part II: Additional information on The Organization and the ES project – To be filled in by The Organization

- 34 Validity/ expiry date of FSC FM, FSC FM/CoC, FSC CFM certification.
- 35 Individual certification, group certification.
- 36 SLIMF or CF MUs.
- 37 Natural forest, or plantation.
- 38 Forest biome: boreal, temperate, subtropical, tropical.

- 39 Country where ES impacts have been verified or validated.
- 40 Region(s) where ES impacts have been verified or validated.
- 41 A brief ES project description(s) for the FSC Registry.

#### ESR part III: Sponsorship information – To be filled in by The Organization

NOTE: ESR Part III can be submitted separately, when The Organization formalizes sponsorships.

- 42 Name of the sponsor.
- 43 Website of sponsor.
- 44 Contact information: address, phone, email, contact person (\*)
- 45 Validated and/or verified ecosystem services impact(s) sponsored.
- Share of the ES impact sponsored (%):
   Option 1: Validated impact was sponsored
   Option 2: Sponsorship communication will be shared with other sponsors (Clause 11.5)
   Option 3: Sponsor has sponsored XX % of the verified ES impact
- 47 Year of sponsorship.
- 48 Duration of sponsorship.
- 49 (If submitted separately) Name of The Organization.
- 50 (If submitted separately) FSC licence code.

#### ESR part IV: Revenue-sharing agreement information – To be filled in by The Organization

Note: ESR part IV can be submitted separately, when The Organization formalizes revenue-sharing agreements, concurrently with ESR part III, or as an update to a previous revenue-sharing agreement disclosure.

- 51 Table disclosing parties participating in the revenue-sharing agreement, including(\*):
  - a) type of party (see NOTE 1 in Clause 10.6);
  - b) share of revenue allocated.

#### ESR part V: Evaluation information – To be filled in by the certification body

- 52 Name of the certification body
- 53 Name of lead auditor
- 54 Contact email address of lead auditor
- 55 Evaluation type (main evaluation, annual evaluation, additional evaluation).
- 56 Audit method (onsite, remote)
- 57 Dates of evaluation
- 58 Validation/Verification statement
- 59 Dates of approval and expiry of the verified and/or validated ES impacts

#### ESR part VI: Updates to an existing ESR – To be filled in by The Organization

Note: ESR Part VI can be submitted separately, when The Organization:

- a) includes new members or MUs to an already existing ESR (see Clause 1.18).
- b) reports the activation/implementation of the risk management plan (see Clause 4.7)
- c) wishes to update the latest present value of an outcome indicator (see Clause 7.5)
- d) submits a present value to verify a previously validated ES impact

#### Type of update submitted

- 60 Type of updates covered in this form. Options:
  - a) new members or new MUs
  - b) implementation of risk management plan
  - c) updated outcome indicators
  - d) verification of previously validated ES Impact

#### Updated, selected ES impacts and project area

- 61 [Update to field 1] Reported ES impacts Table with:
  - a) group Member(s), when applicable, clearly indicating which ones are new
  - b) MU(s), clearly indicating which ones are new
  - c) selected ES impact per MU (from Annex B)
  - d) selected outcome indicators
  - e) whether the impact is being verified or validated

#### 62 [Update to field 2] Project area:

- a) new total size (in ha):
- b) updated boundaries provided through geospatial data (e.g. shapefiles) or, if no geospatial data are available, the coordinates with latitude of site(s) and longitude of site(s).
   NOTE: The Organization can indicate if the project boundaries should not be published FSC Registry (thus kept only accessible to the certification body and FSC)

#### Updates on impact demonstration steps

- 63 [Update to field 4] When the project area overlaps with areas in which ES assets or claims are generated under external frameworks or standards:
  - a) external framework/standard
  - b) ecosystem services category covered by the external standard
  - c) external project registration number
  - d) link to external registry
  - e) type of project (e.g. afforestation, reforestation and revegetation / improved forest management / reduced emissions from deforestation or forest degradation, biodiversity restoration or conservation, water quality improvement)
  - f) justification of how ES impact(s) are distinct from assets or claims obtained under the external framework or standard (e.g. different ES category, different aspect of same ES category and/or different project period)

- 64 In case the risk management plan has been implemented (Clause 4.7):
  - a) Which threat was materialized;
  - b) Activities implemented;

Note: If the materialized threat influenced the present value of the outcome indicator, report the new value in field 67.

- 65 [Update to field 17] For each selected outcome indicator, a table indicating:
  - a) new MUs;
  - b) measured outcome indicator; and
  - c) methodology used.
- 66 [Update to field 19] When new/different methodologies are used in the new MUs, a justification of the reasons for this (also applicable for new group members)
- 67 [Update to field 21] Updated table with all present values (Clause 7.2), baseline value (Clause 7.6), and any other previous measurements (Clause 7.7), indicating:
  - a) outcome indicator;
  - b) unit of measurement;
  - c) measured value for the whole project area;
  - d) uncertainty range (when applicable see Clause 7.10)
  - e) month (when applicable) and year of measurement;
  - f) whether the measurement is the present value, the baseline value, or another previous value of the outcome indicator.
- 68 [Update to field 30] For each outcome indicator, statement of the new difference between the present value and the baseline value.
- 69 [Update to field 31] Justification of how the result reported in field 68 conforms with the required result for the outcome indicator (stated in Annex B)
- 70 [Update to field 32] Justification of how the reported values do not overestimate the result(s) of the comparison between the present value and the baseline value.

# ANNEX B. IMPACTS, INDICATORS AND MEASUREMENTS

#### This annex applies to The Organization

This annex contains additional requirements to conform with Part II of this procedure, including what needs to be measured to demonstrate an ES impact, what needs to be the result for an ES impact to be verified and a few additional safeguards for some ES categories. There is one table for each ES impact, with each ES category identified by a different colour. The Organization can choose which ES impact(s) to demonstrate (one or more). Each ES impact is identified by a code and a title, e.g. ES1.1: Enhancement of natural forest cover.

For most ES impacts, there is a maintenance and an enhancement variation.

- Maintenance: The condition is stable, shown by the outcome indicator value that remains within the range of natural variability over time.
- Enhancement: The condition is improving, shown by an increase in the value of the outcome indicator over time that is beyond the range of natural variability, for the outcome indicator(s) as per requirements for the selected ES impact in Annex B.

Clause 7.10.a) on the uncertainty range will support in determining the natural variability. Also, the methodology used might provide such guidance.

Every impact table contains five columns and needs to be read from left to right.

- 1) The <u>first column</u> contains the outcome indicator types that need to be measured to demonstrate the ES impact. Attention must be paid to 'or', 'and', and 'and optionally' between outcome indicator types that need to be measured.
- 2) The <u>second column</u> includes examples of outcome indicators from which The Organization may select one or more, as required by the outcome indicator type, or propose alternative outcome indicators.
- 3) The third column stipulates the required measurement.
- 4) The fourth column specifies the required baseline, where attention needs to be paid to 'or', 'and', and 'and optionally'.
- 5) the <u>fifth column</u> lists the required result for an ES impact to be verified.

**Overview of ES categories and ES impacts (1/2)** 

# **ES1: Biodiversity conservation**

- **ES1.1** Enhancement of natural forest cover
- ES1.2 Maintenance of Intact Forest Landscapes
- ES1.3 Maintenance of an ecologically sufficient conservation area network
- **ES1.4** Enhancement of an ecologically sufficient conservation area network
- ES1.5 Maintenance of natural forest structure
- ES1.6 Enhancement of natural forest structure
- ES1.7 Maintenance of native species diversity
- ES1.8 Enhancement of native species diversity
- ES1.9 Maintenance of functional biodiversity
- ES1.10 Enhancement of functional biodiversity
- ES1.11 Maintenance of rare, endemic, threatened or endangered habitats or ecosystems
- **ES1.12** Enhancement of rare, endemic, threatened or endangered habitats or ecosystems

## **ES2:** Carbon sequestration & storage

- ES2.1 Maintenance of forest carbon stocks through forest protection or conservation
- ES2.2 Maintenance of forest carbon stocks through responsible forest management
- **ES2.3** Enhancement of forest carbon stocks through afforestation, reforestation and restoration
- ES2.4 Enhancement of forest carbon removals through responsible forest management
- **ES2.5** Enhancement of forest climate benefits through increased carbon stock or reduction of GHG emissions

# ES3: Water services

- ES3.1 Maintenance of water quality
- ES3.2 Enhancement of water quality
- ES3.3 Maintenance of water volume regulation
- ES3.4 Enhancement of water volume regulation

Page 45 of 72 Ecosystem Services Procedure: Impact Demonstration and Market Tools FSC-PRO-30-006 V2-0 EN Overview of ES categories and ES impacts (2/2)

# **ES4: Soil conservation**

- ES3.1 Maintenance of soil condition
- ES3.2 Enhancement of soil condition
- **ES3.3** Maintenance of soil stability and protection against soil erosion.
- **ES3.4** Enhancement of soil stability and protection against soil erosion.

### **ES5:** Recreational services

- ES5.1 Maintenance of social-ecological benefits from forest recreation and/or tourism
- **ES5.2** Enhancement of social-ecological benefits from forest recreation and/or tourism.
- **ES5.3** Maintenance of populations of species of interest for naturebased tourism
- **ES5.4** Enhancement of populations of species of interest for naturebased tourism

# **ES6:** Cultural practices and values

- ES6.1 Maintenance of cultural and ancestral knowledge, practices and language
- **ES6.2** Enhancement of cultural and ancestral knowledge, practices and language
- ES6.3 Maintenance of culturally valued populations or species
- ES6.4 Enhancement of culturally valued populations or species

# ES7: Air quality

- ES7.1 Maintenance of air quality
- ES7.2 Enhancement of air quality

### 20 ES1: Biodiversity conservation

#### Impact ES1.1: Enhancement of natural forest cover

20.1 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the extent of natural forest cover from restoration activities; and
- b) the quality of forest cover from restoration activities.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result maintenance
a) Extent of natural forest cover from restoration activities	<ul> <li>Area of natural forest cover resulting from reforestation</li> <li>Restored forest area as a proportion of total forest area</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is improving
AND				
b) Quality of natural forest cover from reforestation/restoration activities	<ul><li>Forest density</li><li>Survival rate of planted native species</li></ul>	Present value of outcome indicator	At least one previousvalue of outcome indicator	Condition is improving
	<ul> <li>Variety of plant species composition</li> </ul>		OR	
	Diversity of forest structure		A description of the natural forest condition	Condition is improving towards natural condition

#### Impact ES1.2: Maintenance of Intact Forest Landscapes

20.2 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure the extent of Intact Forest Landscapes (IFL) in the MU.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)		<b>4. Baseline</b> <b>requirement(s)</b> (compare column 3 to this)	5. Required result
Extent of Intact Forest Landscapes in the management unit	<ul> <li>Area of Intact Forest Landscapes</li> <li>Area of Intact Forest Landscape core areas</li> <li>Area of protected Intact Forest Landscapes</li> </ul>	Present value of outcome indicator	The value on 1 January 2017 or earlier	Condition is stable

#### Impact ES1.3: Maintenance of an ecologically sufficient conservation area network

20.3 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the connectivity of the conservation areas network; and
- b) the habitat quality of the conservation areas network.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Connectivity of the conservation areas network	<ul> <li>Connectivity of the conservation areas network</li> <li>Connectivity to conservation areas outside the management unit</li> <li>Connectivity to natural habitats outside the conservation areas network</li> <li>Size of ecological corridor</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Connectivity of the conservation areas network is stable
AND				
b) Habitat quality of the conservation areas network	<ul> <li>Area of the conservation area network within and outside the management unit (including representative sample areas, conservation zones, protection areas, connectivity areas, and high conservation value areas)</li> <li>Area with High Conservation Value (HCV)</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Habitat quality of the conservation area network is stable
	<ul> <li>Proportion of HCV area within the conservation area network</li> </ul>			
	Area of habitats of conservation importance			
	<ul> <li>Area of suitable habitats for species with conservation value</li> </ul>			
	<ul> <li>Area of large landscape level ecosystems and mosaics (HCV2)</li> </ul>			

#### Impact ES1.4: Enhancement of an ecologically sufficient conservation area network

20.4 The Organization shall select outcome indicators as required in Impact ES1.3 but the required result for a) is 'Connectivity is improving', and for b) is 'Habitat quality is stable or improving'.

#### Impact ES1.5: Maintenance of natural forest structure

20.5 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure forest structure.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> <b>requirement(s)</b> (compare column 3 to this)	5. Required result
Forest structure	<ul> <li>Forest age class</li> <li>Forest ecosystem structure</li> <li>Forest structural condition index</li> <li>Forest vertical and/or horizontal structure</li> <li>Amount of standing and fallen deadwood and/or other important natural microhabitats</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES1.6: Enhancement of natural forest structure

20.6 The Organization shall select outcome indicators as required in Impact ES1.5 but the required result is 'Condition is improving'.

#### Impact ES1.7: Maintenance of native species diversity

20.7 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the native species diversity; or
- b) the abundance or viability of focal species or rare or endemic or threatened species; and
- c) habitat availability within the management unit for focal species or rare and threatened species.

NOTE: Native species diversity refers to the diversity of plant and animal species that occur in a given geographic area because it evolved naturally in that geographic area, as opposed to having been transported there by humans. Native species are also known as 'indigenous species.'

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	4. Baseline requirement(s) (compare column 3 to this)	5. Required result
a) Native species diversity	<ul> <li>Indices of native species assemblage or composition (e.g. Shannon diversity index)</li> </ul>	value of outcome indicator	Condition is stable	
	<ul> <li>composition (e.g. Shannon diversity index)</li> <li>Proportion of native species classified as at risk</li> </ul>		AND A value from a natural reference area OR, based on best available information, from a description of a natural condition	Present value is similar to the value of a natural reference area OR from the description of a natural condition
OR				
<ul> <li>b) Abundance or viability of focal, endemic or rare, threatened and/or endangered species</li> </ul>	<ul> <li>Abundance of selected species</li> <li>Availability of selected species for</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
	sustainable traditional use (e.g. medicinal plants)		OR	
			Minimum viable population for the species	Abundance equals the minimum viable population
AND				
<ul> <li>c) Habitat availability within the management unit for focal, endemic, or rare, threatened and/or endangered species</li> </ul>	<ul> <li>Area of available habitat</li> <li>Suitability of habitat</li> <li>Habitat connectivity</li> <li>Area protected from illegal hunting</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES1.8: Enhancement of native species diversity

20.8 The Organization shall select outcome indicators as required in Impact ES1.7 but the required result for at least a), b) or c) is 'Condition is improving'

Page 50 of 72 Ecosystem Services Procedure: Impact Demonstration and Market Tools FSC-PRO-30-006 V2-0 EN

#### Impact ES1.9: Maintenance of functional biodiversity

20.9 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) ecological function; or
- b) functional biodiversity; and
- c) habitat availability within the management unit for functional biodiversity.

NOTE: These technical terms are introduced under this ES impact:

- Functional biodiversity refers to the variety of biological function or ecological roles that different species within an ecosystem fulfil.
- Gross primary production refers to the total amount of biomass that is created through photosynthesis in a given length of time.
- Net primary production refers to the total amount of biomass that is created through photosynthesis in a given length of time, minus the energy used by the primary producers to maintain themselves during this length of time (e.g. respiration).

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	4. Baseline requirement(s) (compare column 3 to this)	5. Required result
a) Ecological function	<ul> <li>Pollination rates</li> <li>Seed dispersal</li> <li>Pest control</li> <li>Gross or net primary production</li> <li>Population dynamics</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
b) Functional biodiversity	<ul> <li>Species richness of native pollinators</li> <li>Abundance of natural enemies (e.g. bats) that limit pests</li> <li>Variety of functional species groups</li> <li>Diversity of morphological species traits</li> <li>Diversity of soil microbiome</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND c) Habitat availability within the management unit for functional biodiversity	<ul> <li>Evidence of roosts and shelters in use by functional species</li> <li>Area of available habitat for functional biodiversity species</li> <li>Suitability of habitat for functional biodiversity</li> <li>Availability of standing and fallen deadwood and/or other important natural microhabitats</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES1.10: Enhancement of functional biodiversity

20.10The Organization shall select outcome indicators as required in Impact ES1.9 but the required result for a) or b), and c) is 'Condition is improving'.

#### Impact ES1.11: Maintenance of rare, endemic, threatened or endangered habitats or ecosystems

20.11 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the extent of rare, endemic or threatened or endangered habitats or ecosystem; and
- b) the condition of rare, endemic or threatened or endangered habitats or ecosystem.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Extent of rare, endemic, threatened or endangered habitats or ecosystems	<ul> <li>Area of endemic habitats or ecosystems</li> <li>Area of ecosystems that are threatened or endangered</li> <li>Area of ecosystems or habitats that are classified as threatened in national or international systems</li> <li>Area of priority habitats and ecosystems for conservation at the global, regional, national, and/or local levels</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
b) Condition of rare, endemic, threatened or endangered habitats or ecosystem	<ul> <li>Ecological Integrity Index</li> <li>Proportion of forest intactness areas</li> <li>Disturbance level</li> <li>Presence of indicator species for good habitat/ecosystem quality</li> <li>Proportion of degraded habitats in relation to total</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator <b>OR</b> A value from a reference area OR, based on best available information, from a description of a natural condition	Condition is stable Present value is similar to the value of a reference area OR to the description of a natural condition

#### Impact ES1.12: Enhancement of rare, endemic or threatened habitats or ecosystems

20.12The Organization shall select outcome indicators as required in Impact ES1.11 but the required result for a) or b) is 'Condition is improving'.

### 21 :ES2: Carbon sequestration and storage

#### General requirements for impacts related to ES2.

21.1 The Organization shall specify which carbon pools have been included in the measurement of the present value and the baseline value.

NOTE: Forest carbon pools include above ground biomass, below ground biomass, deadwood (standing and lying), litter, and soil organic matter.

- 21.2 The Organization shall not include more carbon pools in the measurement of the present value than in the measurement of the baseline value.
- 21.3 The Organization shall justify that carbon pools excluded from measurement are not affected by the ES project.

#### Impact ES2.1: Maintenance of forest carbon stocks through forest protection or conservation

21.4 The Organization shall justify that no leakage is happening outside the ES project area in MU(s) owned by The Organization.

NOTE: Leakage occurs when carbon benefits within the ES project area result in carbon emissions or reduction in carbon stocks elsewhere. One example of leakage happens when extending the rotation age (which increases the forest carbon stocks in a specific area), also results in decreasing forest carbon stocks elsewhere. Another example of leakage is when a responsible forest management project restricts logging in a specific area, but the logging activity then shifts to a different forest stand, resulting in emissions elsewhere that reduce or completely undo the net carbon benefits from the ES project area.

21.5	The Organization shall select one outcome ind	dicator (exampl	es are provided in	Column 2) to measure	forest carbon stocks.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> <b>requirement(s)</b> (compare column 3 to this)	5. Required result
Forest carbon stocks	Carbon stocks in the ES project area	Present value of outcome indicator	At least one previous value of outcome indicator	Present value of forest carbon stocks is similar or higher than the baseline value(s).

#### Impact ES2.2: Maintenance of forest carbon stocks through responsible forest management

- 21.6 If The Organization pursues or receives a sponsorship for impact ES2.2, it shall also have verified impact ES1.5 Maintenance of natural forest structure or ES1.6 Enhancement of natural forest structure, conforming with Clause 20.5 or 20.6.
- 21.7 The Organization shall justify that no leakage is happening outside the ES project area in MU(s) owned by The Organization.
- 21.8 The Organization shall select one outcome indicator (examples are provided in Column 2) to measure forest carbon stocks.

1. Type of outcome indicator required	<b>2. Examples of outcome</b> <b>indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
Forest carbon stocks			At least one previous value of outcome indicator At least one previous value of outcome indicator At least one previous value of outcome higher than the baseline value(s)	
	Carbon stocks across the entire management unit	Present value of outcome indicator	AND	
			Projected carbon stocks in the management unit over the entire logging cycle	Present value of forest carbon stocks is similar to the baseline value in the year of the measurement

#### Impact ES2.3: Enhancement of forest carbon stocks through afforestation, reforestation and restoration

- 21.9 The Organization shall demonstrate impact ES1.1 Enhancement of natural forest cover, conforming with Clause 20.1.
- 21.10The Organization shall justify that no leakage is happening outside the ES project area in MU(s) owned by The Organization.
- 21.11 When harvesting is taking place in the ES project area, The Organization shall select in column 3 (Measurement required) 'Long term average of the value of the outcome indicator after ES project activity' and in column 4 (Baseline requirement(s)) 'Long term average of the value of the outcome indicator before the ES project activity'.
- 21.12The Organization shall select one outcome indicator (examples are provided in Column 2) to measure forest carbon stocks.

1. Type of outcome indicator required	<b>2. Examples of outcome</b> <b>indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
Forest carbon stocks		Present value of outcome indicator resulting from the project activity	At least one previous value of the outcome indicator	Present value of forest carbon stocks is higher than the baseline value(s).
	Carbon stocks in the ES project area	OR Long term average of		Long term average of the
		the value of the outcome indicator after ES project activity	indicator before the ES project activity	value of the outcome indicator after the ES project activity is higher than before the ES project activity

#### Impact ES2.4: Enhancement of forest carbon removals through responsible forest management

21.13The Organization shall implement actions that promote carbon removals.

NOTE: Removals represent removal of atmospheric CO<sub>2</sub> through sequestration in the forest, either due to afforestation, reforestation and restoration (impact ES2.3), or implementing responsible forest management (impact ES2.4). Carbon benefits from responsible forest management can result from activities such as extension of rotation age, enrichment planting, improving forest structure, enhanced regeneration, and others.

- 21.14The Organization shall justify that no leakage is happening outside the ES project area in MU(s) owned by The Organization.
- 21.15The Organization shall calculate the long-term average of its present value at the ES project area.
- 21.16The Organization shall calculate the long-term average of its baseline value, if possible.

NOTE: For example, when the baseline value contains more than one value for the outcome indicator (e.g. it changes through time), Clause 21.16 requires the long-term average of the baseline value to be calculated.

- 21.17The Organization shall select one outcome indicator (examples are provided in Column 2) to measure:
  - a) forest carbon stocks; and optionally
  - b) greenhouse gas (GHG) emissions.

1. Type of outcome indicator required	<b>2. Examples of outcome</b> <b>indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> <b>requirement(s)</b> (compare column 3 to this)	5. Required result
a) Forest carbon stocks	Carbon stocks in the ES project area	Present value of outcome indicator	Reference value	Present value of forest carbon stocks is higher than the baseline value. The maximum verifiable value is the difference between the long-term average of the present value vs the long-term average of the baseline value.
AND OPTIONALLY				
b) GHG emissions	GHG emissions related to forestry operations	Present value of outcome indicator	Reference value	Present value of GHG emissions is similar than the baseline value.

NOTE 1: The <<u>FSC-GUI-30-006 Guidance for Demonstrating Ecosystem Services Impacts</u>> provides specific guidance on the type of reference values, their source(s), and how they can be applied in different ES projects.

NOTE 2: Examples of GHG emissions from leakage sources (including from forestry operations) are fossil fuel use (from machinery used in forestry operations), fertilizer application, road network development, fuel load removal, creation of firebreaks. GHG emissions are expressed as CO<sub>2</sub> equivalent.

#### Impact ES2.5: Enhancement of forest climate benefits through increased carbon stock or reduction of GHG emissions

21.18The Organization shall implement actions that promote GHG reductions.

NOTE: Reductions refer to the decrease or prevention of GHG emissions from the forest to the atmosphere, achieved through responsible forest management practices. These practices may include converting production areas to conservation areas, implementing reduced impact logging (like reduced road width, directional felling, improved planning of road network etc.), and using techniques to improve resilience against pests, diseases, or fires.

- 21.19The Organization shall justify that no leakage is happening outside the ES project area in MU(s) owned by The Organization.
- 21.20The Organization shall calculate the long-term average of its present value at ES project area.
- 21.21 The Organization shall calculate the long-term average of its baseline value, if possible.

NOTE: For example, when the baseline value contains more than one value for the outcome indicator (e.g. it changes through time), Clause 21.21 requires the long-term average of the baseline value to be calculated.

- 21.22The Organization shall select one outcome indicator (examples are provided in Column 2) to measure:
  - a) forest carbon stocks; and optionally
  - b) GHG emissions.

1. Type of outcome indicator required	<b>2. Examples of outcome</b> <b>indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Forest carbon stocks	Carbon stocks in the ES project area	Present value of outcome indicator	Reference value	Present value of forest carbon stocks is higher than the baseline value. The maximum verifiable value is the difference between the long-term average of the present value vs the long-term average of the baseline value.
OR				
b) GHG emissions	GHG emissions related to forestry operations in the ES project area	Present value of outcome indicator	Reference value OR Previous value of outcome indicator	Present value of GHG emissions is similar than the baseline value.

#### 22 ES3: Water services

#### General requirements for impacts related to ES3.

22.1 The Organization shall conduct an assessment that identifies areas of water stress and water scarcity as well as flooding within the MU.

#### Impact ES3.1: Maintenance of water quality

22.2 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure water quality.

NOTE: In the case of water quality measurements, it is particularly important that the sampling methods have sufficient frequency and spatial coverage to give an accurate reflection of status and trends.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
Water quality	<ul> <li>Water turbidity</li> <li>Water temperature</li> <li>Dissolved oxygen</li> <li>Water pH</li> <li>Bio-indicators of stream health (macro-invertebrates, fish)</li> <li>Pathogens (bacteria, e.g. E. coli; viruses) in water</li> <li>Nutrients (phosphorous, nitrogen)in water</li> <li>Total suspended solids</li> <li>Level of sedimentation/ water sediment load (grams per litre)</li> <li>Organic pollution: biochemical oxygen demand (BOD) and/or chemical oxygen demand (COD)</li> <li>Level of metal contamination (e.g. mercury, arsenic, cadmium, lead)</li> </ul>	Present value of outcome indicator	A relevant standard for the established uses of water NOTE: For example, the WHO Guidelines for drinking-water quality (2022) or the WHO Guidelines on recreational water quality: Volume 1 Coastal and fresh waters (2021).	Present water quality meets relevant standards

#### Impact ES3.2: Enhancement of water quality

22.3 The Organization shall select outcome indicators as required in Impact ES3.1 but the required result is 'Water quality is showing progress towards or exceeding the relevant standard.'

#### Impact ES3.3: Maintenance of water volume regulation

- 22.4 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:
  - a) native forest cover and density; and/or
  - b) watershed condition; and
  - c) volume of water regulated.

1. Type of outcome indicator required	2. Examples of outcome indicators (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Native forest cover and density	<ul> <li>Natural forest cover for the management unit overlapping with the relevant watershed</li> <li>Native forest density</li> <li>Proportion of forest that is degraded over total forest area</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND/ OR				
b) Watershed condition	<ul> <li>Percentage of natural wetlands remaining</li> <li>Percentage of forest cover in the relevant watershed in undisturbed</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
	condition		AND	
	<ul> <li>Percentage of forest that is degraded over total forest area</li> <li>Percentage of waterbody shoreline with forest cover</li> <li>Percentage of undisturbed water sources</li> </ul>		A natural reference area OR based on best available information a description of a natural condition	Present value on MU is similar to the natural reference area OR the description of a natural condiction
AND				
c) Volume of water regulated	<ul> <li>Volume of infiltration and groundwater recharge</li> <li>Volume of runoff avoided or reduced</li> <li>Peak discharge reduction</li> <li>Water flow</li> <li>Level of flood protection</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES3.4: Enhancement of water volume regulation

22.5 The Organization shall select outcome indicators as required in Impact ES3.3 but the required result for at least a), b) or c) is 'Condition is improving'.

#### 23 ES4: Soil conservation

#### General requirements for impacts related to ES4.

23.1 The Organization shall identify vulnerable or high-risk soils within the MU, including thin soils; soils with poor drainage and that are subject to waterlogging; and soils prone to compaction, erosion, instability, and run-off.

#### Impact ES4.1: Maintenance of soil condition

23.2 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) soil properties and quality; and
- b) soil condition.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Soil properties and quality	<ul> <li>Soil depth</li> <li>Soil (aggregate) stability</li> <li>Thickness of layer of soil organic matter</li> <li>Organic matter content (%)</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
	• Soil pH		AND	
	<ul> <li>Nutrient (e.g. nitrogen, phosphorous, potassium) content of soil</li> <li>Salt concentration in the soil</li> <li>Soil humidity/ moisture</li> <li>Soil macro-fauna abundance</li> </ul>		Relevant standard for soil properties and quality	Present value is similar to relevant standard for soil properties and quality
AND		l	1	Ι
b) Soil condition	<ul> <li>Extent of land with forest canopy or ground vegetation</li> <li>Percentage of forest cover in undisturbed condition</li> <li>Proportion of forest that is degraded over total forest area</li> <li>Percentage of damaged soil</li> <li>Degree of soil compaction in operated areas (roads and harvest areas)</li> <li>Water infiltration rate</li> <li>Water runoff</li> <li>Incidence of landslides</li> <li>Productivity (forest and agricultural) per unit area</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES4.2: Enhancement of soil condition

23.3 The Organization shall select outcome indicators as required in Impact ES4.1 but the required result for a) or b) is 'Condition is improving.'

Page 62 of 72 Ecosystem Services Procedure: Impact Demonstration and Market Tools FSC-PRO-30-006 V2-0 EN

#### Impact ES4.3: Maintenance of soil stability and protection against soil erosion

23.4 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) forest cover on vulnerable or high- risk areas; and
- b) soil erosion; and optionally
- c) successful reforestation/ restoration activities.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Forest cover on vulnerable or high-risk areas	<ul> <li>Protective forest cover on steep slopes</li> <li>Protective forest cover for wetlands and/or coastal areas</li> <li>Natural forest cover on vulnerable areas</li> <li>Degraded forest area as a proportion of total forest area</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
b) Soil erosion	<ul> <li>Area affected by wind and/or water erosion</li> <li>Amount of erosion (cubic meters, area affected)</li> <li>Soil erosion and sedimentation levels</li> <li>Time spent on removal of sediment</li> <li>Costs of removal of sediment</li> <li>Impacts of sediment deposited by wind and/or water erosion on nearby land or water bodies</li> <li>Percentage of households within local communities affected by landslide</li> </ul>	Present value of outcome indicator	At least one previousvalue of outcome indicator	Condition is stable
AND OPTIONALLY				-
c) Successful reforestation/ restoration activities	<ul> <li>Area of natural forest cover resulting from afforestation/ reforestation</li> <li>Restored forest area as a proportion of total forest area</li> </ul>	Present value of outcome indicator	Zero activity	Condition is stable

#### Impact ES4.4: Enhancement of soil stability and protection against soil erosion

23.5 The Organization shall select outcome indicators as required in Impact ES4.3 but the required result for at least b) is 'Condition is improving.'

#### 24 ES5: Recreational services

- 24.1 General requirements for impacts related to ES5.
- 24.2 The Organization shall implement practices to protect the health and safety of the people engaged in recreational or touristic activities.
- 24.3 The Organization shall implement practices to protect wildlife from any potential negative consequences from recreational or touristic activities.

#### Impact ES5.1: Maintenance of social-ecological benefits from forest recreation and/or tourism

24.4 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the extent of areas protected and used for nature-based recreation; and
- b) the facilities and services for visitors; or
- c) visitor experience; and optionally
- d) benefits for local communities, Indigenous Peoples and/or traditional peoples from nature-based tourism.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	4. Baseline requirement(s) (compare column 3 to this)	5. Required result
a) Extent of areas protected and used for nature-based recreation	<ul> <li>Area protected and used for nature-based recreation (e.g. forest bathing)</li> <li>Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas and used as recreational, by ecosystem type</li> <li>Coverage by protected areas of important sites for biodiversity conservation used for tourism visitation</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND		•	1	

b) Facilities and services for visitors	<ul> <li>Km of hiking trails with adequate accessibility</li> <li>Coverage of interpretation panels</li> <li>Sheltering/resting facilities for visitors</li> <li>Adequacy of waste management processes</li> <li>Trail signage and surface markings</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
c) Visitor experience AND OPTIONALLY	<ul> <li>Level of visitor satisfaction, feedback or reactions</li> <li>Number of recurring visits per recreational experience</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
d) Benefits for local communities, Indigenous Peoples and/or traditional peoples from nature- based tourism	<ul> <li>Level of wellbeing of local communities, Indigenous Peoples and/or traditional peoples (considering factors like health, education, income, housing infrastructure, etc.)</li> <li>Number of new employments generated by recreational activities</li> <li>Number of people/households involved in recreational activities</li> <li>Level of income generated by recreational activities</li> <li>Improvement of social needs (e.g. healthcare, education, food security) generated by recreational activities</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES5.2: Enhancement of social-ecological benefits from forest recreation and/or tourism

24.5 The Organization shall select outcome indicators as required in Impact ES5.1 but the required result for at least a) or b) is 'Condition is improving.'

#### Impact ES5.3: Maintenance of populations of species of interest for nature-based tourism

24.6 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to:

- a) measure, for selected species of interest, indicators of population abundance; and
- b) provide evidence that the habitat is in suitable condition.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	4. Baseline requirement(s) (compare column 3 to this)	5. Required result
a) For selected species of interest, indicators of population abundance	<ul> <li>Abundance of selected species of recreational interest</li> <li>Number of charismatic species sightings (e.g. when birdwatching)</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND				
b) Evidence that the habitat is in suitable condition	<ul> <li>Area of habitat of selected species protected</li> <li>Suitability of habitat for selected species</li> <li>Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES5.4: Enhancement of populations of species of interest for nature-based tourism

24.7 The Organization shall select outcome indicators as required in Impact ES5.3 but the required result for a) or b) is 'Condition is improving'.

### 25 ES6: Cultural practices and values

#### General requirements for impacts related to ES6

- 25.1 The Organization shall involve, in a culturally appropriate manner, Indigenous Peoples and/or traditional peoples in:
  - a) the identification of cultural practices and values;
  - b) the design and implementation of activities; and
  - c) the measurement of the outcome indicators to demonstrate that their cultural practices and values are maintained or enhanced over time.

#### Impact ES6.1: Maintenance of cultural and ancestral knowledge, practices and language

- 25.2 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:
  - a) the extent of protected areas or sites in the forest that are of importance for cultural practices ; and
  - b) the socio-cultural and environmental benefits resulting from their connection to the forest.

NOTE 1: protected areas refer to sites that are legally protected or protected by The Organization, e.g. because they have been included in the conservation area network

NOTE 2: The Organization is allowed to differentiate in the statement of results the benefits per gender.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Extent of protected areas or sites in the forest that are of importance for cultural practices	<ul> <li>Indigenous land protected or area protected based on evidence as a result of cultural activities, cultural heritage, identity or sense-of-belonging</li> <li>Sacred sites or sites nationally designated or recognized to possess high cultural value</li> <li>Area covered by Indigenous Cultural Landscape</li> <li>Extent of sites of special intellectual, scientific, archeological interest or used for educational activities</li> <li>Sites used for cultural awareness, cultural exchange, or of cultural and</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND	spiritual importance that are protected			
b) Socio-cultural and environmental benefits resulting from their connection to the forest	<ul> <li>Educational, training, capacity building or learning activities and materials developed to reveal cultural and historic significance of protected areas, and people engaged</li> <li>Events used for high spiritual, intergenerational, traditional or bequest significance conducted in the areas (e.g. storytelling, folklore, dance, songs or art ceremonies and initiatives)</li> <li>Transference of Indigenous or traditional knowledge and languages intergenerationally (e.g. by recognising and using indigenous terms for sites and practices)</li> <li>Activities that recognize and enhance the contribution of Indigenous, traditional, cultural knowledge and practices to wellbeing and</li> </ul>		At least one previous value of outcome indicator	Condition is stable

#### Impact ES6.2: Enhancement of cultural and ancestral knowledge, practices and language

25.3 The Organization shall select outcome indicators as required in Impact ES6.1, but the required result for a) and b) is 'condition is improving.'

#### Impact ES6.3: Maintenance of culturally valued populations or species

25.4 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) culturally valued species or populations; and
- b) habitats protected by traditional Indigenous practices.

1. Type of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> requirement(s) (compare column 3 to this)	5. Required result
a) Culturally valued species or populations	<ul> <li>Diversity of cultural, historical or iconic species or populations which are used as emblems or cultural signifiers of some kind</li> <li>Richness of species deemed to have cultural, sacred or spiritual significance for people, including for Indigenous or traditional peoples' values and sense of belonging</li> <li>Existence of endangered species which preservation is required for heritage or identity values or future generations</li> <li>Existence of species associated to spiritual, traditional or culturally relevant food, knowledge, therapeutic and medicinal activities</li> <li>Existence of species important to sustain livelihoods, subsistence and food sovereignty</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND				

b) Habitats protected by traditional, Indigenous practices	<ul> <li>Area of selected species protected by Indigenous and traditional cultural practices</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
	<ul> <li>Proportion of important sites for terrestrial and freshwater biodiversity that are under Indigenous or traditional sustainable management</li> </ul>			
	<ul> <li>Habitat protected from external pressures, using Indigenous and traditional knowledge (e.g. control of wildfires)</li> </ul>			

#### Impact ES6.4: Enhancement of culturally valued populations or species

25.5 The Organization shall select outcome indicators as required in Impact ES6.3, but the required result for a) and b) is 'condition is improving.'

### 26 ES7: Air quality

#### Impact ES7.1: Maintenance of air quality

26.1 The Organization shall select at least one outcome indicator (examples are provided in Column 2) to measure:

- a) the air quality; and
- b) the forest structure.

1. Ty	ype of outcome indicator required	<b>2. Examples of outcome indicators</b> (select at least one or select an alternative, see Clause 5.3b)	3. Measurement required	<b>4. Baseline</b> <b>requirement(s)</b> (compare column 3 to this)	5. Required result
a)	Air quality	<ul> <li>Critical loads of atmospheric deposition of nitrogen and/or sulphite</li> <li>Concentration of NO<sub>2</sub> and/or O<sub>3</sub></li> <li>PM2.5 or PM10</li> <li>Bio-indicators of air quality such as lichens, mosses</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable
AND					
b)	Forest structure	<ul> <li>Leaf area index (LAI)</li> <li>Forest vertical and/or horizontal structure</li> <li>Forest structural condition index</li> </ul>	Present value of outcome indicator	At least one previous value of outcome indicator	Condition is stable

#### Impact ES7.2: Enhancement of air quality

26.2 The Organization shall select outcome indicators as required in ES7.1, but the required result for a) and b) is 'condition is improving'.



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