



# WWF Analysis of Forest Certifications Systems

June 2025

## About this analysis

This World Wildlife Fund (WWF) analysis focuses on how the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC), and the Sustainable Forestry Initiative (SFI) forest management standards address a number of key topics related to forests and forestry. The topics are organized within two broad categories:

1) Environmental Issues

- Deforestation & conversion
- Maintenance & restoration of forest ecosystems, biodiversity & habitat
- Opening sizes & live tree retention
- Riparian buffers & water quality
- Climate adaptation & resilience

2) Social Issues

- Socioeconomic well-being of local communities & stakeholders
- Stakeholder engagement & dispute resolution
- Indigenous Peoples' rights
- Workers' rights

We examine the systems' forest management standards both at an international level and at the national level in two countries: the US and Indonesia. We have tried to assist the reader in understanding and comparing the standards by quoting from them directly and offering commentary that aims to clarify important points and highlight key similarities and differences. Additionally, we point to some important differences between the systems that lie beyond the core forest management standards.

While our goal in producing this analysis is to support readers in drawing their own conclusions about the systems' relative merits, we wish to state clearly that it has reinforced our belief that FSC's standards are more robust than those of PEFC/SFI, particularly when it comes to:

1. The comprehensiveness and relative stringency of requirements;
2. The specificity and verifiability of outcomes; and
3. International respect and regard for the organizations and their standards.

## Comparing the systems & standards

There are two global forest certification systems: the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). There are many differences between them, including notably their origins and organization:

- Launched in 1994, FSC is a relatively unified and centralized system in that it started with the establishment of an international secretariat (headquarters) out of which grew national offices or initiatives in timber-producing countries.
- PEFC started out in 1999 as the Pan European Forest Certification system, an umbrella for national systems in Finland, Sweden, Norway, Germany and Austria that were developed to offer alternatives to FSC. In 2004, PEFC extended its umbrella by endorsing the first non-European national systems, morphing into the Programme for the Endorsement of Forest Certification – same acronym, different name. Today there are PEFC-endorsed national systems in 40 countries that are loosely affiliated relative to FSC.
- The largest single PEFC-endorsed system is the Sustainable Forestry Initiative (SFI) which covers both the United States and Canada. There is also a separate PEFC-endorsed standard in Canada that is less widely used.

At the heart of both FSC and PEFC are a set of standards that set requirements for forest and plantation management in the countries in question.<sup>1</sup> Third-party certifiers conduct annual audits of the on-the-ground practices of a given operation against these forest management (FM) standards, and the timber that flows from them can be used to make value-added certified products.

Comparisons of FSC and PEFC are complicated by the fact that the two evolved and are structured quite differently. Additionally, it should be borne in mind that comparing standards at the international level is in some ways less meaningful than doing so at the national level, because auditing occurs and certification is granted against the latter and not the former.

## FSC

FSC's rules for forest management are comprised of a hierarchy of standards:

- The Principles & Criteria (P&C)
- The International Generic Indicators (IGIs)
- Forest Stewardship Standards<sup>2</sup> (commonly referred to as FM standards, per the above)

At the highest level are FSC's universal P&C (FSC-STD-01-001 V5-3). All FSC FM standards incorporate the P&C, but as the latter are rather general and there are variations in environmental and social conditions across countries, regions and forest types, the rules are elaborated in national FM standards at the Indicator level, and these are generally at least somewhat differentiated. Such variation is limited, however, by the IGIs (FSC-STD-60-004 V2-1 EN), a standard that lays out instructions for the development of Indicators that FM standards are required to incorporate (limited exceptions may occasionally be accepted but must be approved by the international secretariat).

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<sup>1</sup> Beyond these core FM standards, there are additional ones, including:

- Standards for chain of custody certification: rules governing things like the purchase, storage, processing and sale of certified products that are applied throughout the different stages of production and distribution from forest to retail.
- Standards governing the use of the forest certification system's labels and trademarks.
- Standards that apply to non-certified inputs to certified products, i.e., Controlled Wood in FSC and avoidance of material from controversial sources in PEFC/SFI. Certified products can be made entirely from wood from certified forests or, most commonly, from a mix of material from certified and non-certified forests. Both systems allow such mixing and establish rules whose purpose is to avoid wood from unacceptable sources such as illegal logging.

<sup>2</sup> The great majority of FSC's Forest Stewardship Standards are developed and applied at a national level, although there are also some regional standards that have multiple countries in scope.

## PEFC

PEFC's normative framework also has a hierarchical structure, although the relationship between the standards is looser than FSC's. For forest management certification, the PEFC Benchmark Standard for Sustainable Forest Management (PEFC ST 1003:2018) is at the top level and is the rough equivalent of FSC's P&C, but while the latter constitute a uniform backbone of all national FSC FM standards, national PEFC systems do not need to incorporate the exact language and structure of the Benchmark into their FM standards. Additionally, in PEFC there is no direct equivalent of FSC's IGIs. Rather, the Benchmark functions as a set of guidelines and a basis for assessing national systems for endorsement. As with the P&C and IGIs, the Benchmark and the endorsement process are intended to drive alignment among national FM standards, but this less prescriptive approach results in greater variation as some national standards do not adhere to the language in the PEFC Benchmark.

### Important differences

We find substantial differences between all of the FSC and PEFC FM standards considered in this document in terms of length, degree and depth of detail, and level of prescription. A somewhat crude but nevertheless indicative way to compare them is by considering the number of requirements.

- FSC's international *Principles and Criteria for Forest Stewardship* (FSC-STD-01-001 V5-3) has ten overarching Principles. The PEFC equivalent, the *Sustainable Forest Management Benchmark Standard* (PEFC ST 1003:2024), has seven overarching categories.
- In the same documents, FSC has 70+ Criteria, while PEFC has about 25.
- In its *International Generic Indicators* (FSC-STD-60-004 V2-1), FSC has more than 200 requirements. PEFC's *Sustainable Forest Management Benchmark Standard* has around 80.
- The FSC US FM standard has, as noted above, the same Criteria as the P&C as well as over 250 Indicators and Sub-Indicators. The SFI FM standard uses different hierarchical nomenclature than both FSC and PEFC: Objectives are at the highest level (the rough equivalent of FSC's Principles); Performance Measures are next (similar to FSC's Criteria); and Indicators are below those. SFI has 17 Objectives, 41 Performance Measures, and 112 Indicators.

There are also important differences between the level of consistency between the international- and national-level standards. All of the FSC national standards incorporate the exact language of its Principles and Criteria (P&C) and are aligned with its International Generic Indicators.

On the other hand, there are some significant discrepancies between PEFC's international standards and at least one of its endorsed national standards, SFI. For example:

- **Conversion:** The PEFC FM Benchmark's section 8.1.6 states that "human-induced forest degradation shall not occur" and adds "[p]lantation forests established by converting primary forests or naturally regenerating forests after 31 December 2010 are not eligible for certification." However, the SFI FM

standard's Indicator 1.21 states that "Certified Organizations shall not convert one forest cover type to another forest cover type, unless [our emphasis] the conversion: a. does not convert native forest cover types that are rare, ecologically important, or that put any native forest cover types at risk of becoming rare; and b. does not create significant adverse impacts on Forests with Exceptional Conservation Value, old growth forests, forest critical to threatened and endangered species, or special sites or ecologically important non-forest eco-systems; and c. includes objectives for long-term outcomes that support maintaining native forest cover types and ecological function; and d. is in compliance with relevant national and regional policy and legislation related to land use and forest management."

- **Forest ecosystems:** The PEFC FM Benchmark's section 8.1.1 stipulates that "management shall aim to maintain or increase forests and their ecosystem services and maintain or enhance the economic, ecological, cultural and social values of forest resources" and 8.2.1 "requires that health and vitality of forest ecosystems shall be maintained or enhanced..." However, the SFI FM standard's Indicator 4.1.1 uses less prescriptive language, requiring that companies have a "program to incorporate the conservation of biological diversity, including native species, wildlife habitats and ecological community types at stand and landscape levels" without specifying that conservation of biodiversity is required.
- **Rights of Indigenous Peoples:** The SFI FM standard makes no reference to Free, Prior & Informed Consent of Indigenous Peoples (FPIC) despite the fact that the PEFC Benchmark Standard contains the following provision: "6.3.2.2 ...forest practices and operations shall be conducted in recognition of the established framework of legal, customary and traditional rights such as outlined in ILO 169 and the UN Declaration on the Rights of Indigenous Peoples, which shall not be infringed upon without the free, prior and informed consent of the holders of the rights..."
- **Rights of workers:** The SFI FM standard is out of step with the PEFC Benchmark Standard's provisions for workers' rights. Section 6.3.3.1 of the latter states, "The standard requires that forest practices and operations shall comply with fundamental ILO conventions." However, SFI's standard addresses workers' rights in a very limited way, requiring only that certified companies follow the law and that they respect workers' rights in a way that "encompasses the intent" of the ILO core conventions, which is a far cry from requiring that they be followed. PEFC also has stipulations about wages, collective bargaining, equal opportunities, freedom from workplace harassment, and dispute resolution that SFI does not appear to require.

This raises questions as to the PEFC endorsement process: it appears that endorsed national standards do not need to incorporate what would appear to be key elements of the Benchmark, resulting in meaningful inconsistencies.

Finally, there are important differences between other aspects of the systems that an analysis of FM standards does not address. For example, FSC has a Policy for Association (FSC-POL-01-004) which defines a number of unacceptable activities, including large-scale conversion and human rights violations, that organizations and their corporate group commit to avoid in both certified and non-certified operations. This prevents companies or their sister companies from maintaining certification in some parts of their operations if they cause significant environmental or social harm in others. There is no equivalent to the Policy for Association in PEFC or SFI.

Another important example relates to the rules applying to non-certified material that is mixed with material from forests certified to FM standards to make certified products. In FSC, this is called Controlled Wood, and in order to control wood, organizations must refer to National Risk Assessments that establish various types of risks in producer countries and specify measures that companies must take to mitigate those risks. PEFC and SFI also require that companies avoid “controversial sources” for non-certified material, and to do this, they must gather information, conduct a risk assessment and have a program for mitigating risk, including by identifying controls that suppliers must put in place for high-risk sources. The weakness of this approach is that there are no objective requirements for, or definitive guidance on, determinations of risk or mitigation measures. Instead, it is up to each individual company to assess and determine risk and to decide how to control it. This can lead to inconsistencies where one company finds that a source is low risk while another determines that the same source is high risk; or, where two companies both find a source is high risk, one may choose relatively stringent controls while the other chooses relatively lax ones. Additionally, it is in the interest of companies to reduce their burden by classifying as low risk sources that most objective observers would deem controversial.

A third example lies in the SFI Fiber Sourcing and Certified Sourcing standards. These are unique to SFI. Nothing like them exists anywhere else in the PEFC or FSC systems, and the standards and the accompanying SFI Certified Sourcing label and claim are not recognized by PEFC International. The Fiber Sourcing/Certified Sourcing standards are used by manufacturers such as pulp/paper mills and sawmills and require the implementation of a management system that encompasses a variety of topics, including due diligence for avoidance of controversial sources. Audits, however, are limited to the manufacturer and their management system –there is no auditing of the forests that supply the material that will carry the Certified Sourcing label/claim, and there is no requirement for Certified Sourcing products to contain any material from forests certified to the SFI FM standard.

Neither FSC nor PEFC allow their labels to be used in association with products that have no inputs from certified forests or recycled sources in their manufacture. The SFI Certified Sourcing label is very nearly identical in appearance to SFI Certified Chain of Custody labels, whose use does require some certified or recycled content.

## FM Standard Comparisons: International Level

The tables that follow compare FSC and PEFC’s international FM standards.. In this analysis, some of the text has been highlighted to draw the reader’s attention (it is not highlighted in the originals).

It should be remembered that neither of the international-level standards below are used as the basis for auditing, so while it is relevant to compare them, it is the differences in the national-level standards that are most material in determining what is and isn’t certifiable.

Table 1. Environmental Issues			
Topic	PEFC Sustainable Forest Management Benchmark Standard <i>PEFC ST 1003:2024</i>	FSC Principles & Criteria and International Generic Indicators <i>FSC-STD-01-001 V5-3</i>	Comments
<p><b>Deforestation &amp; conversion</b></p> <p>This section concerns both:</p> <ol style="list-style-type: none"> <li>1) Deforestation: the conversion of forests to another land use, typically to make way for development, infrastructure, or agriculture, and;</li> <li>2) Forest degradation: the conversion of natural forests that are diverse native ecosystems to monoculture plantations or “tree farms” designed to</li> </ol>	<p>8.1.4 The standard requires that forest conversion to agricultural use shall not occur.</p> <p>8.1.5 The standard requires that forest conversion to other land use shall not occur unless in justified circumstances where the conversion: a) is in compliance with national and regional policy and legislation applicable for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority including consultation with affected stakeholders; and b) entails a small proportion (no greater than 5 %) of forest type within the certified area; and c) does not have negative impacts on ecologically important forest areas, culturally and socially significant areas, or other protected areas; and d) does not destroy areas of significantly high carbon stock; and e) makes a contribution to long-term conservation, economic, and social benefits.</p> <p>8.1.6 The standard requires that human-induced forest degradation shall not occur.</p>	<p>6.9 The Organization shall not convert natural forest or High Conservation Value Areas to plantations or to non-forest land-use, nor transform plantations on sites directly converted from natural forest to non-forest land-use, except when the conversion: a) Affects a very limited portion of the Management Unit, and b) Will produce clear, substantial, additional, secure long-term conservation and social benefits in the Management Unit, and c) Does not damage or threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.</p> <p>6.10 Management Units containing plantations that were established on areas converted from natural forest between 1 December 1994 and 31 December 2020 shall not qualify for certification, except where: a) The conversion affected a very limited portion of the Management Unit and is producing clear, substantial, additional, secure long- term conservation benefits in the Management Unit, or b) The Organization which was directly or indirectly involved in the conversion demonstrates restitution of all social harms and proportionate remedy of environmental harms as specified in the applicable FSC Remedy Framework, or c) The</p>	<p>Both FSC and PEFC prohibit deforestation, but they differ in their treatment of forest degradation.</p> <p>FSC does not allow certification of plantations established at the expense of natural forest (i.e., degradation) between 1994 and 2022 unless there is restitution of environmental and social harms under the FSC Remedy Framework. For more information on the Framework:</p> <p><a href="https://connect.fsc.org/system-integrity/fsc-remedy-framework">https://connect.fsc.org/system-integrity/fsc-remedy-framework</a></p> <p>PEFC’s timeline allows certification of plantations that replaced natural forest anytime before 2011. Additionally, PEFC has no equivalent to the FSC Remedy Framework.</p>

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<p>maximize yields and profits.</p>	<p>Note 1: Plantation forests established by converting primary forests or naturally regenerating forests after 31 December 2010 are not eligible for certification.</p> <p>Note 2: Planted forests established by converting primary forests after 31 December 2010 are not eligible for certification.</p> <p>Note 3: This requirement is not applicable for plantation forests established for protection or ecosystem restoration, as well as forests established through planting or seeding which at stand maturity resemble or will resemble naturally regenerating forests.</p>	<p>Organization which was not involved in the conversion but has acquired Management Units where conversion has taken place demonstrates restitution of priority social harms and partial remedy of environmental harms as specified in the applicable FSC Remedy Framework.</p> <p>6.11 Management Units shall not qualify for certification if they contain natural forests or High Conservation Value Areas converted after 31 December 2020, except where the conversion: a) Affected a very limited portion of the Management Unit, and b) Is producing clear, substantial, additional, secure long-term conservation and social benefits in the Management Unit, and c) Did not threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.</p>	
<p><b>Maintenance and restoration of forest ecosystems, biodiversity, and habitat</b></p> <p>This section concerns the inherent ecological health and biodiversity of forests as well as the closely related concept of <i>ecosystem services</i>—i.e., the social, economic, and environmental benefits that humans and human</p>	<p>8.1.1 The standard requires that management shall aim to maintain or increase forests and their ecosystem services and maintain or enhance the economic, ecological, cultural and social values of forest resources.</p> <p>8.2.1 The standard requires that health and vitality of forest ecosystems shall be maintained or enhanced and degraded forest ecosystems shall be rehabilitated wherever and as far as economically feasible, by making best use of natural structures and processes and using preventive biological measures.</p> <p>8.4.2 The standard requires that inventory, mapping and planning of forest resources shall identify, protect, conserve or set aside ecologically important forest areas.</p> <p><u>Definition of ecologically important forest areas</u></p>	<p>6.5 The Organization shall identify and protect representative sample areas of native ecosystems and/or restore them to more natural conditions. Where representative sample areas do not exist or are insufficient, The Organization shall restore a proportion of the Management Unit to more natural conditions.</p> <p>6.6.3 Management maintains, enhances, or restores habitat features associated with native ecosystems, to support the diversity of naturally occurring species and their genetic diversity.</p> <p>6.8 The Organization shall manage the landscape in the Management Unit to maintain and/or restore a varying mosaic of species, sizes, ages, spatial scales and regeneration cycles appropriate for the landscape values in</p>	<p>FSC requires the retention of representative samples of native ecosystems, where management is restricted to activities to maintain or enhance those ecosystems. It requires that a portion of plantations be restored as complex ecosystems and provides a clear definition of such restoration. And it requires the maintenance or restoration of forests’ ecological and structural diversity, biodiversity, and habitat.</p> <p>FSC also requires applying the precautionary approach in maintaining or restoring six categories of well-defined High Conservation Values (HCVs), including the protection of Intact Forest Landscapes (IFLs)—large areas (50,000+ hectares) that have not been impacted by industrial human activity.</p> <p>Protection of IFLs is among FSC’s more important requirements in relation to climate and ecosystem health</p>

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<p>communities derive from ecosystems.</p> <p>Forest structure (the layers of vegetation between the soil and the canopy) and biodiversity are closely tied to resilience, and both FSC and PEFC consider carbon sequestration, carbon storage, and flood mitigation to be ecosystem services.</p> <p>Ties between biodiversity and resilience can be more of less direct. The section on climate resilience and adaptation below evaluates some of the more direct ways that forests can adapt or remain intact as climate change progresses.</p>	<p>a) Containing protected, rare, sensitive or representative forest ecosystems; b) Containing significant concentrations of endemic species and habitats of threatened species, as defined in recognised reference lists; c) Containing endangered or protected genetic in situ resources; d) Contributing to globally, regionally and nationally significant large landscapes with natural distribution and abundance of naturally occurring species.</p> <p>8.4.10 The standard requires that tending and harvesting operations shall be conducted in a way that does not cause <b>lasting damage</b> to ecosystems. <b>Wherever possible</b>, practical measures shall be taken to maintain or improve biological diversity.</p>	<p>that region, and for enhancing environmental and economic resilience.</p> <p>Principle 9: The Organization shall maintain and/or enhance the High Conservation Values [HCV] in the Management Unit through applying the precautionary approach.</p> <p>9.1. The Organization, through engagement with affected stakeholders, interested stakeholders and other means and sources, shall assess and record the presence and status of the following High Conservation Values in the Management Unit, proportionate to the scale, intensity and risk of impacts of management activities, and likelihood of the occurrence of the High Conservation Values:</p> <p>HCV 1 - Species diversity. <b>Concentrations of biological diversity</b> including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.</p> <p>HCV 2 – Landscape-level ecosystems and mosaics. <b>Intact Forest Landscapes</b> and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain <b>viable populations of the great majority of the naturally occurring species in natural patterns</b> of distribution and abundance.</p> <p>HCV 3 – Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats, or refugia.</p> <p>HCV 4 - Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.</p>	<p>because large-scale deforestation or degradation, including through logging, of IFLs could have larger negative impacts than most other things that forest certification addresses.</p> <p>PEFC does not employ the concept of HCVs, nor does it require the precautionary approach. Instead, it requires the maintenance or enhancement of the “health and vitality” of forest ecosystems and “best use” of natural processes—terms that are relatively loose and open to interpretation. Further examples of relatively non-prescriptive language:</p> <ul style="list-style-type: none"> <li>• Management “shall aim” to maintain forests and ecosystem services;</li> <li>• Restoration of degraded ecosystems is only required if “economically feasible,” but feasibility is not defined;</li> <li>• The use of the word “or” in 8.4.2 could be interpreted to mean that it is sufficient to identify ecologically important forest areas without protecting them;</li> <li>• There are no clear metrics for determining if an area is “ecologically important”;</li> <li>• Harvesting operations are not allowed to cause “lasting damage” to ecosystems, but it’s not clear how to determine whether such damage has occurred, and practical measures to maintain or improve biological diversity must be taken “wherever possible,” but it’s unclear how to determine what is and isn’t possible in this context.</li> </ul>

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Topic	PEFC Sustainable Forest Management Benchmark Standard <i>PEFC ST 1003:2024</i>	FSC Principles & Criteria and International Generic Indicators <i>FSC-STD-01-001 V5-3</i>	Comments
		<p>9.2.1. The Organization identifies and documents the threats to High Conservation Values and develops management strategies necessary to ensure High Conservation Value maintenance and/or enhancement.</p> <p>9.2.2 Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values and to maintain associated High Conservation Value Areas prior to implementing potentially harmful management activities.</p> <p>9.2.4 Management strategies are developed to protect core areas.</p> <p>9.2.5 The vast majority of each Intact Forest Landscape is designated as core area.</p> <p>9.2.7 Management strategies allow limited industrial activity within core areas only if all effects of industrial activity including fragmentation:</p> <ol style="list-style-type: none"> <li>1) Are restricted to a very limited portion of the core area;</li> <li>2) Do not reduce the core area below 50,000 ha, and</li> <li>3) Will produce clear, substantial, additional, long-term conservation and social benefits.</li> </ol>	
<p><b>Opening sizes &amp; live tree retention</b></p> <p>This section concerns the intensity of allowable harvest practices, including acceptable opening sizes (a.k.a. clearcuts) permitted in a</p>	<p>8.1.2 The standard requires that the quantity and quality of the forest resources and the capacity of the forest to store and sequester carbon shall be safeguarded in the medium and long term by balancing harvesting and growth rates, using appropriate silvicultural measures and preferring techniques that minimise adverse impacts on forest resources.</p>	<p>6.6 The Organization shall effectively maintain the continued existence of naturally occurring native species and genotypes, and prevent losses of biological diversity, especially through habitat management in the Management Unit.</p>	<p>FSC’s international standards do not set specific limits on opening sizes or levels of retention, but rather direct national standard developers to set requirements appropriate for the local context so long as they maintain biodiversity, habitats, and species.</p> <p>PEFC also does not set specifications for opening sizes or retention. It states biodiversity as a value but is less specific</p>

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<p>forest management unit as well as live and dead tree “retention” (trees that must be left behind in a logged forest stand).</p> <p>See the section on ecosystem services below for specific requirements regarding logging near running water (“riparian buffers”).</p>	<p>8.4.4 The standard requires that successful regeneration shall be ensured through natural regeneration or planting that is <b>adequate</b> to ensure the quantity and quality of the forest resources.</p> <p>8.4.13 The standard requires that standing and fallen dead wood, hollow trees, old groves, and rare tree species shall be left in quantities and distribution necessary to safeguard biological diversity, taking into account the potential effect on the <b>health and stability</b> of forests and on surrounding ecosystems.</p>	<p>Standard Developers shall specify management thresholds for habitat features in national standards. Thresholds for habitat features that should be considered include:</p> <ul style="list-style-type: none"> <li>• Timber harvest and silvicultural methods that maintain and restore natural forest diversity, composition and structure;</li> <li>• Thresholds and guidelines for retention of trees throughout harvest areas as individual trees or in patches or groups of live trees and snags, including trees representative of the naturally dominant species for the site;</li> <li>• Thresholds and guidelines for retention and recruitment of woody debris, and other vegetation representative of the natural stand;</li> <li>• Thresholds and guidelines for regulation of opening sizes and rotation lengths for even-aged operations to ensure a range of stand ages that maintain all natural habitat types, prevent fragmentation and prevent cumulative watershed impacts; and</li> <li>• Configuration of harvesting to ensure connectivity.</li> </ul>	<p>about how to achieve it and does not reference opening sizes, intactness, or the connectedness of ecosystems.</p>
<p><b>Riparian buffers &amp; water quality</b></p> <p>This section concerns forested areas that must be retained near running water. Primarily designed to protect water quality and prevent erosion, buffers where logging isn’t</p>	<p>8.5.1 The standard requires that protective functions of forests for society, such as their potential role in erosion control, flood prevention, water purification, climate regulation, carbon sequestration and other regulating or supporting ecosystem services shall be maintained or enhanced.</p> <p>8.5.4 The standard requires that <b>special care</b> shall be given to forestry operations in forest areas with water protection functions to avoid adverse effects on the quality and quantity of water resources. <b>Inappropriate</b> use of chemicals or other harmful substances or <b>inappropriate</b></p>	<p>6.7 The Organization shall protect or restore natural watercourses, water bodies, riparian zones and their connectivity. The Organization shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur.</p> <p><b>Standard Developers shall identify protection measures</b> that include the following, and may include existing regulations and/or best practices where they provide sufficient protection:</p>	<p>FSC’s requirements for establishing riparian buffers, controlling erosion, and maintaining water quality are more detailed and prescriptive than are PEFC’s, whose use of relatively loose language like “special care” and “inappropriate use” leaves room for interpretation and variation among national standards.</p>

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<p>allowed result in more intact ecosystems, greater habitat protection, and continued carbon storage and sequestration.</p>	<p>silvicultural practices influencing water quality in a harmful way shall be <b>avoided</b>. Downstream water balance and water quality shall not be <b>significantly affected</b> by the operations.</p>	<ul style="list-style-type: none"> <li>• Buffer zones and other measures to protect natural watercourses and water bodies, their connectivity, in-stream habitat, and fish, invertebrates, and other aquatic species;</li> <li>• Measures to protect native vegetation in riparian zones of watercourses and water bodies, including feeding, breeding, or cover habitat for terrestrial and aquatic species, and needed inputs of wood and leaf litter into aquatic areas;</li> <li>• Measures to prevent negative changes in water quantity and quality, including through maintaining stream shading sufficient to protect against temperature changes beyond natural limits;</li> <li>• Measures to maintain natural hydrological patterns and stream flows;</li> <li>• Measures to prevent impacts from road location, construction, maintenance and use;</li> <li>• Measures to prevent sedimentation of water bodies and soil erosion from harvesting, roads, and other activities; and</li> <li>• Measures to prevent negative impacts from chemicals or fertilizers.</li> </ul>	
<p><b>Climate adaptation &amp; resilience</b></p> <p>Climate change and associated climate feedback loops are major threats to the world's forests. Forest certification systems are</p>	<p>8.2.2 The standard requires that <b>adequate</b> genetic, species and structural diversity shall be <b>encouraged or maintained</b> to enhance the <b>stability, vitality and resilience</b> of the forests to adverse environmental factors and strengthen natural regulation mechanisms.</p> <p>8.2.3 The standard requires that <b>use of fire shall be limited</b> to regions where fire is an essential tool in forest management for regeneration, wildfire protection and habitat management or a recognized practice of</p>	<p>10.9 The Organization shall assess risks and implement activities that reduce potential negative impacts from natural hazards proportionate to scale, intensity, and risk.</p> <p>10.9.1 Potential negative impacts of natural hazards on infrastructure, forest resources and communities in the Management Unit are assessed.</p> <p>10.9.2 Management activities mitigate these impacts.</p>	<p>While neither standard makes direct mention of climate change, both could be said to address it indirectly: PEFC references enhancing “resilience of the forests to adverse environmental factors” while FSC speaks of “negative impacts or natural hazards.” PEFC does not explicitly mention the potential negative impacts of climate change on forests and does not require measures to monitor changing conditions or prepare for or respond to climate</p>

**Table 1. Environmental Issues**

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in the early stages of trying to standardize adaptation and resilience.	indigenous peoples. In these cases, <b>adequate</b> management and control measures shall be taken.	<p>10.9.3 The risk for management activities to increase the frequency, distribution or severity of natural hazards is identified for those hazards that may be influenced by management.</p> <p>10.9.4 Management activities are <b>modified and/or measures are developed and implemented</b> that reduce the identified risks.</p>	<p>risks, including the increasing risk of stronger and more frequent natural hazards.</p> <p>FSC explicitly requires continuous cycles of risk assessment, on-the-ground monitoring, and responses to changing conditions, whether they arise from climate change or other factors. PEFC does not require anything comparable.</p>

**Table 2. Social Issues**

Topic	PEFC Sustainable Forest Management Benchmark Standard <i>PEFC ST 1003:2024</i>	FSC Principles & Criteria and International Generic Indicators <i>FSC-STD-01-001 V5-3</i>	Comments
<p><b>Socioeconomic well-being of local communities &amp; stakeholders</b></p> <p>In addition to potential impacts on ecosystem services, logging can have huge economic consequences and less tangible impacts on the health, safety, and well-being of people and communities.</p>	<p>8.6.1 The standard requires that forest management planning shall aim to respect all socio-economic functions of forests.</p> <p>8.6.4 The standard requires that management shall promote the long-term health and well-being of communities within or adjacent to the forest management area, where appropriate supported by engagement with local communities and indigenous peoples.</p> <p>8.6.6 The standard requires that management shall give due regard to the role of forestry in local economies. Special consideration shall be given to new opportunities for training and employment of local people, including indigenous peoples.</p>	<p>Principle 4: The Organization shall contribute to maintaining or enhancing the social and economic wellbeing of local communities.</p> <p>4.3 The Organization shall provide reasonable opportunities for employment, training and other services to local communities, contractors and suppliers proportionate to scale and intensity of its management activities.</p> <p>4.4 The Organization shall implement additional activities, through engagement with local communities, that contribute to their social and economic development, proportionate to the scale, intensity and socio-economic impact of its management activities.</p> <p>4.5 The Organization, through engagement with local communities, shall take action to identify, avoid and mitigate significant negative social, environmental and economic impacts of its management activities on affected communities. The action taken shall be proportionate to the scale, intensity and risk of those activities and negative impacts.</p> <p>5.1 The Organization shall identify, produce, or enable the production of diversified benefits and/or products, based on the range of resources and ecosystem services existing in the Management Unit in order to strengthen and diversify the local economy proportionate to the scale and intensity of management activities.</p> <p>5.4 The Organization shall use local processing, local services, and local value adding to meet the requirements of The Organization where these are available, proportionate to scale, intensity and risk. If these are not</p>	<p>FSC’s Principle 4 includes detailed, verifiable criteria for maintaining or enhancing the economic and social well-being of local communities affected by logging and other management activities. These include requirements to engage proactively with affected communities, avoid harming public resources, and commit to long-term economic sustainability for the community.</p> <p>FSC also reviews how certified organizations are contributing to economic development.</p> <p>PEFC uses language that is comparatively non-prescriptive and thus potentially more difficult to verify. It requires engagement “where appropriate,” as well as “due regard” for local economies, and “special consideration” regarding economic opportunities.</p>

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		<p>locally available, The Organization shall make reasonable attempts to help establish these services.</p> <p>5.5 The Organization shall demonstrate through its planning and expenditures proportionate to scale, intensity and risk, its commitment to long-term economic viability.</p> <p>HCVs from Principle 9 [see above for HCVs 1 through 4]</p> <p>HCV 5 - Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or Indigenous Peoples.</p> <p>HCV 6 - Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples</p>	
<p><b>Stakeholder engagement &amp; dispute resolution</b></p> <p>Forest management standards require engagement and communication with local communities to receive information from them as well as to provide information</p>	<p>7.3.1 The standard requires that effective communication and consultation with local communities, indigenous peoples and other stakeholders relating to sustainable forest management shall be provided.</p> <p>7.4.1 The standard requires that appropriate mechanisms are in place for resolving complaints and disputes relating to forest management operations, land use rights and work conditions.</p>	<p>4.2.1 Through culturally appropriate engagement local communities are informed of when, where and how they can comment on and request modification to management activities to the extent necessary to protect their rights.</p> <p>4.2.3 Where evidence exists that legal and customary rights of local communities related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process in Criteria 1.6 or 4.6.</p> <p>4.6 The Organization, through engagement with local communities, shall have mechanisms for resolving grievances and providing fair compensation to local</p>	<p>FSC has specific requirements that are relatively stringent and verifiable when compared with PEFC, which leaves more room for interpretation. For example, PEFC requires national standards to provide “effective” communication and consultation and to have “appropriate” mechanisms for dispute resolution without specifying how to demonstrate effectiveness or appropriateness.</p>

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Topic	PEFC Sustainable Forest Management Benchmark Standard <i>PEFC ST 1003:2024</i>	FSC Principles & Criteria and International Generic Indicators <i>FSC-STD-01-001 V5-3</i>	Comments
<p>transparency and accountability.</p> <p>This section also covers what happens if a dispute arises—e.g., when companies appear to be breaking laws, exploiting resources without meeting economic commitments, or violating other tenets of sustainable management.</p>		<p>communities and individuals with regard to the impacts of management activities of The Organization.</p> <p>7.6 The Organization shall, proportionate to scale, intensity and risk of management activities, proactively and transparently engage affected stakeholders in its management planning and monitoring processes, and shall engage interested stakeholders on request.</p>	
<p><b>Indigenous Peoples’ rights</b></p> <p>Forests (particularly IFLs) and associated ecosystems are frequently essential to Indigenous Peoples’ ways of life.</p> <p>This section covers the rules for locating and communicating with Indigenous Peoples, conserving the ecosystems that sustain them, and protecting locations with spiritual or</p>	<p>6.3.2.2 The standard requires that forest practices and operations shall be conducted in recognition of the established framework of legal, customary and traditional rights such as outlined in ILO 169 and the UN Declaration on the Rights of Indigenous peoples, which shall not be infringed upon without the free, prior and informed consent of the holders of the rights, including the provision of compensation where applicable. Where the extent of rights is not yet resolved, or is in dispute, there are processes for just and fair resolution. In such cases forest managers shall, in the interim, provide meaningful opportunities for parties to be engaged in forest management decisions whilst respecting the processes and roles and responsibilities laid out in the policies and laws where the certification takes place.</p>	<p>3.1 The Organization shall identify the Indigenous Peoples that exist within the Management Unit or those that are affected by management activities. The Organization shall then, through engagement with these Indigenous Peoples, identify their rights of tenure, their rights of access to and use of forest resources and ecosystem services, their customary rights and legal rights and obligations, that apply within the Management Unit. The Organization shall also identify areas where these rights are contested.</p> <p>3.2 The Organization shall recognize and uphold the legal and customary rights of Indigenous Peoples to maintain control over management activities within or related to the Management Unit to the extent necessary to protect their rights, resources and lands and territories. Delegation by Indigenous Peoples of control over management activities to third parties requires Free, Prior and Informed Consent.</p> <p>3.2.1 Through culturally appropriate engagement Indigenous Peoples are informed when, where and how</p>	<p>The two standards both recognize Indigenous Peoples’ rights at a high level, but there are differences at the detail level.</p> <p>FSC stipulates that the legal and customary rights of Indigenous Peoples to maintain control over forest management “shall” be upheld, and that delegation of control to third parties requires Free, Prior, and Informed Consent (FPIC). FSC also emphasizes that FPIC must be granted by Indigenous Peoples prior to management activities that affect their rights and that this must be done through a clearly prescribed process. In both cases, FPIC must be obtained before harvesting or other management activities occur.</p> <p>The PEFC language, on the other hand, seems to allow logging to begin without the consent of affected Indigenous Peoples. The PEFC standard requires that operators “recognize” the rights of Indigenous Peoples but also states that logging can begin before FPIC is established if there</p>

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other cultural significance.		<p>they can comment on and request modification to management activities to the extent necessary to protect their rights, resources, lands and territories.</p> <p>3.2.3 Where evidence exists that legal and customary rights of Indigenous Peoples related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process as required in Criteria 1.6 or 4.6.</p> <p>3.2.4 Free, prior and informed consent is granted by Indigenous Peoples prior to management activities that affect their identified rights...</p> <p>3.3 In the event of delegation of control over management activities, a binding agreement between The Organization and the Indigenous Peoples shall be concluded through Free, Prior and Informed Consent. The agreement shall define its duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions. The agreement shall make provision for monitoring by Indigenous Peoples of The Organization's compliance with its terms and conditions.</p> <p>3.4 The Organization shall recognize and uphold the rights, customs and culture of Indigenous Peoples as defined in the United Nations Declaration on the Rights of Indigenous Peoples (2007) and ILO Convention 169 (1989).</p>	<p>are “meaningful” opportunities for engagement. The significance of this indicator hinges on the word “meaningful,” which the standard does not define, possibly opening the door to conflicting interpretations and raising the risk that organizations could begin logging while the parties are still negotiating terms.</p> <p>FSC also requires that the FPIC process result in “binding” agreements, whose terms are defined in the IGLs, between certified companies and Indigenous Peoples. PEFC has no explicit requirement for binding agreements.</p>
<p><b>Worker’s rights</b></p> <p>Logging and other forest management activities can be extremely dangerous, and they</p>	<p>In nations where the fundamental ILO conventions have been ratified:</p> <p>6.3.3.1 The standard requires that forest practices and operations shall comply with fundamental ILO conventions.</p>	<p>2.1 The Organization shall uphold the principles and rights at work as defined in the ILO Declaration on Fundamental Principles and Rights at Work (1998) based on the eight ILO Core Labour Conventions.</p> <p>2.1.1 The Organization shall not use child labour.</p>	<p>FSC requires upholding ILO principles and also prescribes detailed and specific indicators and sub-indicators, regardless of national laws or adoption of ILO conventions. PEFC requires a national standard to specify details only if the relevant country has not ratified a convention.</p>

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<p>often take place in sparsely populated rural areas—out of the public’s eye.</p> <p>This section discusses workers’ right to health and safety; prompt and fair payment; collective bargaining; and freedom from coercion, discrimination, and harassment.</p>	<p>In nations where a fundamental ILO convention has not been ratified:</p> <p>If [the convention’s] content is not covered by applicable legislation, specific requirements shall be included in the forest management standard.</p> <p>6.3.4.3 The standard requires that wages of local and migrant forest workers as well as of contractors and other operators operating in PEFC-certified areas shall meet or exceed at least legal, industry minimum standards or, where applicable, collective bargaining agreements.</p> <p>6.3.4.4 The standard requires that the organisation is committed to equal opportunities, non-discrimination and freedom from workplace harassment. Gender equality shall be promoted.</p> <p>7.4.1 The standard requires that appropriate mechanisms are in place for resolving complaints and disputes relating to forest management operations, land use rights and work conditions.</p>	<p>2.1.2 The Organization shall eliminate all forms of forced and compulsory labour.</p> <p>2.1.3 The Organization shall ensure that there is no discrimination in employment and occupation.</p> <p>2.1.4 The Organization shall respect freedom of association and the right to collective bargaining.</p> <p>2.2 The Organization shall promote gender equality in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities.</p> <p>2.4 The Organization shall pay wages that meet or exceed minimum forest industry standards or other recognized forest industry wage agreements or living wages, where these are higher than the legal minimum wages. When none of these exist, The Organization shall through engagement with workers develop mechanisms for determining living wages.</p> <p>2.4.1 Wages paid by The Organization in all circumstances meet or exceed legal minimum wage rates, where such rates exist. 2.4.2 Wages paid meet or exceed: 1) Minimum forest industry standards; or 2) Other recognized forest industry wage agreements; or 3) Living wages that are higher than legal minimum wages. 2.4.3 When no minimum wage levels exist, wages are established through culturally appropriate engagement with workers and/or formal and informal workers organizations. 2.4.4 Wages, salaries and contracts are paid on time.</p> <p>2.6 The Organization through engagement with workers shall have mechanisms for resolving grievances and for providing fair compensation to workers for loss or damage</p>	<p>FSC and PEFC both require “promotion” of gender equality, but FSC has detailed guidelines (FSC-GUI-60-005) on how national standards should promote gender equality. FSC gender requirements extend to all activities, including stakeholder engagement and awarding of contracts.</p> <p>PEFC requires compliance with the minimum wage laws and encourages a living wage. FSC goes further, requiring that wages meet or exceed prevailing local standards for the same work (provided it is higher than the legal minimum wage). If there is no pre-existing minimum, prevailing, or living wage, FSC requires engaging with workers to determine fair payment. Also, FSC requires timely payment of wages and contractual fees; PEFC does not.</p> <p>FSC requires companies to engage with their workers to develop mechanisms for resolving grievances and providing compensation for losses and injuries, while PEFC stipulates more loosely that “appropriate” mechanisms for resolving complaints and disputes are in place.</p>

## Table 2. Social Issues

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		to property, occupational diseases, or occupational injuries sustained while working for The Organization.	

## FM Standard Comparisons: National Level

The FSC US FM standard (The *FSC Forest Stewardship Standard for the Conterminous United States*; FSC-STD-USA-02-2025 EN) used in this analysis has been undergoing a revision process for many years and is in its fifth and almost certainly its final draft. It has been submitted to FSC International for final approval which is expected by the end of 2025.

In the text quoted below from the FSC US and FSC Indonesia FM standards, the first number corresponds to the Principle, the second to the Criterion, and the third to the Indicator, e.g., 1.1 is a Criterion and 1.1.1 is an Indicator.

As noted above, the *SFI 2022 Forest Management Standard* is organized into Objectives, Performance Measures, and Indicators. In the text quoted below, the first number corresponds to the Objective, the second to the Performance Measure, and the third to an Indicator, e.g., 1.1 is a Performance Measure while 1.1.1 is an Indicator. Note that this analysis also includes information from supplemental SFI documents, including separate guidance and a glossary.

The PEFC standards have a similar 3-tier hierarchy but the different levels are not given names.

**Table 3. Environmental Issues: USA**

Topic	SFI 2022 Forest Management Standard and Guidance to SFI 2022 Standards and Rules	FSC Forest Stewardship [Draft] Standard for the Coterminous United States FSC-STD-USA-02-2025 EN	Comments
<p><b>Deforestation &amp; conversion</b></p> <p>This section concerns both:</p> <p>3) Deforestation: the conversion of forests to another land use, typically to make way for development, infrastructure, or agriculture, and:</p> <p>4) Forest degradation: the conversion of natural forests that are diverse native ecosystems to monoculture plantations or “tree farms” designed to maximize yields and profits.</p>	<p>1.2.1 Certified Organizations shall not convert one forest cover type to another forest cover type, unless the conversion: a. does not convert native forest cover types that are rare, ecologically important, or that put any native forest cover types at risk of becoming rare; and b. does not create significant adverse impacts on Forests with Exceptional Conservation Value, old growth forests, forest critical to threatened and endangered species, or special sites or ecologically important non-forest eco-systems; and c. includes objectives for long-term outcomes that support maintaining native forest cover types and ecological function; and d. is in compliance with relevant national and regional policy and legislation related to land use and forest management.</p> <p>1.2.2. A proposed conversion deemed appropriate per 1.2.1, and which has considered impacts relative to scale, may be implemented subject to a landscape assessment that considers: a. a response to address forest health issues such as pests or pathogens, or proactive consideration of anticipated impacts of fire or climate change, reforestation challenges, or riparian protection needs, provided that such justification is supported by the best scientific information. b. site productivity, economics, and/or stand quality. c. ecological impacts of the conversion at the site and landscape scale, as well as consideration for any appropriate mitigation measures; and d. appropriate</p>	<p>6.9 The Organization shall not convert natural forest or High Conservation Value Areas to plantations or to non-forest land-use, nor transform plantations on sites directly converted from natural forest to non-forest land-use, except when the conversion: a) Affects a very limited portion of the Management Unit, and b) Will produce clear, substantial, additional, secure long-term conservation and social benefits in the Management Unit, and c) Does not damage or threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.</p> <p>6.10 Management Units containing plantations that were established on areas converted from natural forest between 1 December 1994 and 31 December 2020 shall not qualify for certification, except where: a) Clear and sufficient evidence is provided that The Organization was not directly or indirectly responsible for the conversion, or b) The conversion affected a very limited portion of the area of the Management Unit and is producing clear, substantial, additional, secure long-term conservation benefits in the Management Unit.</p> <p>6.10.1. Based on Best Available Information, accurate information related to prior land use and forest type present before and after conversion is compiled on all conversions from natural forest or semi-natural forest since 1994. Information includes: a) maps and/or photographs noting location of converted land; b) description of previous and current conditions including forest community types, size class and/or successional stages, and reason for conversion; and c) acres converted.</p>	<p>FSC US prohibits deforestation and conversion to plantations with limited exceptions. SFI also places limits on deforestation and conversion but offers exceptions that are broader than FSC’s.</p> <p>SFI’s performance measure 1.3 allows organizations to engage in deforestation by adjusting the boundaries of certified lands at their discretion: they can move a parcel out of the scope of their certificate, log it off, and sell it for development, farming or another non-forest use (deforestation). Depending on the scale at which this occurred, such practices could lead to a company being “disassociated” under the terms of the Policy for Association (see pg. 5).</p> <p>FSC US and SFI differ in their treatment of plantations. FSC US does not allow certification of plantations established at the expense of natural or semi-natural forest after 1994 unless the organization was not responsible for the conversion—and in this case, the organization must implement a plan to restore the land to natural or semi-natural forest. The FSC US standard also makes an exception if the plantation area has broader conservation benefits, provided it comprises 5% or less of the certified area.</p> <p>Despite PEFC’s requirement that no plantations converted after 2010 may be certified, the SFI standard sets no time limit on when conversion to plantation forestry may have occurred. SFI also provides blanket exceptions for organizations that “consider” and “assess” potential impacts and mitigation measures. But these organizations aren’t required to implement these mitigation measures.</p>

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	<p>consultation with local communities, Indigenous Peoples, and other stakeholders who could be affected by such activities.</p> <p>From SFI’s guidance document:</p> <p>In situations where a Certified Organization intends to convert from one forest cover type to another forest cover type, the Certified Organization is expected to demonstrate proficiency in its assessment of the conditions outlined in Indicator 1.2.2.</p> <p>Indicator 1.2.2d notes the need for “appropriate consultation” with local communities, Indigenous Peoples, and other stakeholders who could be affected by such activities, including adjacent ownerships. Landowners must recognize the societal context of managed forests within landscapes, and consider stakeholder concerns, if any, when determining the scale and impact of the proposed conversion. “Appropriate consultation” should help to gauge the possible impacts of conversion on local values — recreation, aesthetics, cultural, etc. Consultation becomes increasingly critical according to the scale of the proposed conversion, but there is no specific prescription for a threshold of the size of a conversion that should trigger a consultation. In some circumstances consultation may not be necessary, for example, if the project is sufficiently remote, it may occur beyond the range of impact to any local community or group. Therefore, with sufficient explanation and justification, the</p>	<p>6.10.2. Areas converted from natural forest or semi-natural forest to plantation since November 1994 are not certified, except where: a) The Organization provides clear and sufficient evidence that it was not directly or indirectly responsible for the conversion; or b) the conversion is producing clear, substantial, additional, secure, long-term conservation benefits in the Management Unit; and the total area of plantation on sites converted from natural forest or semi-natural forest since November 1994 is a very limited portion of the Management Unit.</p> <p>6.10.3. For plantations established in areas converted after 1994 per (a) in Indicator 6.10.2, The Organization develops and implements a plan to restore the plantation stands to natural forest or semi-natural forest and to manage those stands in compliance with all Indicators of Principles 1–10 as quickly as feasible.</p> <p>6.11 Management Units shall not qualify for certification if they contain natural forests or High Conservation Value Areas converted after 31 December 2020, except where the conversion: a) Affected a very limited portion of the Management Unit, and b) Is producing clear, substantial, additional, secure long-term conservation and social benefits in the Management Unit, and c) Did not threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.</p>	<p>The SFI guidance also says organizations are “expected to demonstrate proficiency,” but is unclear what they are expected to be proficient in or how to assess their proficiency. Also, there is no requirement that they apply their proficiency in a way that mitigates any potential impacts.</p> <p>SFI’s guidance also seems to leave the need for consultation with local communities up to an organization’s sole judgment.</p>

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	<p>Certified <b>Organization may determine</b> to forego consultation.</p> <p>1.3. Certified Organizations shall not have within the scope of their certification to this SFI Standard, forest lands that have been converted to non-forest land use.</p> <p>From SFI’s guidance document:</p> <p>Certified <b>Organizations are not restricted</b> in their decision making regarding the purchase of or sale of forest land, or in the <b>movement of forest land (or the quantity) in or out of the scope</b> of an SFI 2022 Forest Management Standard certificate.</p> <p>Certification bodies must ensure that <b>lands within the scope</b> of an SFI 2022 Forest Management Standard audit are being managed in conformance with the SFI 2022 Forest Management Standard to protect the integrity of the SFI 2022 Standards and Rules.</p>		
<p><b>Maintenance and restoration of forest ecosystems, biodiversity, and habitat</b></p> <p>This section concerns the inherent ecological health and biodiversity of forests as well as the closely related concept of</p>	<p>4.1.1. <b>Program to incorporate</b> the conservation of biological diversity, including native species, wildlife habitats and ecological community types at stand and landscape levels, through the use of best scientific information including the incorporation of research results.</p> <p>4.1.2. Development of criteria and implementation of practices, as guided by regionally based best scientific information, to retain stand-level <b>wildlife</b></p>	<p>6.5 The Organization <b>shall identify and protect</b> representative sample areas of native ecosystems and/or restore them to more natural conditions. Where representative sample areas do not exist or are insufficient, The Organization <b>shall restore a proportion of the Management Unit</b> to more natural conditions.</p> <p>6.6. The Organization <b>shall effectively maintain</b> the continued existence of naturally occurring native species and genotypes, and <b>prevent losses of biological diversity,</b></p>	<p>FSC requires the retention of representative samples of native ecosystems, where management is restricted to activities that maintain or enhance those ecosystems. It specifies in detailed, prescriptive indicators and sub-indicators and in region-specific requirements that organizations must maintain or enhance naturally occurring levels of biodiversity and ecological integrity.</p> <p>SFI refers repeatedly to <u>programs</u> that must “incorporate” or “support” biodiversity and retain habitat “elements,” but</p>

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<p><i>ecosystem services</i>—the social, economic, and environmental benefits that humans and human communities derive from ecosystems.</p> <p>Forest structure (the layers of vegetation between the soil and the canopy) and biodiversity are closely tied to climate resilience, and both FSC US and SFI consider carbon sequestration, carbon storage, and flood mitigation to be ecosystem services.</p> <p>Ties between biodiversity and resilience can be more or less direct. The section on climate resilience and adaptation below evaluates some of the more direct ways that forests can adapt or remain intact as climate change progresses.</p>	<p><b>habitat elements</b> such as snags, stumps, mast trees, down woody debris, den trees and nest trees.</p> <p>4.1.3. <b>Program to individually and/or through cooperative</b> efforts such as SFI Implementation Committees, <b>support diversity</b> of native forest cover types and age or size classes that enhance biological diversity, by <b>incorporating the results of analysis</b> of documented diversity at landscape and ownership/ tenure levels, to ensure the <b>contribution of the managed area to the diversity of conditions</b> that promote biodiversity.</p> <p>4.1.5. <b>Program to address</b> conservation of ecologically important species and natural communities.</p>	<p><b>especially through habitat management</b> in the Management Unit. The Organization shall demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting.</p> <p>6.6.1. Management activities maintain, enhance, or restore habitat conditions <b>suitable for well-distributed populations of animal species</b> that are characteristic of ecosystems within the landscape.</p> <p>6.6.3. At a stand or site scale, management <b>maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes</b>. These components: a) include large live trees, live trees with decay or declining health, snags, and well- distributed coarse down and dead woody debris; b) provide vertical and horizontal complexity; c) are generally representative of the species naturally found on the site; and d) are <b>maintained over successive harvests and are buffered by green trees and other vegetation</b> where needed and available to maintain microclimate and reduce windthrow.</p> <p>6.8.1. The Organization <b>maintains, enhances, and/or restores a mosaic of forest community types and underrepresented successional stages</b> that would naturally occur on the types of ecological sites (e.g. soil, aspect, elevation) found on the Management Unit. Where old forest, late, and early successional habitats of different community types that would naturally occur on the forest are underrepresented in the landscape relative to natural conditions, a portion of the forest is <b>managed to enhance</b></p>	<p>defines few specific requirements, does not prescribe clear outcomes, and has no region-specific guidance.</p> <p>For example, for old-growth:</p> <ul style="list-style-type: none"> <li>• SFI does not require certified organizations to protect old-growth occurring on their lands; they are free to log it, provided that they have or participate in a program “that supports diversity of native forest cover types and age or size classes.” Whether or not such a program would result in any protection of old growth is unclear.</li> <li>• FSC US explicitly requires the protection of old-growth forest occurring on certified lands in Principle 9: old-growth forests are a rare ecosystem in the continental US, and thus classified as HCV 3. This means management must maintain and/or enhance it. FSC US also requires enhancing or restoring old growth on lands where it is “underrepresented in the landscape relative to natural conditions.”</li> </ul>

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		<p>and/or restore old forest, late, and early successional characteristics.</p> <p>Principle 9: The Organization shall maintain and/or enhance the High Conservation Values [HCV] in the Management Unit through applying the precautionary approach.</p> <p>9.2.2 Management strategies and actions are developed to maintain and/or enhance...High Conservation Values and to maintain associated High Conservation Value Areas prior to implementing potentially harmful management activities.</p> <p>HCV 3 – Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats, or refugia.</p>	
<p><b>Opening sizes &amp; live tree retention</b></p> <p>This section concerns the intensity of allowable harvest practices, including acceptable opening sizes (a.k.a. clearcuts) permitted in a forest management unit as well as live tree “retention” (live trees that must be left behind in a logged forest stand).</p> <p>See below for specific requirements regarding logging near running water (“riparian buffers”).</p>	<p>5.1. Certified Organizations shall manage the impact of harvesting on visual quality.</p> <p>5.2.1. Program to address visual quality management.</p> <p>5.2.2. Incorporation of aesthetic considerations in harvesting, road, landing design and management, and other management activities where visual impacts are a concern.</p> <p>5.2. Certified Organizations shall manage the size, shape, and placement of clearcut harvests.</p> <p>5.2.1. Average size of clearcut harvest areas does not exceed 120 acres (50 hectares), except when necessary to meet regulatory requirements, achieve ecological objectives or to respond to</p>	<p>6.6.5. When even-aged silvicultural systems are employed, the harvest opening sizes and proportion and configuration of live trees and other native vegetation retained within the harvest unit are consistent with characteristic natural disturbance regime(s), unless retention at a lower level is necessary for the purposes of restoration harvest or rehabilitation. The regional supplementary requirements that follow also apply for portions of Management Units within the specified FSC US Regions.</p>	<p>Under SFI, the average opening size within the certified boundary must 120 acres or less. 120 acres is already a large clearcut, but a company could make even larger clearcuts as long as smaller ones bring the average size under the limit.</p> <p>The FSC US standard requires that even-aged management (clearcutting is one example of even-aged silviculture) produces conditions that resemble those caused by natural disturbances such as wildfire. This translates into limits on clearcut sizes and minimum levels of live tree retention that vary by region and forest type.</p> <p>FSC also places restrictions through region-specific requirements. Within 6.6.5, there are prescriptions for maximum clearcut (“opening”) sizes and/or minimum levels of retention in most regions. For example, in the Ozark-Ouachita Region, even-aged silviculture can only be used</p>

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	forest health emergencies or other natural catastrophes.		on 10% of the total timber-producing area, natural regeneration is required after harvest, and in one of the two subregions, clearcut sizes are limited to “2 acres with no retention and 20 acres with retention of at least 20%–30% of the canopy.”
<p><b>Riparian buffers &amp; water quality</b></p> <p>This section concerns forested areas that must be retained near running water. Primarily designed to protect water quality and prevent erosion, buffers where logging isn’t allowed result in more intact ecosystems, greater habitat protection, and continued carbon storage and sequestration.</p>	<p>3.2. Certified Organizations shall implement water, wetland, and riparian protection programs based on climate, soil type, terrain, vegetation, ecological function, harvesting system, state best management practices (BMPs), provincial guidelines and other applicable factors.</p> <p>3.2.1. Program addressing management and protection of water quality of rivers, streams, lakes, wetlands, other water bodies and riparian areas during all phases of management.</p>	<p>6.7. The Organization shall protect or restore natural water courses, water bodies, riparian zones and their connectivity. The Organization shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur.</p> <p>6.7.1. Management maintains, enhances, and/or restores the plant and wildlife habitat of riparian areas to provide: a) habitat for aquatic species that breed in surrounding uplands; b) habitat for predominantly terrestrial species that breed in adjacent aquatic habitats; c) habitat for species that use riparian areas for feeding, cover, and travel; d) habitat for plant species associated with riparian areas; and e) stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem.</p> <p>6.7.4. Stream, wetland and other waterbody crossings are avoided when possible. Unavoidable crossings are located and constructed to minimize short-term and long-term impacts on water quality, hydrology, and fragmentation of aquatic habitat. Crossings do not eliminate the movement of aquatic species. Temporary crossings are restored to original hydrological conditions when operations are finished.</p> <p>6.7.5. Using Best Available Information, The Organization documents and implements riparian management zone (i.e., RMZ) guidelines that are adequate for protecting and</p>	<p>Both FSC US and SFI require protection of running water and wetlands.</p> <p>Within 6.7.3, FSC US has specific prescriptions by region for what are called “riparian management zones.” For example, in the Ozark-Ouachita Region, riparian management zones have minimum widths depending on how steep the slope is and susceptibility to erosion, ranging from 75 feet at the low end and 250 feet at the high end. Single tree harvest is allowed in riparian management zones except in no-cut zones, and a minimum of 80% crown cover is maintained throughout. There is a 10 foot no-cut zone from either streambank.</p> <p>SFI refers to programs for riparian and water quality protection rather than required outcomes, and it has no specifics on streamside tree retention (riparian buffers). It does reference state and provincial Best Management Practices (BMPs) for managing water quality, but not all states have BMPs, and in some states BMPs do not require riparian buffers.</p>

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		restoring water quality and hydrologic conditions in all: a) water bodies, and b) hydrologically sensitive areas (e.g., rivers and stream corridors, lake and pond shorelines). The guidelines include vegetative buffer widths and protection measures that are acceptable within those buffers. In addition to the above, the regional supplementary requirements that follow apply for portions of Management Units within the specified FSC US Regions.	
<p><b>Climate adaptation &amp; resilience</b></p> <p>Climate change and associated climate feedback loops are major threats to the world's forests. Forest certification systems are in the early stages of trying to standardize adaptation and resilience.</p>	<p>9.1 Certified Organizations shall individually and/or through cooperative efforts involving SFI Implementation Committees or other partners identify and address the climate change risks to forests and forest operations and develop appropriate adaptation objectives and strategies. Strategies are based on best scientific information.</p> <p>9.1.1. Based on best scientific information, Certified Organizations shall identify climate change risks and prioritize them based on the likelihood, nature, severity of their expected impact to their forest lands or forest tenures.</p> <p>9.1.2. Certified Organizations shall develop an adaptation plan to address priority climate change risks, via effective implementation of the SFI 2022 Forest Management Standard requirements for potential adaptive management including: a. periodic updates of forest inventory and recalculation of planned harvests as appropriate to account for changes in growth due to productivity increases or decreases, including improved data, long-term drought, fertilization,</p>	<p>6.1.1. Using Best Available Information, an assessment of conditions is completed that identifies environmental values that may be affected by management activities implemented on the Management Unit, considering environmental values that occur both inside and outside the Management Unit. The assessment includes: i. forest community types, forest size class and/or successional stages, and associated natural disturbance regimes; ii. rare, threatened, and endangered species and rare ecological communities (including plant communities); iii. other habitats, ecosystems, and species of management concern; iv. water resources, including watercourses water bodies, wetlands, riparian areas and hydrologic functions; v. soil resources; and vi. forest ecosystem services and resources that support public values (e.g., community drinking water, commercial and recreational fisheries, carbon storage, carbon sequestration, recreation, and tourism) a) historic conditions on the Management Unit related to forest community types and forest size class and/or successional stages; b) a broad comparison of historic conditions and current conditions; c) potential future impacts of climate change and catastrophic natural</p>	<p>Both FSC US and SFI address climate resilience, including wildfire risk. Both present guidance for assessing, prioritizing, and managing climate-related risks, and both also highlight carbon storage as a key value to protect.</p> <p>There are two substantive differences between SFI and FSC US when it comes to climate change.</p> <ul style="list-style-type: none"> <li>• SFI focuses on economic impacts on logging rates (“growth and yield”), while FSC US focuses on loss of biodiversity and ecosystem services.</li> <li>• SFI requires organizations to explain how their climate adaptation plans fit into the adaptation plans for the region or municipality where the lands are located. It then recommends example strategies for maintaining sustained yields (e.g., prescribed burns and hybridized tree seedlings); FSC US, on the other hand, references the Adaptation Workbook, a forest-specific framework from the Northern Institute of Applied Climate Science (NIACS), and explains how organizations should use the framework to meet specific requirements of FSC US indicators relating to climate change, ecology, and biodiversity.</li> </ul>

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	<p>climate change, or forest health; b. access to growth and yield modeling capabilities; c. documented harvest trends within long-term sustainable levels identified in the forest management plan, and d. appropriate research, testing, evaluation, and deployment of improved planting stock, including varietal seedlings.</p> <p>9.1.3. Certified Organizations shall document how their adaptation plan objectives and strategies fit within broader regional climate adaptation strategies and plans, where they exist.</p> <p>9.1.4. Certified Organizations shall report annually to SFI Inc. their progress towards achieving climate change adaptation strategies and plans.</p> <p>9.2 Certified Organizations shall individually and/or through cooperative efforts involving SFI Implementation Committees or other partners identify and address opportunities to mitigate the effects associated with its forest operations on climate change.</p> <p>9.2.1. Based on best scientific information, Certified Organizations shall identify and address opportunities to enhance the climate benefits associated with forest management operations on the forests they own or manage via effective implementation of the SFI 2022 Forest Management Standard requirements such as: a. Objective 2 – Forest Health and Productivity; Objective 10 – Fire Resilience and Awareness; and/or other silvicultural or operational practices</p>	<p>disturbances; and d) consideration of the following environmental values ....</p> <p>10.9. The Organization shall assess risks and implement activities that reduce potential negative impacts from Natural Hazards proportionate to scale, intensity, and risk.</p> <p>10.9.1. Within The Organization’s control, management activities are implemented to mitigate potential negative impacts of natural hazards on infrastructure, forest resources, and communities in the Management Unit, while maintaining the ecosystem function of natural disturbances where feasible.</p> <p>Guidance: In forest types that are fire-adapted or at risk of wildfire, The Organization identifies and applies site-specific fuels management practices, based on: 1) natural fire regimes; 2) risk of wildfire; 3) potential economic losses; 4) public safety; and 5) applicable laws and regulations.</p> <p>Mitigation of the impact of natural hazards should support resilience as opposed to eliminating or preventing the occurrence of the natural hazards.</p> <p><b>From Annex L, Climate change adaptation and forest carbon toolkit:</b></p> <p>Annex L provides guidance for conforming with climate change—and carbon sequestration and storage—associated elements of Principle 5, Principle 6, Principle 7 and Principle 8, but is not normative.</p> <p>While the FSC US National Forest Stewardship Standard Version 2-0 (NFSS) does require consideration for climate change, The Organization is not expected to develop its</p>	

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	<p>to enhance the climate benefits associated with their forest operations.</p> <p>9.2.2. Based on best scientific information, Certified Organizations shall identify and address opportunities to enhance ecosystem resilience for the forests they own or manage via effective implementation of the SFI 2022 Forest Management Standard requirements including: a. prompt reforestation or planned natural reforestation as per Indicator 2.1.1; b. adequate regeneration and appropriate actions to correct understocked areas, and c. evaluation for afforestation of areas that are not ecologically important, and d. protection of desirable or planned advanced regeneration during harvest and the retention of vigorous trees during partial harvest.</p> <p>9.2.3. Based on best scientific information, Certified Organizations shall develop a program to identify and address greenhouse gas emissions within their operational control.</p> <p>9.2.4. Certified Organizations shall report annually to SFI Inc. their measures to mitigate climate change associated with forest operations.</p> <p>10.1 On the forests they own or manage, Certified Organizations shall limit susceptibility to undesirable impacts of wildfire, promote healthy and resilient forest conditions through management techniques, actions and/or policies,</p>	<p>own scientific projections of climate change impacts. The NFSS is not explicit about the methods, format, or documentation of the evaluations and assessments. This toolkit is intended to assist The Organization in conforming with the NFSS by providing:</p> <ul style="list-style-type: none"> <li>A. A commonly accepted conceptual framework for managing forests to adapt to climate change</li> <li>B. Expectations for conforming with indicators that explicitly address climate change adaptation</li> <li>C. Examples of web-based sources for Best Available Information to assist with Item B</li> <li>D. Support for incorporating management for forest carbon (an ecosystem service)</li> </ul> <p>Indicator 6.1.1 expects The Organization to not only identify environmental values that may be affected by management activities, but also assess the potential future impacts of climate change and catastrophic natural disturbances on these environmental values. This assessment will inform the evaluation that is needed for conformance with Indicator 7.2.4. The impacts of climate change are expected to vary spatially, as well as temporally, and will be influenced by future trends in temperature, precipitation regime, and frequency and intensity of natural disturbance events. Therefore, assessments should reflect these different variables, while considering the following questions:</p> <ol style="list-style-type: none"> <li>1. How are climatic conditions expected to change in the region, and on the Management Unit over the next 25-100+ years?</li> </ol>	

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	<p>and support restoration of forests following wildfire damage.</p> <p>10.1.1. Program to evaluate the risk of undesirable impacts of wildfire and the role of fire on the forests they own or manage.</p> <p>10.1.2. Use of stand and landscape level management techniques, actions and/or policies to promote forest health and resilience, and to mitigate the likelihood of undesirable impacts of wildfire, such as, prescribed fire, cultural burning, thinning, or hazardous fuel reduction where appropriate based on risk.</p> <p>10.1.3. Use of management techniques to address wildfire damage, mitigate negative impacts to water and soils, and to promote forest restoration and future forest resilience.</p> <p>From SFI's guidance document:</p> <p>Adapting forest practices to address the potential risks identified in Performance Measure 9.1 includes understanding the range of variability in future climate scenarios and adapting management and silvicultural practices to those potentially altered conditions to sustain a thriving forest with all of its inherent values. Larger forest landowners and managers may choose to conduct a more holistic adaptation plan and incorporate a broader range of options or may examine a narrower range of feasible options for the purposes of developing an adaptation</p>	<p>2. How are the forest (and non-forest) ecosystems in the region and on the Management Unit likely to respond to the expected changes in climatic conditions?</p> <p>3. What are the potential impacts on environmental values resulting from the expected changes to the forest ecosystems?</p>	

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	strategy, depending on their capacity or market purposes.		

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<p><b>Socioeconomic well-being of local communities &amp; stakeholders</b></p> <p>In addition to potential impacts on ecosystem services, logging can have huge economic consequences and less tangible impacts on the health, safety, and well-being of people and communities.</p>	<p>1.1.6. <b>Assessment</b> of the local or regional social, environmental, and economic effects of forest management operations contained in the forest management plan.</p> <p>From SFI's guidance document:</p> <p>The "consideration" required in Indicator 1.1.6 <b>does not necessarily require a formal assessment</b>, but Certified Organizations should <b>show evidence of having developed an appropriate understanding</b>, relative to the size and scale of the operation, of the potential social, environmental, and economic effects of the implementation of forest planning.</p> <p>5.4.1. Provide <b>recreational opportunities</b> for the public, where consistent with forest management objectives.</p>	<p>Principle 4: The Organization shall contribute to <b>maintaining or enhancing the social and economic wellbeing</b> of local communities.</p> <p>4.3.1. The Organization <b>provides work opportunities to qualified local applicants and seeks opportunities for purchasing local goods and services</b> of equal price and quality.</p> <p>4.3.2. Commensurate with the size and scale of operation, The Organization provides and/or supports vocational learning opportunities associated with forest management.</p> <p>4.4.1. The Organization <b>participates in local economic development and civic activities</b>, based on scale of operation and where such opportunities are available.</p> <p>4.5 The Organization, through engagement with local communities, <b>shall take action to identify, avoid and mitigate significant negative social, environmental and economic impacts</b> of its management activities on affected communities. The action taken shall be</p>	<p>The indicators and sub-indicators under Principles 4 and 5 of the FSC US standard include detailed, verifiable criteria for maintaining or enhancing the economic and social well-being of local communities affected by management activities. These include requirements to engage proactively with affected communities to avoid harm.</p> <p>SFI requires an "assessment" of local social and economic impacts, but its guidance document notes that a "formal" assessment is not necessary.</p>

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		<p>proportionate to the scale, intensity and risk of those activities and negative impacts.</p> <p>4.5.1. Through direct engagement with local communities identified per Indicator 4.1.1, or through other engagement processes, The Organization identifies significant negative social, environmental, and economic community-level impacts that are likely to result from management activities.</p> <p>4.5.2. The Organization develops strategies to avoid or mitigate impacts identified per Indicator 4.5.1, and incorporates these into the management plan development (or revision) process.</p> <p>5.1.1. The Organization demonstrates knowledge of the operation's current and potential impact on the local economy as it relates to existing and potential markets for the range of resources and ecosystem services applicable to the Management Unit (e.g., timber, non-timber forest products, water, carbon sequestration, recreation).</p> <p>5.4.1. Where forest products are harvested or sold, opportunities for forest product sales and services are given to local harvesters, value-added processing and manufacturing facilities, and other operations that are able to offer services at competitive rates and levels of service.</p> <p>5.4.2. Attempts are made to encourage and/or support capacity if local goods, services, processing, and value-added facilities are not adequate or available.</p> <p>5.4.3. On public lands where forest products are harvested and sold, some sales of forest products or</p>	

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		<p>contracts are scaled or structured to allow small businesses to bid competitively.</p> <p>5.5 The Organization shall demonstrate through its planning and expenditures proportionate to scale, intensity and risk, its commitment to long-term economic viability.</p>	
<p><b>Stakeholder engagement &amp; dispute resolution</b></p> <p>Forest management standards require engagement and communication with local communities to receive information from them as well as to provide information transparency and accountability.</p> <p>This section also covers what happens if a dispute arises— e.g., when companies appear to be breaking laws, exploiting resources without meeting economic commitments, or violating other tenets of sustainable management.</p>	<p>14.3. Certified Organizations shall, <b>individually and/or through cooperative efforts</b> including SFI Implementation Committees, establish, at the state, provincial, or other appropriate levels, <b>procedures to address concerns raised</b> by loggers, consulting foresters, employees, unions, stakeholders, the public or other Certified Organizations regarding <b>management that appears inconsistent</b> with the SFI standards principles and objectives.</p> <p>1. <b>Support for</b> SFI Implementation Committees (e.g., <b>toll-free numbers and other efforts</b>) to address concerns about apparent nonconformance.</p> <p>2. <b>Process to receive and respond to public inquiries.</b> SFI Implementation Committees shall submit data annually to SFI Inc. regarding concerns received and responses.</p> <p>16.1. A Certified Organization <b>shall provide a summary audit report</b>, prepared by the certification body, to SFI Inc. after the successful completion of a certification, recertification, or surveillance audit to the SFI 2022 Forest Management Standard.</p>	<p>1.6. The Organization <b>shall identify, prevent and resolve disputes</b> over issues of statutory or customary law, which can be settled out of court in a timely manner, through engagement with affected stakeholders.</p> <p>4.6 The Organization, through engagement with local communities, <b>shall have mechanisms for resolving grievances and providing fair compensation</b> to local communities and individuals with regard to the impacts of management activities of The Organization.</p> <p>7.6 The Organization shall, proportionate to scale, intensity and risk of management activities, <b>proactively and transparently engage affected stakeholders</b> in its management planning and monitoring processes, and <b>shall engage interested stakeholders on request</b>.</p> <p><b>From the Glossary of Terms</b></p> <p><b>Culturally appropriate:</b> Means/approaches for outreach to target groups that are in harmony with the customs, values, sensitivities, and ways of life of the target audience. NOTE: Guidance for culturally appropriate communication is provided in Annex F.</p> <p><b>Engaging/ engagement:</b> The process by which The Organization communicates, consults and/or provides for the participation of interested and/or affected stakeholders in a culturally appropriate manner,</p>	<p>FSC US has specific and verifiable requirements for transparency, accountability, and culturally appropriate engagement.</p> <p>SFI encourages “cooperative efforts” through SFI committees but does not define or prescribe outcomes.</p>

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		<p>ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and updating of the management plan and implementation of associated activities.</p> <p>7.1. The Organization shall, proportionate to scale, intensity and risk of its management activities, set policies (visions and values) and objectives for management, which are environmentally sound, socially beneficial and economically viable. Summaries of these policies and objectives shall be incorporated into the management plan, and publicized.</p> <p>7.2. The Organization shall have and implement a management plan for the Management Unit which is fully consistent with the policies and objectives as established according to Criterion 7.1. The management plan shall describe the natural resources that exist in the Management Unit and explain how the plan will meet the FSC certification requirements. The management plan shall cover forest management planning and social management planning proportionate to scale, intensity and risk of the planned activities.</p> <p>7.5. The Organization shall make publicly available a summary of the management plan free of charge. Excluding confidential information, other relevant components of the management plan shall be made available to affected stakeholders on request, and at cost of reproduction and handling.</p> <p>7.6. The Organization shall, proportionate to scale, intensity and risk of management activities, proactively and transparently engage affected stakeholders in its</p>	

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		<p>management planning and monitoring processes, and shall engage interested stakeholders on request.</p> <p>8.4. The Organization shall make publicly available a summary of the results of monitoring free of charge, excluding confidential information.</p>	
<b>Indigenous Peoples' rights</b>	<p>8.1. Certified Organizations shall recognize and respect Indigenous Peoples' rights.</p> <p>8.1.1. Certified Organizations shall develop and implement a written policy acknowledging a commitment to recognize and respect the rights of Indigenous Peoples. This policy shall provide reference to a program that includes: a. use of available resources and information to identify the Indigenous Peoples whose rights may be affected by the Certified Organization's forest management activities. b. recognition of the established framework of legal, customary, and traditional rights such as outlined in: i. the UN Declaration on the Rights of Indigenous Peoples; ii. federal, provincial, and state laws and regulations; iii. treaties, agreements or other constructive arrangements among governments and Indigenous Peoples. c. appropriate training of personnel and contractors so that the Certified Organization is competent to fulfill their responsibilities under Objective 8 of the Forest Management Standard.</p> <p>8.1.2. The written policy shall be publicly available.</p> <p>8.2. Certified Organizations with forest management responsibilities on public lands shall confer with Indigenous Peoples whose rights may be affected by the Certified Organization's forest management practices.</p>	<p>3.2. The Organization shall recognize and uphold the legal and customary rights of Indigenous Peoples to maintain control over management activities within or related to the Management Unit to the extent necessary to protect their rights, resources and lands and territories. Delegation by Indigenous Peoples of control over management activities to third parties requires Free, Prior and Informed Consent.</p> <p>3.2.1. Native American Indigenous Peoples identified per Indicator 3.1.1 are engaged during management plan development and revision to promote protection of their rights, and to provide input into management activities that may affect resources and lands and territories in which they have an interest, but for which they do not hold rights.</p> <p>3.2.2. If management activities may affect legal rights or customary rights identified per Indicator 3.1.2, The Organization engages in a Free, Prior, and Informed Consent process with the Native American Indigenous Peoples and does not implement the management activities until consent has been received from the rightsholder. If the rightsholder does not engage in a Free, Prior, and Informed Consent (FPIC) process, The Organization upholds the rights in question as management activities are implemented and documents the actions taken to achieve this.</p>	<p>The FSC US standard mirrors the language of the P&amp;C and IGIs, notably:</p> <ul style="list-style-type: none"> <li>• Stipulating that the legal and customary rights of Indigenous Peoples to maintain control over management activities shall be upheld, and that delegation of such control to third parties requires Free Prior and Informed Consent (FPIC);</li> <li>• Requiring that FPIC be granted by Indigenous Peoples prior to management activities that affect their rights; and</li> <li>• Requiring that the FPIC process result in binding agreements between companies and Indigenous Peoples.</li> </ul> <p>SFI has requirements for organizations to communicate with Indigenous Peoples, provide opportunities to review management plans, and respond to inquiries and concerns. It is not clear, however, whether certified operations need to do anything at all regarding input or concerns received from Indigenous Peoples aside from "respond."</p> <p>The guidance document makes it clear that, beyond legal obligations, SFI does not require engagement with Indigenous Peoples. It does encourage engagement as a way to avoid future disruptions. SFI does not mention or require FPIC or binding agreements.</p>

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	<p>8.2.1. Program that includes communicating with affected Indigenous Peoples to enable Certified Organizations to: a. understand and respect traditional forest-related knowledge; b. identify and protect spiritually, historically, or culturally important sites; c. address the use of non-timber forest products of value; d. communicate through processes that respect their representative institutions, using appropriate protocols; e. provide opportunities to review forest management plans and forest management practices; and f. respond to inquiries and concerns received.</p> <p>8.3. Certified Organizations are encouraged to communicate with and shall respond to Indigenous Peoples whose rights may be affected by forest management practices on the Certified Organization's private lands.</p> <p>8.3.2. Respond to Indigenous Peoples' inquiries and concerns received.</p> <p><b>From SFI's guidance document:</b></p> <p>At a minimum, Certified Organizations with forest management responsibilities on public lands must fulfill their legal requirements arising from relevant federal, state, or provincial regulations. Many jurisdictions have existing legislation or regulations that guide communications with Indigenous Peoples in the context of sustainable forest management.</p> <p>Early, often, and ongoing communication with Indigenous Peoples can enhance relationship-building efforts, promote trust and collaboration, and enable all parties to proactively address potentially contentious issues before they become sources of disruptive conflict. As such, Certified Organizations are</p>	<p>3.2.3. Where consent has not yet been received from the rightsholder, The Organization and the rightsholder are engaged in a mutually agreed-upon Free, Prior, and Informed Consent process that is advancing in good faith and with which the rightsholder is satisfied. If the rightsholder ends engagement in a Free, Prior, and Informed Consent process prior to granting consent, The Organization upholds the rights in question as management activities are implemented and documents the actions taken to achieve this.</p> <p>3.3.1. Where control over management activities has been granted per Criterion 3.2 through Free, Prior, and Informed Consent based on engagement, an agreement contains the duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions. The agreement may be made verbally or in writing at the discretion of the Indigenous Peoples. Records of agreements are maintained.</p> <p>3.3.2. When Free, Prior, and Informed Consent is granted by a Native American Indigenous Peoples, they are provided with the opportunity to monitor The Organization's compliance with the agreement made per Indicator 3.3.1.</p>	<p>SFI's only clear obligation to Indigenous Peoples—beyond what's required by law—is a publicly available policy acknowledging a commitment to recognize and respect their rights.</p>

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Topic	SFI 2022 Forest Management Standard and Guidance to SFI 2022 Standards and Rules	FSC Forest Stewardship Standard for the Coterminous United States FSC-STD-USA-02-2025 EN	Comments
	<p>encouraged to implement communications programs that build on regulated requirements and are aimed at supporting open, respectful, and locally relevant communication with affected Indigenous Peoples.</p>		
<p><b>Workers' rights</b></p> <p>Logging and other forest management activities can be extremely dangerous, and they often take place in sparsely populated rural areas—out of the public's eye.</p> <p>This section discusses workers' right to health and safety; prompt and fair payment; collective bargaining; and freedom from coercion, discrimination, and harassment.</p>	<p>11.2. Certified Organizations shall comply with all applicable social laws at the federal, provincial, state, and local levels in the country in which the Certified Organization operates.</p> <p>11.2.1. Written policy demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, gender equality, diversity inclusion, anti-discrimination and anti-harassment measures, workers' compensation, Indigenous Peoples' rights, workers' and communities' right to know, prevailing wages, workers' right to organize, and occupational health and safety.</p> <p>11.2.2. Forestry enterprises will respect the rights of workers and labor representatives in a manner that encompasses the intent of the International Labor Organization (ILO) core conventions.</p>	<p>2.1 The Organization shall uphold the principles and rights at work as defined in the ILO Declaration on Fundamental Principles and Rights at Work (1998) based on the eight ILO Core Labour Conventions.</p> <p>2.1.1 Child labor is not used.</p> <p>2.1.2 All forms of forced or compulsory labor are eliminated.</p> <p>2.1.3 There is no illegal discrimination in employment and occupation.</p> <p>2.1.4 Workers' freedom of association and the right to collective bargaining are respected.</p> <p>2.2 The Organization shall promote gender equality in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities.</p> <p>2.2.1 Gender equity is promoted and gender discrimination is prevented in employment practices, training opportunities, awarding of contracts and other legal agreements that result in implementation of management activities, processes of engagement, and implementation of management activities.</p> <p>2.2.3 Confidential and effective mechanisms exist for reporting and addressing cases of sexual harassment and discrimination, workplace harassment or bullying and The Organization follows all applicable federal laws</p>	<p>The FSC US standard generally mirrors the language of the P&amp;C and IGIs but goes beyond them by including language about gender identity and familial status.</p> <p>SFI's standard requires only that certified companies follow the law and that they respect workers' rights in a way that "encompasses the intent" of the ILO core conventions.</p> <p>The US has ratified 2 of the 8 core ILO conventions. The SFI standard does not require complying with these, however, and does not address all of the PEFC Benchmark's requirements for standards in instances where the ILO convention has not been ratified.</p> <p>This puts SFI out of step with the PEFC Benchmark Standard, which states:</p> <p>6.3.3.1 The standard requires that forest practices and operations shall comply with fundamental ILO conventions. In nations where a fundamental ILO convention has NOT been ratified:</p> <p>If [the convention's] content is not covered by applicable legislation, specific requirements shall be included in the forest management standard.</p> <p>PEFC also has stipulations about wages, collective bargaining, equal opportunities, freedom from workplace harassment, and dispute resolution that SFI does not appear to require. See Table 2 for specific PEFC requirements.</p>

**Table 4. Social Issues: USA**

Topic	SFI 2022 Forest Management Standard and Guidance to SFI 2022 Standards and Rules	FSC Forest Stewardship Standard for the Coterminous United States <i>FSC-STD-USA-02-2025 EN</i>	Comments
		<p>and local laws regarding harassment and discrimination.</p> <p>2.2.4 Individuals of all genders (including gender identities) of the same qualifications, skills, level of performance, and experience are paid the same wage when they do the same work and The Organization complies with all applicable laws regarding equal pay.</p> <p>2.4.2 Employee remuneration, including wages and benefits, is comparable to or exceeds regional industry norms.</p> <p>2.4.3 The Organization negotiates in good faith contracts, and other legal agreements, that result in the implementation of management activities, and considers the investment in equipment, the regional industry remuneration norms, and other factors including economic inflation, remoteness of the work site, and difficulty of the work that affect costs for the entity with whom the agreement is established.</p> <p>2.4.4 The Organization seeks opportunities for establishing contracts, and other legal agreements, that result in the implementation of management activities with entities that have a positive reputation regarding general working conditions for the entity's staff.</p> <p>2.6.1. Workers understand what mechanism to use for resolving disputes regarding fair compensation for loss or damage to property, occupational diseases, or occupational injuries sustained while implementing management activities.</p> <p>2.6.2 The Organization carries workers' compensation insurance for its employees.</p>	

**Table 4. Social Issues: USA**

Topic	SFI 2022 Forest Management Standard and Guidance to SFI 2022 Standards and Rules	FSC Forest Stewardship Standard for the Coterminous United States <i>FSC-STD-USA-02-2025 EN</i>	Comments
		2.6.3 In states where workers' compensation insurance is legally required, <b>contracts or other legal agreements</b> for which The Organization is a signatory and that result in the implementation of management activities <b>address expectations that applicable federal laws and local laws covering workers' compensation insurance will be followed.</b>	

**Table 5. Environmental Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
<p><b>Deforestation &amp; conversion</b></p> <p>This section concerns both:</p> <p><b>5) Deforestation:</b> the conversion of forests to another land use, typically to make way for development, infrastructure, or agriculture, and:</p> <p><b>6) Forest degradation:</b> the conversion of natural forests that are diverse native ecosystems to</p>	<p>7.1.4. The organisation <b>shall not undertake forest conversion</b> unless in justified circumstances, where the conversion: a) is in compliance with national and regional policy and legislation applicable for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority including consultation with affected stakeholders; and b) entails a small proportion (<b>no greater than 5%</b>) of the total forested area within the certified area; and c) does not have negative impacts on ecologically important forest areas, culturally and socially significant areas, or other protected areas; and d) does not destroy areas of significantly high carbon stock; and e) makes a contribution to long-term conservation, economic, and social benefits.</p>	<p>6.9.1 The Organization <b>shall not convert natural forest to plantations</b>, nor <b>natural forests or plantations on sites directly converted from natural forest to non-forest land use</b>, except when the conversion: a) Affects a very limited portion of the area of the Management Unit, and b) Will produce clear, substantial, additional, secure long-term conservation benefits in the Management Unit, and c) Does not damage or threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.</p> <p>6.10 Management Units containing plantations that were established on areas converted from natural forest <b>after November 1994</b> shall not qualify for certification, except where: a) Clear and sufficient</p>	<p>The deforestation requirements are essentially the same, but the Indonesia standards differ on conversion to plantation.</p> <p>FSC Indonesia prohibits certification of natural forests converted to plantation anytime after 1994*** and requires documentation to back up that claim. PEFC Indonesia permits certification of land converted to plantation anytime before 2011 and does not specify how to demonstrate compliance.</p> <p>The FSC standard for Indonesia also has special safeguards to prevent degradation of natural forests after harvesting. Operators must not resort to planting unless data demonstrate that planting is required to maintain biodiversity. The PEFC standard for Indonesia leaves the</p>

**Table 5. Environmental Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
<p>monoculture plantations or “tree farms” designed to maximize yields and profits.</p>	<p>Appendix 2. Specific interpretation of requirements in the case of forest plantations.</p> <p>7.1.4. The organization shall exclude from forest certification those plantation forests that have been established by <b>conversion of primary as well as secondary forest</b> after <b>31 December 2010</b> except those meeting the “justified circumstances”.</p> <p>7.4.5. The organisation shall ensure successful regeneration <b>through natural regeneration or planting</b> in accordance with appropriate silvicultural system, including through but not limited to harvesting process which take into account <b>sufficient number of seed producing species</b>, and sufficient number of seedlings of all harvested species under the canopy; and <b>considering enrichment planting when necessary</b>.</p>	<p>evidence is provided that The Organization <b>was not directly or indirectly responsible</b> for the conversion, or</p> <p>b) The conversion affected a very limited portion of the area of the Management Unit and is producing clear, substantial, additional, secure long-term conservation benefits in the Management Unit.</p> <p>6.10.1 Based on Best Available Information and not limited to: historical background of the past and current management activities, satellite imagery data and/or other relevant data or document, <b>accurate data is compiled on all conversions since 1994</b>.</p> <p>10.1.2 For natural forest managed for production, the silvicultural and/or other management systems of the Management Unit are designed to <b>encourage and take advantage of natural regeneration</b> with the following measures: 1) Identification of seed trees (commercial and non-commercial); 2) Retention and mapping the seed trees; 3) Timing of harvesting; 4) Design and size of harvesting areas; 5) Short and long term post-harvest treatment of the site; unless data show that enrichment planting will enhance or restore genetic, species or ecosystem diversity.</p> <p>10.1.3 Regeneration activities are implemented in a manner that: 1) For harvest of existing plantations, regenerate to the vegetation cover that existed prior to the harvest or to more natural conditions using ecologically well-adapted species; 2) For harvest of natural forests, regenerate to pre-harvest or to more natural conditions; or 3) For harvest of degraded natural forests, regenerate to more natural conditions.</p>	<p>choice between planting and natural regeneration to the operator’s judgment.</p> <p>*** NOTE: the FSC Indonesia FM standard was approved in 2021 and in 2022 FSC approved the FSC Remedy Framework which allows plantations established at the expense of natural forest (i.e., degradation) between 1994 and 2022 if there is restitution of environmental and social harms under the FSC Remedy Framework. For more information: <a href="https://connect.fsc.org/system-integrity/fsc-remedy-framework">https://connect.fsc.org/system-integrity/fsc-remedy-framework</a></p>

**Table 5. Environmental Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
<p><b>Maintenance and restoration of forest ecosystems, biodiversity, and habitat</b></p>	<p>7.2.1. The organisation shall maintain and enhance health and vitality of forest ecosystem and shall rehabilitate degraded forest ecosystems wherever and as far as economically feasible, by making best use of natural structures and processes and using preventive biological measures.</p> <p>7.2.2. The organisation shall encourage or maintain adequate genetic, species and structural diversity to enhance the health and vitality of the forests to adverse environmental factors and strengthen natural regulation mechanisms.</p> <p>7.4.1. The organisation shall implement maintenance, conservation or enhancement of biodiversity at landscape, ecosystem, species, and genetic levels in accordance with the management plan.</p> <p>7.4.2. The organisation shall protect, conserve or set aside identified ecologically important forest areas in accordance with management plan.</p> <p>7.4.3. The organisation shall not exploit protected, threatened and endangered plant and animal species for commercial purposes.</p> <p>Note: The requirement does not preclude trade according to CITES requirements.</p> <p>7.4.4. The organisation shall maintain and repair the habitat of protected flora and fauna, endemic, rare and threatened/endangered species.</p> <p>7.4.9. The organisation shall promote, where appropriate, diversity of both horizontal and vertical structures and the diversity of species such as mixed</p>	<p>6.4 The Organization shall protect rare species and threatened species and their habitats in the Management Unit through conservation zones, protection areas, connectivity and/or (where necessary) other direct measures for their survival and viability. These measures shall be proportionate to the scale, intensity and risk of management activities and to the conservation status and ecological requirements of the rare and threatened species. The Organization shall take into account the geographic range and ecological requirements of rare and threatened species beyond the boundary of the Management Unit, when determining the measures to be taken inside the Management Unit.</p> <p>6.5 The Organization shall identify and protect representative sample areas of native ecosystems and/or restore them to more natural conditions. Where representative sample areas do not exist or are insufficient, The Organization shall restore a proportion of the Management Unit to more natural conditions. The size of the areas and the measures taken for their protection or restoration, including within plantations, shall be proportionate to the conservation status and value of the ecosystems at the landscape level, and the scale, intensity and risk of management activities.</p> <p>6.6 The Organization shall effectively maintain the continued existence of naturally occurring native species and genotypes, and prevent losses of biological diversity, especially through habitat management in the Management Unit. The Organization shall demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting.</p>	<p>The FSC and PEFC standards for Indonesia address similar concerns, but FSC is more specific and explicitly requires a precautionary approach as well as tracking and documentation of verifiable targets.</p> <p>The FSC standard for Indonesia also includes an HCV toolkit with many examples of the ecosystems, habitats, and species that fall into specific HCVs (e.g., “HCV 1 1.4: Cave for bats or swallows, lake for migratory birds, grassland along the river for crocodiles to lay eggs, saltlick for various fauna, specific areas where food sources are available for fruit eater such as Ficus trees, and hollow tree for hornbill”). The toolkit also points out specific threats to each subset of HCV and provides strategies for protecting them.</p> <p>The PEFC standard for Indonesia provides more detail than what appears in the international standard but still has less specificity than FSC. For example, when it comes to protected species:</p> <ul style="list-style-type: none"> <li>• The PEFC standard for Indonesia prohibits organizations from exploiting protected species and habitats but does not require any specific controls.</li> <li>• FSC, in contrast, specifies measures to manage and control illegal hunting. For example, “An internal regulation is in place banning and punishing illegal transportation of and trade in wildlife and firearms in the facilities and vehicles of The Organization”).”</li> </ul>

**Table 5. Environmental Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
	<p>stands. The practices shall also aim to maintain or restore landscape diversity.</p> <p>7.4.10. The organisation shall support, where appropriate, the traditional management practices that create valuable ecosystems (environmental, social and economic benefits) on <b>appropriate</b> sites.</p> <p>7.4.11. The organisation shall conduct tending and harvesting operations <b>in a way that does not cause lasting damage</b> to ecosystems, and wherever possible, measures shall be taken to maintain or improve biological diversity</p> <p>7.4.12. The organisation shall, in the construction of infrastructure, <b>minimize or mitigate the impact and damage to ecosystems</b> especially to rare, sensitive or representative ecosystems and genetic reserves, and that <b>takes</b> threatened or other key species – in particular their migration patterns – <b>into consideration</b>.</p> <p>7.4.14. The organisation <b>shall leave standing and fallen dead wood, hollow trees, old groves and rare tree species</b> in quantities and distribution necessary to safeguard biological diversity, taking into account the potential effect on the health and stability of forests and on surrounding ecosystems.</p>	<p>6.8 The Organization <b>shall manage the landscape</b> in the Management Unit <b>to maintain and/or restore</b> a varying mosaic of species, sizes, ages, spatial scales and regeneration cycles appropriate for the landscape values in that region, and for enhancing environmental and economic resilience.</p> <p>6.9.2 Conversion does not occur on <b>ecologically classified wetlands</b> such as protected peatlands based on Best Available Information.</p> <p>7.3.1 <b>Verifiable targets, and the frequency that they are assessed</b>, are established for monitoring the progress towards each management objective.</p> <p>7.3.2 Monitoring results are documented.</p> <p>7.3.3 The Management Plan <b>shall include verifiable targets</b> by which progress towards each of the prescribed management objectives can be assessed.</p> <p>7.4.1(L) The Management Plan and/or other supporting documents is revised and/or updated periodically consistent with Annex D to incorporate: 1) Monitoring results, including results of certification audits; 2) Evaluation results 3) Stakeholder engagement results; 4) New scientific and technical information, and 5) Changing environmental, social, or economic circumstances.</p>	
<p><b>Opening sizes &amp; live tree retention</b></p> <p>This section concerns the intensity of allowable harvest</p>	<p>7.4.14. The organisation shall leave standing and fallen dead wood, hollow trees, <b>old groves</b> and rare tree species in quantities and distribution necessary to safeguard biological diversity, <b>taking into account</b></p>	<p>9.1.4 The Organization <b>assesses and identifies Intact Forest Landscape</b> area within the Management Unit by using the best available map of Intact Forest Landscape and including records of historic use, present use, and impacts of local communities, government land use</p>	<p>The FSC standard for Indonesia prioritizes ecosystem intactness and connectivity. Operators are required to identify and map intact forest landscapes 500 km<sup>2</sup> (193 mi<sup>2</sup>) or larger and work closely with Indigenous Peoples to protect them from fragmentation.</p>

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<p>practices, including acceptable opening sizes (a.k.a. clearcuts) permitted in a forest management unit as well as live tree “retention” (trees that must be left behind in a logged forest stand).</p> <p>See the section below for specific requirements regarding logging near running water (“riparian buffers”).</p>	<p>the potential effect on the health and stability of forests and on surrounding ecosystems.</p> <p>7.4.2. The organisation shall protect, conserve or set aside identified ecologically important forest areas in accordance with management plan.</p> <p><b>Definition of ecologically important forest areas</b></p> <p>Forest areas: a) containing protected, rare, sensitive or representative forest ecosystems; b) containing significant concentrations of endemic species and habitats of threatened species, as defined in recognised reference lists; c) containing endangered or protected genetic in situ resources; d) contributing to globally, regionally and nationally significant <b>large landscapes</b> with natural distribution and abundance of naturally occurring species.</p> <p>7.4.7. The organisation shall <b>promote contribution to improvement and restoration</b> of ecological connectivity in afforestation, reforestation and other tree planting activities.</p>	<p>planning and ground sampling to determine the existence of previous forest operations and consider the following: 1) Any logged over area of the past 70 years is not qualified as Intact Forest Landscape 2) The vast majority of each Intact Forest Landscape is designated as core area.</p> <p>Note: Vast majority is 80% of Intact Forest Landscape within the Management Unit. Directive: The portions of Intact Forest Landscapes not designated as Core Areas are managed as High Conservation Values Category 2.</p> <p><b>From the Glossary of Terms</b></p> <p>Intact Forest Landscape: a territory within today's global extent of forest cover which contains forest and non-forest ecosystems minimally influenced by human economic activity, with an area of at least 500 km<sup>2</sup> (50,000 ha) and a minimal width of 10 km (measured as the diameter of a circle that is entirely inscribed within the boundaries of the territory).</p> <p>9.1.5 When Intact Forest Landscape is identified within the Management Unit, The Organization <b>has and implements policy to protect</b> Intact Forest Landscape with: 1) Respect the rights to Free Prior and Informed Consent of affected rights holders 2) Respect the Legal and customary rights of Indigenous peoples to use the Intact Forest Landscape core areas; 3) <b>Protect the integrity and other ecological attributes</b> of Intact Forest Landscape core areas from activities that impact the Intact Forest Landscape intactness including <b>commercial logging, illegal activities, and the construction of roads</b>; 4) Minimize road construction and the intensity of other activities adjacent to Intact Forest Landscape core areas to <b>prevent illegal logging, windthrow, depredation, and other edge effect</b></p>	<p>In PEFC, “large landscapes” are a type of ecologically important area, but the standard does not say what makes a landscape “large” and does not discuss intactness, connectivity, or lack of prior logging. The PEFC standard for Indonesia also mentions “old groves” but does not define the term, specify a grove size, or require buffers to prevent fragmentation.</p>

**Table 5. Environmental Issues: Indonesia**

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		<p>impacts within core areas; 5) Minimize road density and impacts to forest cover in areas that provide connectivity between Intact Forest Landscapes; 6) Identify appropriate buffer zone widths adjacent to Intact Forest Landscape core areas where road construction and other activities are minimized to prevent edge effect impacts within the core areas; 7) Secure long-term protection for Intact Forest Landscape core areas; and 8) Ensure Indigenous peoples are given priority for participation in alternative forest management projects and other low impact activities that are compatible with protection of Intact Forest Landscape core areas.</p> <p>10.1.1 Harvested sites are regenerated in a timely manner that: 1) Protects affected environmental values; and 2) Is suitable to recover overall pre-harvest or natural forest composition and structure.</p> <p><b>Strategies for maintaining HCV2</b></p> <p>1) Strategies that fully maintain the extent and intactness of the forest ecosystems and the viability of their biodiversity concentrations, including plant and animal indicator species, keystone species, and/or guilds associated with large intact natural forest ecosystems.</p> <p>The Organization must avoid all direct or indirect intrusion on core zone or its bufferzone. Example of direct intrusion includes logging, forest conversion to plantation, and infrastructure development such as road, channel, or settlement on core zone and its buffer zone.</p> <p>The Organization shall use Best Available Information and solicit input from experts when developing management strategies and actions. Management strategies shall be</p>	

**Table 5. Environmental Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
		<p>developed with appropriate measures for protecting core zone, and addressing identified threats.</p> <p>This means that strategies shall maintain the extent and intactness of the forest ecosystems and the viability of their biodiversity concentrations, including plant and animal indicator species, keystone species, and/or guilds associated with large intact natural forest ecosystems.</p> <p>2) Examples include protection zones and set-aside areas, with any commercial activity in areas that are not set-aside being limited to low-intensity operations that fully maintain forest structure, composition, regeneration, and disturbance patterns at all times.</p>	
<p><b>Riparian buffers &amp; water quality</b></p> <p>This section concerns forested areas that must be retained near running water. Primarily designed to protect water quality and prevent erosion, buffers where logging isn't allowed result in more intact ecosystems, greater habitat protection, and continued carbon storage and sequestration.</p>	<p>7.5.1. The organisation shall maintain or enhance protective functions of forests for society, such as their potential role in erosion control, flood prevention, water purification, climate regulation, carbon sequestration and other regulating or supporting ecosystem services.</p> <p>7.5.2. The organization shall map the areas that fulfill specific and recognised protective functions for society.</p> <p>7.5.3. The organisation shall, in the forest management plans and operation, maintain or enhance the areas that fulfill specific and recognized protective functions for society.</p> <p>7.5.4. The organisation shall give special care to forestry operation on sensitive soils and erosion-prone areas as well as in areas where operations might lead to excessive erosion of soil into watercourses. Techniques applied and the machinery</p>	<p>6.7 The Organization shall protect or restore natural watercourses, water bodies, riparian zones and their connectivity. The Organization shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur.</p> <p>6.7.3(L) Where natural watercourses, water bodies, riparian zones and their connectivity, water quantity or water quality have been damaged by uncontrolled activities of The Organization or past manager on land and water, restoration activities are implemented.</p> <p>6.7.4(L) Where continued degradation exists to watercourses, water bodies, water quantity and water quality caused by previous managers and the activities of third parties, measures are implemented that prevent or mitigate this degradation.</p> <p>6.7.6(S) The Organization maintains the main ecological functions of natural watercourses, water bodies, riparian</p>	<p>FSC's requirements for riparian buffers and water quality in Indonesia require large operations to restore areas where waterways have been damaged—regardless of what entity caused the damage.</p> <p>PEFC's standard for Indonesia diverges very little from the international benchmark standard. , PEFC's standard for Indonesia does not require restoration of waterways.</p>

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Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
	<p>used shall be <b>suitable</b> for such areas, and measures shall be taken to minimise the pressure of animal populations on these areas.</p> <p>7.5.6. The organisation shall <b>mitigate the impact of construction of infrastructure</b>, in a manner that minimizes bare soil exposure, avoids the introduction of soil into watercourses and <b>preserves the natural level and function</b> of water courses and river beds. Proper road drainage facilities shall be installed and maintained.</p>	<p>zones including water quality and water quantity within the Management Unit.</p> <p>6.7.7(S) The Organization <b>repairs damage</b> of natural watercourses, water bodies, or the vegetation, that the forestry or related activities have caused.</p>	

**Table 6. Social Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
<p><b>Socioeconomic well-being of local communities &amp; stakeholders</b></p>	<p>7.6.3. The organisation shall promote the long-term health and well-being of communities and/or provide where necessary public facilities.</p> <p>7.6.4. The organisation shall: a) <b>make the best use</b> of local related knowledge and experience, such as those of local populations and/or indigenous people and other affected stakeholders; b) <b>provide equitable sharing of the benefits</b> arising from the utilization of such knowledge.</p>	<p>4.3.1 Local communities, contractors and suppliers are <b>given equal or preferential opportunities</b> in terms of: 1) Employment, 2) Training, and 3) Other services.</p> <p>4.3.2(L) If the requirements of Indicator 4.3.1 have not been possible to meet despite maximum possible efforts, <b>reasonable measures are implemented</b> to increase the capacity of local community to enable meeting the requirements of Indicator 4.3.1.</p> <p>Note: this indicator is applicable to the situations where the capacities of local communities are insufficient, which does not allow the fulfilment of the requirements of Indicator 4.3.1.</p>	<p>FSC’s standard for Indonesia requires operators to create or support economic development projects, engage with communities to reduce the risk of harm, and demonstrate that their activities have helped the local economy.</p> <p>PEFC’s standard for Indonesia is less detailed and less robust than the international benchmark. fFor example, indicator 7.6.3 involves “promoting long-term health,” which means activity refers to providing public facilities “where necessary.” The standard does not describe the facilities involved or any kind of test to determine the necessity for providing them.</p>

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		<p>4.4.1 Opportunities for local social and economic development are identified through culturally appropriate engagement with local communities and other relevant organizations.</p> <p>4.4.2 Projects and additional activities are implemented and / or supported that contribute to local social and economic benefit and are proportionate to the socio-economic impact of management activities.</p> <p>4.5.1 Through culturally appropriate engagement with local communities, measures are implemented to identify and avoid significant negative social, environmental and economic impacts of management activities.</p> <p>5.1.1 The range of resources and ecosystem services that could strengthen and diversify the local economy are identified.</p> <p>5.1.2(L) Consistent with management objectives, the identified benefits and ecosystem services are produced by the Organization and/or made available for others to produce, to strengthen and diversify the local economy.</p> <p>5.1.3(S) Management activities have contributed to strengthening and diversifying the local economy.</p> <p>5.1.4 When The Organization uses FSC ecosystem services claims, The Organization complies with applicable requirements in FSC-PRO-30-006.</p> <p>5.5.1 Sufficient funds are allocated to implement the Management Plan in order to meet this standard and to ensure long-term economic viability.</p>	<p>When it comes to economic development and job opportunities for local workers, the FSC standard for Indonesia specifically requires providing equal or preferential treatment to local workers and allows exceptions only if there are not enough local workers to implement the management plan.</p> <p>In the PEFC standard for Indonesia, it isn't clear what it would mean to “develop” the local economy, and when it comes to jobs, PEFC requires operators to “consider” providing them to local people.</p>

**Table 6. Social Issues: Indonesia**

Topic	PEFC Sustainable Forest Management – Requirements <i>IFCC ST 1001:2021</i>	FSC National Forest Stewardship Standard of Indonesia <i>FSC-STD-IDN-02.1-2020 EN</i>	Comments
<b>Stakeholder engagement &amp; dispute resolution</b>	<p>6.3.1. The organisation shall establish an effective and on-going communication and consultation with indigenous and/or local communities and other affected stakeholders relating to the forest management operations and their impact.</p> <p>6.4.1. The organisation shall establish complaints and disputes resolution mechanism, which contain participatory process in the disputes resolution related to the customary or local communities land tenure, forest management operations, and work conditions.</p>	<p>4.2.1 Through culturally appropriate engagement local communities are informed of when, where and how they can comment on and request modification to management activities to the extent necessary to protect their rights.</p> <p>4.2.3 Where evidence exists that legal and customary rights of local communities related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process in Criteria 1.6 or 4.6.</p> <p>4.6.1 A dispute resolution mechanism is publicly available and developed through a culturally appropriate engagement with local communities in relation to avoiding damage to property, resources, rights, and livelihood.</p> <p>4.6.2 The Organization implements culturally appropriate engagement in resolving any dispute with local communities.</p> <p>4.6.4 An up to date record of grievances related to the impacts of management activities is held including: 1) Steps taken to resolve grievances; 2) Outcomes of all dispute resolution processes including fair compensation to local communities and individuals; and 3) Unresolved disputes, the reasons they are not resolved, and how they will be resolved.</p> <p>7.6 The Organization shall, proportionate to scale, intensity and risk of management activities, proactively and transparently engage affected stakeholders in its management planning and</p>	<p>PEFC’s standard for Indonesia adds no specifics beyond what appears in the benchmark, for example, to explain what effective communication and consultation would look like or accomplish. The only substantive difference compared with the international PERC standard is the word “ongoing” to describe the expected communication and consultation.</p> <p>FSC’s standard for Indonesia has more specific, verifiable requirements and definitions, and it clearly describes how to provide adequate transparency and accountability.</p>

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<b>Indigenous Peoples’ rights</b>	<p>5.3.2.1. The organisation shall identify, recognize, respect legal, customary and traditional property rights, tree ownership and land tenure of the indigenous people, and integrate them into its forest management plans.</p> <p>5.3.2.2. The organization shall ensure that legal, customary and traditional property rights, tree ownership and land tenure are not infringed upon without the free, prior and informed consent (FPIC) of the holders of the rights, including establishment of an agreement, and the provision of compensation where applicable.</p> <p>From Appendix 1. Explanation of some requirements</p> <p>5.3.2.2. The agreement is made in participatory and equitable manner, taking into consideration the rights and obligations of stakeholders, including fair and equitable distribution of incentives, costs and benefits. Where the agreement is not established within a reasonable time, the organisation shall provide the indigenous/local people with meaningful opportunities to engage in the forest management decision making which may affect them, whilst respecting the processes, roles and responsibilities in accordance with the current legislation and regulations.</p> <p>7.6.2. The organisation shall protect or manage sites with recognised specific historical, cultural or spiritual significance and areas fundamental to meeting the needs of indigenous peoples and local communities</p>	<p>monitoring processes, and shall engage interested stakeholders on request.</p> <p>3.1.2 Through culturally appropriate engagement with the indigenous peoples identified in 3.1.1, the following are documented and/or mapped: 1) Their legal and customary rights of tenure; 2) Their legal and customary access to, and use rights, of the forest resources and ecosystem services; 3) Their legal and customary rights and obligations that apply; 4) The evidence supporting these rights and obligations; 5) Areas where rights are contested between Indigenous Peoples, governments and/or others; 6) Summary of the means by which the legal and customary rights and contested rights, are addressed by The Organization; 7) The aspirations and goals of Indigenous Peoples related to management activities, Intact Forest Landscapes and Indigenous cultural landscapes.</p> <p>3.2.1 Through culturally appropriate engagement Indigenous peoples are informed when, where and how they can comment on and request modification to management activities to the extent necessary to protect their rights, resources, lands and territories.</p> <p>3.2.2 The Legal and customary rights of indigenous peoples are not violated by The Organization.</p> <p>3.2.3 Where evidence exists that Legal and customary rights of indigenous peoples related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process as required in Criteria 1.6 or 4.6.</p>	<p>The two standards for Indonesia recognize Indigenous Peoples’ rights at a high level, but there are notable differences at the detail level in the following categories.</p> <p>In addition to the language in the main body of the FSC standard (documented below), the HCV Toolkit elaborates at length on how to protect HCV 5 (community needs) and 6 (cultural values) in Indonesia. HCV 5 examples include “caves throughout a karst ecosystem managed for edible swallow nests.” HCV 6 examples include “Baduy community in Banten” and “Suku Anak Dalam in Riau and Jambi.” There is no equivalent of this toolkit in PEFC.</p> <p><b>Engagement</b></p> <p>Proactive “culturally appropriate engagement” prior to commencing forest management is a fundamental principle in all FSC standards, including the national standard for Indonesia. The term refers to “means/approaches for outreach to target groups that are in harmony with the customs, values, sensitivities, and ways of life of the target audience.”</p> <p>PEFC does not have a comparable principle. The national standard for Indonesia introduces but does not define terms like “participatory and equitable” and “meaningful opportunities.” It only requires operators to take the rights of Indigenous Peoples “into consideration,” while FSC states outright that rights must not be violated.</p> <p><b>Consent &amp; timing</b></p> <p>The legitimacy of forestry operations depends on Free, Prior, and Informed Consent (FPIC) in both FSC and PEFC,</p>

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	<p>(e.g. health, subsistence), in a way that <b>takes due regard</b> of the significance of the site.</p>	<p>3.2.4 Free, Prior and Informed Consent is <b>granted by Indigenous Peoples prior to management activities that affect their identified rights</b> through a process that includes: 1) Ensuring indigenous peoples <b>know their rights and obligations</b> regarding the resource; 2) Informing the indigenous peoples of the <b>value of the resource, in economic, social and environmental terms</b>. 3) Informing the indigenous peoples of <b>their right to withhold or modify consent</b> to the proposed management activities to the extent necessary to protect their rights, resources, lands and territories; and; 4) Informing the Indigenous Peoples of <b>the current and future planned forest management activities</b>.</p> <p>3.2.5 Where the process of Free Prior and Informed Consent has not yet resulted in an FPIC agreement, The Organisation and the affected Indigenous peoples are engaged in a mutually agreed FPIC process that <b>is advancing, in good faith</b> and with which <b>the community is satisfied</b>.</p> <p>3.3.1 Where control over management activities has been granted through Free Prior and Informed Consent based on culturally appropriate engagement, the <b>binding agreement</b> contains the <b>duration, provisions for renegotiation, renewal, termination, economic conditions</b> and other terms and conditions.</p> <p>3.3.3 The binding agreement contains the provision for <b>monitoring by Indigenous Peoples of The Organization's compliance</b> with its terms and conditions.</p>	<p>but FSC goes much further than PEFC by requiring a legally binding agreement; inclusion of Indigenous Peoples in identification, acceptable treatment, and monitoring of all six HCVs; and preventing operations before a binding agreement is in place unless both parties are already in negotiations and agree that operations can move forward.</p> <p>In contrast, PEFC, references “due regard” for culturally significant sites without defining the term or requiring any specific metrics or outcomes. It also does not require “prior” consent since operators can begin logging before they come to an agreement, provided they are providing “meaningful opportunities” for feedback.</p> <p><b>Use of traditional knowledge</b></p> <p>FSC’s standard for Indonesia requires operators to protect the intellectual property of Indigenous Peoples and use traditional forestry knowledge only after establishing FPIC through a binding agreement. It also requires operators to compensate Indigenous Peoples for use of their intellectual property.</p> <p>Rather than requiring sharing of benefits, PEFC suggests compensation “where applicable” and does not include a definition or test of applicability. PEFC also mentions both rights and obligations of stakeholders and references fair and equitable distribution of both costs and benefits,” opening up the possibility of holding Indigenous Peoples legally responsible for costs associated with the operator’s forest management activities.</p> <p><b>Accountability</b></p> <p>FSC systematically requires repair and restoration of any negative impacts from management activities, and this</p>

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		<p>3.4.1 The rights, customs and culture of indigenous peoples as defined in UNDRIP, and ILO Convention 169 <b>are not violated</b> by The Organization.</p> <p>3.4.2 The Organization complies with article 18B and paragraph 3 of Article 28i of the 1945 National Constitution (UUD 1945), as well as related <b>national statutory laws</b> regarding the rights, customs and culture of Indigenous Peoples.</p> <p>3.4.3 Where evidence that rights, customs and culture of Indigenous Peoples, as defined in UNDRIP and ILO Convention 169 have been violated by The Organization, the situation is documented <b>including steps to restore these rights, customs and culture</b> of Indigenous Peoples, to the <b>satisfaction of the rights holders</b>.</p> <p>Note: the definition of indigenous peoples according to Indonesia Constitutional Court Decree No 35/PUU-X/2012 includes forest dependant and non-forest dependant peoples.</p> <p>3.5.2 Measures to protect such sites are agreed, documented and implemented through culturally appropriate engagement with indigenous peoples. When indigenous peoples determine that <b>physical identification of sites in documentation or on maps would threaten the value or protection</b> of the sites, then <b>other means will be used</b>.</p> <p>3.5.3 Wherever sites of special cultural, ecological, economic, religious or spiritual significance are <b>newly observed or discovered</b>, <b>management activities cease immediately</b> in the vicinity until protective</p>	<p>holds true in the national standard for Indonesia. Binding agreements must permit monitoring by Indigenous Peoples and include provisions for renegotiation and termination of contracts. Violations require “steps to restore” rights and value “to the satisfaction of the rights holders.”</p> <p>The PEFC standard for Indonesia has no explicit accountability mechanisms regarding the rights of Indigenous Peoples.</p>

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		<p>measures have been agreed to with the Indigenous Peoples, and as directed by local and national laws.</p> <p>3.6.1 Traditional knowledge and intellectual property are protected and are only used when the acknowledged owners of that traditional knowledge and intellectual property have provided their Free, Prior and Informed Consent formalized through a binding agreement.</p> <p>3.6.2 Indigenous Peoples are compensated according to the binding agreement reached through Free, Prior and Informed Consent for the use of traditional knowledge and intellectual property.</p> <p>6.4.5 The Organization prevents or mitigates hunting, fishing, trapping and collection of rare or threatened species within the control of the Management Unit.</p> <p>Note: Mitigation is included to specifically accommodate for the needs of some of the indigenous people in Indonesia, who are still practicing respective cultural ceremonies.</p> <p>7.6.1 Culturally appropriate engagement is used to ensure that affected stakeholders are proactively and transparently engaged in the following processes: 1) Dispute resolution processes (Criterion 1.6, Criterion 2.6, Criterion 4.6); 2) Definition of Living wages (Criterion 2.4); 3) Identification of rights (Criterion 3.1, Criterion 4.1), Indigenous cultural landscapes (Criterion 3.1), sites (Criterion 3.5, Criterion 4.7) and impacts (Criterion 4.5); 4) Local communities' socio-economic development activities (Criterion 4.4); and 5) High Conservation Value assessment,</p>	

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		<p>management and monitoring (Criterion 9.1, Criterion 9.2, Criterion 9.4).</p> <p>9.1.1 An assessment is completed using the Best Available Information, (including Culturally appropriate engagement of stakeholders) that records the location and status of High Conservation Value Categories 1-6, as defined in Criterion 9.1; the High Conservation Value Areas they rely upon (Annex F), and their condition.</p>	
<b>Workers’ rights</b>	<p>5.3.4.1. The organisation shall have systems to identify and measures health and accident risks and the organization shall inform these to the workers to protect and prevent workers from work-related risks.</p> <p>5.3.4.2. The organisation shall provide a safe and healthy workplace environment.</p> <p>5.3.4.3. The organization shall provide appropriate personal protective equipment to its workers, guidance and training in safe working practices to all those assigned to a task in forest operations. In the case of injury related the work, organization shall provide first aid and assist the worker in obtaining medical treatment.</p> <p>5.3.4.4. The organisation shall comply with national legislation and regulation or applicable collective agreements in term of working hours and leave.</p> <p>5.3.4.5. The organisation shall have a waging system in place for local and migrant forest workers as well as of contractors and other operators operating in forest management, which meets or exceeds at least legal industry minimum standards or collective bargaining</p>	<p>2.1.2 Workers are able to establish or join labour organizations of their own choosing subject only to the rules of the labour organization concerned.</p> <p>2.1.3 If workers are selected as members of the labour organization committee, The Organization has a mutual agreement between the employer and employee, to allow the opportunity and freedom in performing their labour organization committee duties and functions.</p> <p>2.2.1 Systems are implemented that promote gender equality and prevent gender discrimination in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities.</p> <p>2.2.2 Job opportunities under the same (work) conditions and requirements are open to men, women, and persons with disabilities, all are encouraged to actively participate in all levels of employment.</p> <p>2.2.3 Work typically carried out by women (nurseries, silviculture, Non-Timber Forest Product harvesting,</p>	<p>Both FSC and PEFC require compliance with ILO’s Fundamental Conventions, all of which Indonesia has ratified. But PEFC’s standard for Indonesia offers very little beyond these basic rights.</p> <p>For example, ILO conventions do not protect women from having their wages taken by other members of their households. FSC has explicit protections relating to direct payment to women, plus other requirements, such as maternity and paternity leave; systems for reporting sexual harassment safely and confidentially; and the need to provide safety training to laborers doing work that is typically carried out by women.</p> <p>PEFC standard for Indonesia does not go into detail about pregnancy, women’s safety, or familial status beyond a vague requirement to “promote” gender equality. The national standard for Indonesia primarily repeats language about workers’ rights from PEFC’s international benchmark standard. This pattern also extends discrimination, harassment, training, health and safety, dispute resolution, workers’ compensation, and living conditions in worker camps.</p>

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	<p>agreements. The organization shall regularly review the level of wages to support the welfare of personnel.</p> <p>Note: The government determine minimum wages on annual basis at the regional level (province and district).</p> <p>5.3.4.6. The organisation shall commit to equal opportunities, non-discrimination, freedom from workplace harassment, and promote gender equality.</p> <p>5.3.4.7. The organization shall ensure a clear career path for the workers based on regular evaluation of their performance.</p> <p>6.4.1. The organisation shall establish complaints and disputes resolution mechanism, which contain participatory process in the disputes resolution related to the customary or local communities land tenure, forest management operations, and work conditions.</p>	<p>weighing, packing, etc) is included in training and health &amp; safety programs to the same extent as work typically carried out by men.</p> <p>2.2.5 Women are paid directly and using mutually agreed methods (e.g. direct bank transfer, direct payments for school fees, etc.) to ensure they safely receive and retain their wages.</p> <p>2.2.6 Maternity leave is no less than three months period and can be selected before and/or after childbirth.</p> <p>2.2.7 Paternity leave is available for a male employee when his legal wife/wives (registered at the relevant database of The Organization) is/are having maternity; no reduction of his wage occurs and there is no penalty for taking this leave.</p> <p>2.2.9 Confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and discrimination based on gender, marital status, parenthood or sexual orientation.</p> <p>2.3.2 Workers are provided with personal protective equipment appropriate to their assigned tasks by The Organization.</p> <p>2.3.3 Use of personal protective equipment is enforced.</p> <p>2.3.5(L) The Organization has a zero-accident policy and demonstrates that the measures are being effective.</p> <p>2.3.7 The Organization has a system in place to establish, implement and maintain a procedure(s) to:</p>	<p>FSC national standard for Indonesia address all these topics and others using clearly defined terms and explicit, verifiable indicators.</p>

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		<p>1) identify the potential for emergency situation; 2) respond to such emergency situation.</p> <p>2.3.8(L) The Organization establishes, implements and maintains a procedure(s) to record, investigate and analyse incidents in order to: 1) determine underlying deficiencies and other factors that might be causing or contributing to the occurrence of incidents; 2) identify the need for corrective action; 3) identify opportunities for preventive action; 4) identify opportunities for continual improvement; 5) communicate the results of such investigations; 6) document the investigation result.</p> <p>2.3.9(L) If workers stay in camp, The Organization ensures the requirements on Annex B2 are met.</p> <p><b>Annex B2 - Camp requirements for workers is a set of 18 detailed and specific requirements for the availability of ample and hygienic food, water, medical care, and privacy.</b></p> <p>2.4.1(L) The Organization guarantees payment of the regional minimum wage to all forest workers and implements pay scale and structure.</p> <p>Note: Pay Scale and Structure is required to consider group, position, period of service, education, and competency (Ministry of Labour Regulation No 1, year 2017).</p> <p>2.4.2 Wages paid meet or exceed: 1) Regional minimum wages; or 2) Living wages that are higher than legal regional minimum wages.</p> <p>2.4.4(S) If The Organization is not able to provide minimum wage due to local common practices, The</p>	

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		<p>Organization fully compensates the difference in the form of cash and/or in-kind.</p> <p>2.4.6 For any deduction such as tax, insurance and other benefit, these follow applicable legal requirements and are understood by workers.</p> <p>2.5.1 The organization has a policy for determining the qualification of staff and workers; the respective requirements include education, skill and experience as the basis for recruitment and replacement.</p> <p>Note: The scope of this Indicator also includes NTFPs.</p> <p>2.5.4 The Organization demonstrates that its supervision system ensures all workers implement their tasks effectively and safely and monitors the quality of their work.</p> <p>2.6.1 The Organization has a mechanism and/or documented procedure to resolve grievances and all workers are aware of it.</p> <p>2.6.2(L) A dispute resolution process is in place, developed through bipartite consultation and culturally appropriate engagement with workers.</p> <p>2.6.4 Workers grievances are identified and responded to and are either resolved or are in the dispute resolution process.</p> <p>2.6.6 Fair compensation is provided to workers for work-related loss or damage of property and occupational disease or injuries.</p>	