

**Forest Stewardship Council
United States
National Forest Stewardship Standard**

Draft 1.0-V2-2020

Principles 1–10 Family Forest Indicators
including Annex K: High Conservation Value Framework

Prepared for the First Consultation
April 6, 2021

Approved for Consultation by the FSC US Board of Directors,
Serving as the Standard Development Group

NOTE: The following proposed Family Forest Indicators are presented in context with the Draft 1 base indicators. However, this is for the purposes of this public consultation, to assist with review and commenting. ***Please note that the Draft 1 base indicators are out of scope for this consultation.***

CONSULTATION QUESTIONS:

- Do any of the proposed Family Forest Indicators fail to adequately address the decreased risk of negative impacts on environmental or social values associated with the smaller size and less intensive management within Family Forest management units?
- Are there any additional base indicators where the size of and/or less intensive management within Family Forest management units may result in a low risk of non-conformance and/or low risk of negative impacts on environmental or social values?
- Are there any base indicators that do not currently have proposed Family Forest Indicators that are not feasible for Family Forest management units?

INTRODUCTION

FAMILY FORESTS

Background

FSC strives to ensure equity of access to certification. In 2004, as a response to the challenges faced by small, non-industrial private landowners in accessing FSC certification, the FSC approved its Small and Low-Intensity Managed Forests “SLIMF” policy. This policy allows for SLIMF operators, known in the U.S. as Family Forests (see applicability criteria below) to be evaluated for FSC certification using modified certification procedures and, in some cases, alternative forest management indicators that take into account scale and intensity of small and low intensity forest management operations. This Standard contains a set of Indicators and guidance language that have been developed specifically for Family Forests.

Applicability of Family Forest Indicators/Guidance

Definition of Family Forest: A “family forest” in the United States is equivalent to a “Small and Low Intensity Managed Forest” (SLIMF) as defined in the FSC global system.

Any non-public forest management unit (FMU) that meets the FSC definition of ‘Small and Low Intensity Managed Forest’ is eligible to be considered a Family Forest and to use the Family Forest Indicators. According to FSC, these eligibility requirements are:

- Small: A *Management Unit** that is 1,000 hectares (2,470 acres) or less in size; OR
- Low Intensity:
 - a) the rate of harvesting is less than 20% of the mean annual increment (MAI) within the total production forest area of the unit, AND
 - b) EITHER the annual harvest from the total production forest area is less than 5000 cubic meters,
 - c) OR the average annual harvest from the total production forest is less than 5000 m³ / year during the period of validity of the certificate as verified by harvest reports and surveillance audits.

CONSULTATION QUESTION: The Family Forest Indicators are intended by the SDG to be used by small landowners that typically have fewer and less frequent management activities, and other management units with management objectives that result in very low levels of harvest. They are not intended to be for larger ownerships that have only a small portion certified (i.e., less than 2470 acres) and more intensive management elsewhere within the ownership. The SDG has no evidence that this intent is not being followed, but would like feedback on whether this may be happening. **Do you have any evidence that the SDG's intent for Family Forest Indicators is not being followed?**

Federal Lands: Federal lands are not eligible to use the Family Forest Indicators in any situation.

CONSULTATION QUESTIONS: The SDG believes that Federal lands do not represent a similar risk profile as the small landowners and other low intensity managed forests that are the intended users of the Family Forest Indicators. Therefore, the SDG has proposed that Federal lands be considered ineligible for the Family Forest Indicators. However, the SDG would like to receive feedback on this proposal.

- **Are there specific Family Forest Indicators for which small Federal management units should be eligible?**
- **Should eligibility for the above specific Family Forest Indicators differ depending on the administering Federal agency or on the principle management objectives for the management unit (i.e., limited to conservation objectives vs. multiple use objectives vs. other objectives)?**

[Note that similar questions, but also addressing Federal Lands Supplementary Requirements, are included in the Federal Lands Supplementary Requirements consultation, and duplicate feedback does not need to be provided in both consultations.]

Non-Federal Public Lands: Public lands will be eligible to use the Family Forest Indicators only in very limited situations. City and county parks and forests are eligible, as well as other non-Federal public lands that are determined by the Certification Body to be within the definition of the 'Small' component of SLIMF, but not the 'Low Intensity' component, as defined above. For non-Federal public lands that are deemed eligible to use the Family Forest Indicators, all Indicators in the FSC US National Forest Stewardship Standard that are identified as applicable only to public lands are also applicable to public lands using the Family Forest Indicators .

Terminology for Family Forest Indicators and Guidance

The set of *Indicators** developed specifically for *family forest* Management Units** include a number of different types of *Indicators**. Some *Indicators** are the same as for non-family forest* *Management Units** and some are different:

- a. *The Organization** is assumed to be in conformance with *Indicators** that are designated as being of 'low risk' for *family forest* Management Units**. The *Certification Body** is not expected to assess for conformance with these *Indicators** during audits of the *Management Unit**, unless the *Certification Body** observes or is presented with evidence suggesting that *The Organization** is not in conformance with the *Indicator**.

- b. *The Organization** is not required to be in conformance with *Indicators** that are designated as being 'not applicable' for *family forest* Management Units**. The *Certification Body** is not ever expected to assess for conformance these *Indicators** during audits of the *Management Unit**.
- c. *The Organization** is required to be in conformance with *Indicators** that are provided as *family forest**-specific alternatives to base *Indicators**. The *Certification Body** is expected to assess for conformance with these *Indicators** during audits of the *Management Unit**.
- d. *The Organization** is required to be in conformance with *Indicators** that do not have any *family forest**-specific designations or alternatives. The *Certification Body** is expected to assess for conformance with these *Indicators** during audits of the *Management Unit**. *The Organization** and *Certification Body** may consider *family forest**-specific guidance when it is provided with these *Indicators** to clarify expectations of *family forest* Management Units** related to these *Indicators**.

PRINCIPLE 1: COMPLIANCE WITH LAWS

***The Organization** shall comply with all applicable *laws**, regulations, and *nationally ratified** international treaties, conventions, and agreements. (P1 P&C V4)**

NOTE: Family forest 'not applicable' designations are proposed for Indicators 1.6.1, 1.6.4, and 1.8.2. Family forest 'low risk' designations are proposed for Indicators 1.2.1, 1.3.3, 1.4.1, 1.4.2, and 1.5.1. Alternate family forest indicators are proposed for Indicators 1.6.2, 1.6.3, 1.7.1, 1.8.1, and 1.8.3. Additionally, family forest-specific guidance is proposed for Indicator 1.3.1, and family forest-specific intent language is proposed for Criterion 1.6.

FF Indicator Intent (*New*): *Indicators** that have been designated as 'low risk' for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

However, the *Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest* Management Units**.

C1.1 *The Organization shall be a legally defined entity with clear, documented, and unchallenged *legal registration**, with written authorization from the *legally competent** authority for specific activities. (new)**

Indicator 1.1.1 *Legal registration** to carry out all activities within the scope of the certificate is documented.

C1.2 *The Organization shall demonstrate that the *legal** status of the *Management Unit**, including *tenure** and *use rights**, and its boundaries, are clearly defined. (C2.1 P&C V4)**

Indicator 1.2.1 *The Organization** has evidence of *long-term** *rights** to use and manage the

*Management Unit** for the purposes described in the *management plan**.

FF Indicator 1.2.1 (New) Low risk of non-conformance and if a non-conformance were to go undetected, there is a low *risk** of negative impacts to social or environmental values due to the *scale** of the *Management Unit**.

Guidance: “Evidence of *long-term** *rights*” may include but is not limited to: deeds; *long-term** lease agreements; evidence of fee ownership; or a contractual agreement to manage the *forest**.

Documents do not have to be made *publicly available**.

Indicator 1.2.2 Boundaries of land ownership and *use rights** are clearly identified on the ground and on maps prior to commencing *management activities** in the vicinity of the boundaries.

Intent: This *Indicator** is not intended to evaluate measures taken to prevent trespass (e.g., marking property boundaries), which are addressed in Criterion 1.4 .

Guidance: Boundary designations do not necessarily have to be comprehensive, but must be adequate to assure that *management activities** are implemented where intended. If the boundary cannot be established, then the manager shall postpone management until the boundaries are established and marked either by *legal** survey or by mutual agreement with the adjacent property owner (see also Criterion 1.4 .

*Use rights** held by other parties may include: deed restrictions; *long-term** leases; timber *rights**; mineral *rights**; *rights** to harvest; conservation easements rights-of-way; *non-timber forest products (NTFP)** *rights**; hunting and fishing *rights**; and recreational uses.

C1.3 *The Organization** shall have *legal** rights to operate in the *Management Unit**, which fit the *legal** status of *The Organization** and of the *Management Unit**, and shall comply with the associated *legal** obligations in applicable national and *local laws** and regulations and administrative requirements. The *legal** rights shall provide for harvest of products and/or supply of *ecosystem services** from within the *Management Unit**. *The Organization** shall pay the legally prescribed charges associated with such *rights** and obligations. (C1.1, 1.2, 1.3 P&C V4)

Indicator 1.3.1 The *management plan** and *management activities** demonstrate compliance with all *applicable laws**, including *national laws** and *local laws**.

Guidance: The *management plan** or other documents provided to the CB should include a list of the key laws and administrative requirements that typically apply to management operations and a list of contact information for agencies that are responsible for local enforcement.

FF Guidance (*From existing US FF Indicator 1.1.a*): For family forest* *Management Units**, *The Organization** should be able to demonstrate knowledge of *applicable laws** through the *management activities**. A list of laws in the *management plan** is not required.

Indicator 1.3.2 Situations in which compliance with *applicable laws** or regulations conflicts with compliance with FSC *Principles**, *Criteria**, or *Indicators** are documented and referred to the *Certification Body**.

Indicator 1.3.3 *The Organization** has evidence that all applicable and legally prescribed fees, royalties, taxes, and other charges are being paid in a timely manner. If payment is beyond the control of *The Organization**, then there is evidence that every attempt at payment was made.

FF Indicator 1.3.3 (*Existing US FF Indicator 1.2.a*) Low risk of non-conformance and if a non-conformance were to go undetected, there is a low *risk** of negative impacts to social or environmental values due to the *scale** and management *intensity** of the *Management Unit**.

Intent: Taxes and fees at minimum include, as applicable: *local** and/or county property taxes; severance taxes.

Guidance: Compliance may be verified through: a document that includes a list of taxes, fees, and other charges that typically apply; an annual summary of payments; a signed statement from *The Organization** that all payments are paid on a timely basis.

C1.4 The *Organization** shall develop and implement measures, and/or shall engage with regulatory agencies, to systematically protect the *Management Unit** from unauthorized or illegal resource use, settlement, and other illegal activities. (C1.5 P&C V4)

Intent: "Unauthorized resource use" may include: hunting; fishing; collecting; theft; dumping; and prohibited recreational use, including motorized vehicle use on closed roads, closed trails, and closed off-trail areas.

Indicator 1.4.1 *The Organization** implements strategies intended to prevent illegal and unauthorized activities on the *Management Unit**.

FF Indicator 1.4.1 (*New*) Low *risk** of non-conformance, and if a non-conformance were to go undetected, there is a low *risk** of negative impacts to social or environmental values due to the *scale** of the *Management Unit**.

Applicability: *The Organization** is not expected to play a law enforcement role, but is expected to not ignore illegal activities on the *Management Unit**.

Guidance: Strategies to prevent illegal and unauthorized activities may include, but are not limited to: clear marking of boundaries; appropriate signage and gates; communications with *forest** users, *local community** members, and other *stakeholders**; and reporting suspected illegal or unauthorized activities to the proper authorities.

Monitoring and preventative actions should be proportionate to and guided by the nature of the property and risk of specific types of activities.

Indicator 1.4.2 If illegal or unauthorized activities occur, *The Organization** implements strategies designed to curtail such activities and correct the situation to the extent possible for meeting all *management objectives** with consideration of available resources.

FF Indicator 1.4.2 (New) Low *risk** of non-conformance, and if a non-conformance were to go undetected, there is a low *risk** of negative impacts to social or environmental values due to the *scale** of the *Management Unit**.

Guidance: Efforts to stop illegal or unauthorized activities may include but are not limited to: cooperating with the appropriate authorities; notifying perpetrators and stakeholders; posting boundary notices; using gates; making periodic inspections; and reporting suspected illegal or unauthorized activities to the proper authorities.

Where protection is the responsibility of regulatory bodies, *The Organization** cooperates with the applicable entity to identify, report, control, and discourage unauthorized or illegal activities. No *legal** action may be appropriate if the proper authorities have been notified and *The Organization** demonstrates that *legal** action may have negative consequences that outweigh its benefit, or if *legal** action is not possible.

C1.5 *The Organization** shall comply with the applicable *national laws**, *local laws**, *ratified** international conventions, and *obligatory codes of practice**, relating to the transportation and trade of forest products within and from the *Management Unit**, and/or up to the point of first sale. (C1.3 P&C V4)

Applicability: Additional international agreements are also applicable.

Indicator 1.5.1 The *management plan** and management activities* comply with relevant provisions of all applicable *national laws** and international laws and binding international agreements relating to the transportation and trade of *forest** products (e.g., Lacey Act, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), other international conventions).

FF Indicator 1.5.1 (Existing US FF Indicator 1.3.a) Low *risk** of non-conformance, and if a non-conformance were to go undetected, there is a low *risk** of negative impacts to social or environmental values due to the *scale** and management *intensity** of the *Management Unit**.

Guidance: *The Organization** may demonstrate compliance by maintaining a list of applicable binding international agreements and completing an assessment to confirm compliance. A list of relevant laws, treaties, and agreements can be found in Annex C . An international agreement is considered “binding” when the US has formally signed the agreement.

C1.6 *The Organization shall identify, prevent and resolve *disputes** over issues of statutory or customary law*, which can be settled out of court in a timely manner, through *engagement** with *affected stakeholders**. (C2.3 P&C V4)**

Intent: The *Indicators** of Criterion 1.6 provide the common *Indicators** used for managing and addressing *disputes** throughout this Standard. Parenthetical *Criterion** references identify where language is only applicable to a specific *Criterion**. Annex D provides the framework of the *dispute** management system employed in this Standard, describes FSC's approach to *dispute** management more generally, and provides additional expectations for the *dispute** resolution process—the core component of this *dispute** management system.

*Complaints**, more generally, are not specifically addressed in either the *Indicators** of Criterion 1.6 or Annex D. In this Standard, however, *complaints** may naturally evolve to a *dispute** when initial attempts to resolve a *complaint** have been unsuccessful.

This framework is intended to provide parties with an avenue to manage *dispute** resolution in *good faith** and outside of court. However, if *good faith** is exhausted and the parties have not agreed on a resolution, *The Organization's** responsibility ends. The party bringing the *dispute** may: 1) discontinue their pursuit of the *dispute**; 2) address the *dispute** to *The Organization's** *Certification Body** (if the *dispute** pertains to conformance with FSC Standards); 3) address the *dispute** to FSC International per FSC-PRO-01-008, *Processing Complaints in the FSC Certification Scheme* (if the *dispute** pertains to the FSC system); or 4) seek resolution through the court system (if the *dispute** pertains to a *legal** issue).

FF Indicator Intent (New): Working to resolve *disputes** is essential, regardless of the *scale** or *intensity** of the *Management Unit**. However, conformance with Indicators 1.6.2 and 1.6.3 should be sufficient for ensuring that the core intent of this Criterion is addressed for *family forest** *Management Units**.

Indicator 1.6.1 A system is in place to receive *disputes** related to:

- a. *applicable laws** (Criterion 1.6);
- b. *disputes** from *workers** (Criterion 2.6); and
- c. impact of *management activities** on affected *local communities**, other *affected stakeholders**, and *Native American groups** (Criterion 4.6 and Criterion 3.2)

FF Indicator 1.6.1 (New) Not applicable for *family forest** *Management Units**. Conformance with Criterion 1.6 for *family forest** *Management Units** is addressed through FF Indicator 1.6.2 and FF Indicator 1.6.3.

Indicator 1.6.2 A *publicly available** *dispute** resolution process that can be adapted through *culturally appropriate** *engagement** is in place, and this process is used to resolve *disputes** that can be settled out of court in a timely manner. This process also identifies mechanisms to address *disputes of substantial magnitude**, including provisions for ceasing operations. (Criterion 1.6, Criterion 3.2, and Criterion 4.6)

FF Indicator 1.6.2 (New) *The Organization** seeks to resolve *disputes** out of court and in a timely manner.

Indicator 1.6.3 An up-to-date record of *disputes** is maintained and includes:

- a. steps taken to resolve *disputes**;

- b. outcomes of *dispute** resolution processes, including, where applicable,
 - i. *fair compensation** to *workers** for loss or damage to property, *occupational diseases**, or *occupational injuries** sustained while working for *The Organization** (Criterion 2.6) and
 - ii. *fair compensation** to *local communities**, individuals, and *Native American** groups (Criterion 4.6 and Criterion 3.2); and
- c. unresolved *disputes** and the reason(s) they are not resolved.

FF Indicator 1.6.3 (New) *The Organization** documents steps taken to resolve *disputes**.

Indicator 1.6.4 *The Organization** prevents or identifies and resolves *disputes** in a manner consistent with the *dispute** management framework outlined in Annex D.

FF Indicator 1.6.4 (New) Not applicable for *family forest** *Management Units*. Conformance with Criterion 1.6 for *family forest** *Management Units** is addressed through FF Indicator 1.6.2 and FF Indicator 1.6.3.

C1.7 *The Organization** shall publicize a commitment not to offer or receive bribes in money or any other form of corruption, and shall comply with anti-corruption legislation where this exists. In the absence of anti-corruption legislation, *The Organization** shall implement other anti-corruption measures proportionate to the *scale** and *intensity** of management activities and the *risk** of corruption. (new)

Applicability: The additional requirements of this *Criterion** are addressed through Indicator 1.3.1.

Indicator 1.7.1 *The Organization** has and adheres to a *publicly available** policy that meets or exceeds *applicable laws** regarding bribery and anti-corruption.

FF Indicator 1.7.1 (New) There *The Organization** complies with *applicable laws** regarding bribery and anti-corruption.

C1.8 *The Organization** shall demonstrate a *long-term** commitment to adhere to the FSC *Principles** and *Criteria** in the *Management Unit**, and to related FSC Policies and Standards. A statement of this commitment shall be contained in a *publicly available** document made freely available. (C1.6 P&C V4)

Indicator 1.8.1 *The Organization** demonstrates a *long-term** commitment to adhere to the FSC *Principles** and *Criteria** and FSC and FSC US policies, and has a *publicly available** statement of commitment to manage the *Management Unit** in conformance with FSC standards and policies.

FF Indicator 1.8.1 (New) *The Organization** demonstrates a *long-term** commitment to adhere to the FSC *Principles** and *Criteria** and related FSC and FSC US policies.

FF Indicator Guidance: Demonstration of commitment may be informal.

Indicator 1.8.2 If *The Organization** does not certify their entire holdings, then they document, in brief, the reasons for seeking partial certification, referencing FSC-POL-20-002 (or subsequent policy revisions), the location of other managed *forest** units, the natural resources found on the holdings being excluded from certification, and the *management activities** planned for the holdings being excluded from certification.

FF Indicator 1.8.2 (New) Not applicable for *family forest* Management Units** due to the *scale** of the *Management Unit**.

Applicability: All landowners are encouraged to certify their entire operation, however they are not required to do so. See FSC-POL-20-003, FSC-POL-20-002, and other FSC policy documents for additional guidelines for partial certification.

Indicator 1.8.3 *The Organization** notifies the *Certification Body** of significant changes in ownership and/or significant changes in management planning within 90 days of such change.

FF Indicator 1.8.3 (Existing US FF Indicator 1.6.c) *The Organization** notifies the *Certification Body** of significant changes in ownership, the certified land base and/or significant changes in management planning prior to the next scheduled annual audit, or within one year after such change, whichever comes first.

Intent: The purpose of the *Indicator** is to ensure that changes to the land area that are included in the certificate are communicated to the *Certification Body**. This includes changes in group membership as well as additions or excisions within individual ownerships.

Guidance: The determination of what is a significant change is to be verified by the *Certification Body**.

PRINCIPLE 2: WORKERS* RIGHTS AND EMPLOYMENT CONDITIONS

***The Organization** shall maintain or enhance the social and economic wellbeing of workers*. (new)**

NOTE: Family forest 'not applicable' designations are proposed for Indicators 2.2.2, 2.2.3, and 2.2.4. Family forest 'low risk' designations are proposed for all Indicators in Criterion 2.1 and Criterion 2.4, plus Indicator 2.3.1. Alternate family forest indicators are proposed for Indicators 2.2.1, 2.3.2, and 2.5.1.

Intent: *Indicators** in Principle 2 are applicable to all *workers** unless specifically indicated otherwise (i.e., use of "employee"). If the term *worker** or employee is not used in *Indicator** language, intent is provided following the *Criterion** or *Indicator** in question.

"*Workers**" are defined as "All employed persons, including public employees as well as 'self-employed' persons. This includes part-time and seasonal employees of all ranks and categories, including laborers, administrators, supervisors, executives, contractor employees, as well as self-employed contractors and subcontractors."

C2.1 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. (C4.3 P&C4)

Intent: The *Indicators** of Criterion 2.1 apply to all *workers**.

FF Indicators for Criterion 2.1 (New): All indicators in this *Criterion** have a low risk of non-conformance for *family forest* Management Units** due to the *scale** and management *intensity** of *family forest* Management Units**, which normally result in very few *workers**.

FF Indicator Intent: *Indicators** that have been designated as 'low risk' for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 2.1.1 The Organization* does not use child labor*.

Intent:

- *The Organization** does not employ *workers** below the age of 15, or below the *minimum age** as stated under *national laws** or *local laws** or regulations, whichever age is higher, except as specified in the following bullets.
- In countries where the *national law** or regulations permit the employment of persons between the ages of 13 and 15 years in *light work**, such employment should not interfere with schooling nor be harmful to their health or development. Notably, where children are subject to compulsory education laws, they work only outside of school hours during normal daytime working hours.
- No person under the age of 18 is employed in *hazardous** or *heavy work** except for the purpose of training within approved *national laws** and regulation.
- *The Organization** prohibits the *worst forms of child labor**.

Indicator 2.1.2 The Organization* eliminates all forms of forced or compulsory labor*.

Intent:

- Employment relationships are voluntary and based on mutual consent, without threat of a penalty.
- There is no evidence of any practices indicative of *forced or compulsory labor**, including but not limited to the following:
 - physical and sexual violence
 - bonded labor
 - withholding of wages, including payment of employment fees and/ or payment of deposit to commence employment
 - restriction of mobility/movement
 - retention of passport and identity documents
 - threats of denunciation to the authorities

Indicator 2.1.3 *The Organization** ensures that there is no *discrimination** in *employment and occupation**.

Intent: *Employment and occupation** practices are non-discriminatory.

Guidance: Per the definition of the term, "*discrimination**" includes:

- a. any distinction, exclusion, or preference made on the basis of race, color, sex, religion, political opinion, national extraction, social origin, sexual orientation, or gender identity, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation; and
- b. such other distinction, exclusion, or preference that has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the individual concerned after consultation with representative employers' and *workers' organizations** where such exist, and with other appropriate bodies.

Indicator 2.1.4 *The Organization** respects freedom of association and the right to *collective bargaining**.

Intent:

- *Workers** are able to establish or join *worker organizations** of their own choosing.
- *The Organization** respects the rights of *workers** to engage in lawful activities related to forming, joining, or assisting a *workers' organization**, or to refrain from doing the same, and does not discriminate or punish *workers** for exercising these rights.
- *The Organization** negotiates with lawfully established *workers' organizations** and/or duly selected representatives in *good faith** and with the best efforts to reach a *collective bargaining** agreement.
- *Collective bargaining** agreements are implemented where they exist.

C2.2 *The Organization** shall promote *gender equality** in employment practices, training opportunities, awarding of contracts, processes of *engagement**, and management activities. (new)

Intent: The indicators of Criterion 2.2 apply to the employees of *The Organization**.

FF Indicator Intent (New): *Gender equality** is essential in all aspects of employment, regardless of the *scale** or *intensity** of the *Management Unit**. However, conformance with FF Indicator 2.2.1 and Indicator 2.2.5 should be sufficient for ensuring that the core intent of this Criterion is addressed for *family forest* Management Units**.

*The Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest* Management Units**.

Indicator 2.2.1 Systems are implemented that promote *gender equality** and prevent *gender discrimination** in training opportunities, awarding of contracts, processes of *engagement**, and *management activities**.

FF Indicator 2.2.1 (New) The Organization does not *discriminate** based on *gender identity** in employment practices, training opportunities, awarding of contracts, processes of *engagement**, and *management activities**.

Guidance: Promotion of *gender equality** includes ensuring that training opportunities, contracts, processes of *engagement**, and *management activities** are equally available to people of all gender identities, and encouraging people of less represented gender identities to participate and take advantage of the programs available.

Indicator 2.2.2 Parental leave practices follow applicable *national laws** and *local laws** and/or regulations.

FF Indicator 2.2.2 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 2.2 for *family forest* Management Units** is addressed through FF Indicator 2.2.1 and Indicator 2.2.5.

Indicator 2.2.3 Systems are implemented that encourage and support active participation of people of all gender identities in all levels of employment and decision-making.

FF Indicator 2.2.3 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 2.2 for *family forest* Management Units** is addressed through FF Indicator 2.2.1 and Indicator 2.2.5.

Indicator 2.2.4 Confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and *discrimination** based on gender, gender identity, marital status, parenthood, or sexual orientation.

FF Indicator 2.2.4 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 2.2 for *family forest* Management Units** is addressed through FF Indicator 2.2.1 and Indicator 2.2.5.

Indicator 2.2.5 People of all gender identities of the same qualifications, skills, and experience are paid the same wage when they do the same work.

C2.3 The Organization* shall implement health and safety practices to protect *workers** from occupational safety and health hazards. These practices shall, proportionate to *scale, intensity, and risk* of management activities**, meet or exceed the recommendations of the ILO Code of Practice on Safety and Health in Forestry Work. (C4.2 P&C V4)

Indicator 2.3.1 The Organization* meets or exceeds all applicable *national laws** and *local laws** and/or regulations covering health and safety of *workers** (per Annex C).

FF Indicator 2.3.1 (Existing US FF Indicator 4.2.a) Low risk of non-conformance due to the *scale** and management *intensity** of the *Management Unit**, which normally results in very few *workers**.

FF Indicator Intent: *Indicators** that have been designated as ‘low risk’ for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 2.3.2 *The Organization** develops, maintains, and implements an effective safety program, as demonstrated by safe *worker** habits.

FF Indicator 2.3.2 (New) Employees of *The Organization* demonstrate safe *worker** habits. Contractors and their employees comply with contract stipulations regarding safety requirements.

Guidance: Evaluation of conformance to this *Indicator** may be through interviews and observations and may be demonstrated by the following: operations have consistently low accident rates; training sessions are offered/attended; safety procedures and documentation are posted in the workplace; inexperienced field *workers** are given adequate instructions and supervision; *workers** utilize personal protective equipment; landowners, managers, or operators maintain safety-training records; machinery and equipment are well maintained and in safe working order.

Indicator 2.3.3 Contracts and other written agreements include safety requirements for *workers**.

C2.4 *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**. (new)

FF Indicators for Criterion 2.4 (New): All indicators in this *Criterion** have a low risk of non-conformance for *family forest* Management Units** due to the *scale** and management *intensity** of *family forest* Management Units**, which normally result in very few *workers**.

FF Indicator Intent: *Indicators** that have been designated as ‘low risk’ for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 2.4.1 Employee compensation meets or exceeds the prevailing *local** norms within the forestry industry.

Guidance: “Compensation” includes salary or wages, and benefits.

Indicator 2.4.2 Employee wages, employee salaries, and contracts are paid on time.

C2.5 *The Organization shall demonstrate that *workers** have job-specific training and supervision to safely and effectively implement the *management plan** and all *management activities**. (C7.3 P&C V4)**

Indicator 2.5.1 *Workers** are qualified to properly implement the *management plan**; *workers** are provided with sufficient guidance, training (consistent with Annex E), adequate resources, and supervision to adequately implement their respective components of the plan.

FF Indicator 2.5.1 (New) *Management activities** are implemented by *workers** who are able to demonstrate knowledge of the *management objectives** and *applicable laws**.

Guidance: Adequate training and supervision measures may include but are not limited to:

- employers actively train employees in the goals and requirements of this and other applicable FSC Standards;
- loggers and other operators participate in informal and formal training, such as Forest Industry Safety Training Alliance, Game of Logging, and similar programs;
- professional foresters and resource managers meet continuing education standards, such as Society of American Foresters “Certified Forester” program;
- foresters, loggers, and other relevant employees are trained to understand *riparian management zone**, *rare, threatened, and endangered species**, and *High Conservation Value** protection requirements for the *forest**, as well as safeguards relating to *chemical pesticide** applications;
- field personnel are provided with written harvest plans and/or maps that clearly guide actions required to implement the *management plan**; and
- meetings occur as needed to review operations and make any necessary adjustments.

Regardless of the training and supervision measures taken, *The Organization** maintains up-to-date training records for all relevant *workers**.

FF Indicator Guidance: Demonstration of knowledge may be informal.

C2.6 *The Organization, through *engagement** with *workers**, shall have mechanisms for resolving grievances and for providing *fair compensation** to *workers** for loss or damage to property, *occupational diseases**, or *occupational injuries** sustained while working for *The Organization**. (new)**

Intent: Annex D provides background on the framework of the *dispute** management system employed in this Standard and provides guidance for *Organizations**. *The Organization** addresses the indicators of Criterion 1.6 to ensure that *disputes** from *workers** are received and addressed.

While this *Criterion** applies to *worker* disputes** while working on the *Management Unit**, it is recognized that *The Organization** has limited capacity in managing and implementing *dispute** resolution processes where *The Organization** is not directly involved in the *dispute** (e.g., a *dispute** between a contractor and subcontractor operating on the *Management Unit**).

In some cases, *disputes** may exist between a *worker** and their employer where the employer is not *The Organization**. In these cases, the requirements of the *Criterion** are still applicable, but the approach for demonstrating conformance may be different.

Indicator 2.6.1 *Workers** are covered by *worker's** compensation, in accordance with *national laws** and *local laws** and regulations. In states where *worker's** compensation programs are not compulsory, this coverage is voluntarily provided by the employer of the *workers**. Where *applicable laws** exempt *forest* workers** from coverage, *The Organization** has other mechanisms for providing *fair compensation** to *workers** for losses or injuries sustained on the job.

Intent: Not all states require *The Organization** to maintain *worker's** compensation insurance and some states have exemptions that may exclude *forest* workers** from coverage. This *Indicator** is intended to address both states that do require coverage for *forest* workers** and those that do not.

PRINCIPLE 3: INDIGENOUS PEOPLES'* RIGHTS*

*The Organization** shall identify and *uphold** *Indigenous Peoples* legal** and *customary rights** of ownership, use, and management of land, *territories**, and resources affected by *management activities**. (P3 P&C V4)

NOTE: Family forest 'not applicable' designations are proposed for Indicators 3.2.1 and 3.2.4. Family forest 'low risk' designations are proposed for all Indicators in Criterion 3.6. Alternate family forest indicators are proposed for Indicators 3.1.1, 3.1.2, 3.5.1, and 3.5.2.

C3.1 *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. (new)

Indicator 3.1.1 *The Organization** identifies *Native American** groups that may be affected by *management activities** on the *Management Unit**. This assessment should be revisited as part of the review of *management plans**.

FF Indicator 3.1.1 (New) *The Organization** makes reasonable efforts to identify *Native American** groups that may be affected by *management activities** using the resources identified in Annex F. The assessment may be informal.

Guidance: The identification of *Native American** groups should include tribes previously removed from the area. Lands ceded to the US Government may be identified using the US Forest Service's Tribal Connections Viewer:

<https://usfs.maps.arcgis.com/apps/webappviewer/index.html?id=fe311f69cb1d43558227d73bc34f3a32>

Indicator 3.1.2 Per Annex F, *The Organization** identifies and documents *legal** and/or *customary rights**, including contested *rights**, applicable to the *Management Unit** that are held by the *Native American** groups identified per Indicator 3.1.1 and confirms them through *culturally appropriate* engagement** with these *Native American** groups.

FF Indicator 3.1.2 (New) *The Organization** makes reasonable efforts to identify *rights** held by *Native American** groups identified per FF Indicator 3.1.1 using the resources identified in Annex F and confirms them through *engagement** with these *Native American** groups. The assessment and the *engagement** may be informal.

Guidance: *Legal** rights include treaty rights. For a *right** to be considered “contested,” the complainant should have already taken some formal steps to have their *rights** recognized, such as filing *legal** documents in court.

C3.2 *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**. (C3.1 and 3.2 P&C V4)

FF Indicator Intent (New): Respecting *rights** held by *Native American** groups is essential, regardless of the *scale** or *intensity** of the *Management Unit**. However, conformance with Indicators 3.2.2 and 3.2.3 should be sufficient for ensuring that *rights** are respected on *family forest* Management Units**.

The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as ‘not applicable’ for *family forest* Management Units**.

Indicator 3.2.1 *Native American** groups 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**.

FF Indicator 3.2.1 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 3.2 for *family forest* Management Units** is addressed through Indicators 3.2.2 and 3.2.3.

Intent: The purpose of the *Indicator** is to ensure proactive engagement with *Native American** groups as *management activities** are being planned. The reference to Indicator 3.1.1 reflects that this *indicator** is intended to apply to all *Native American** groups that may be affected by

*management activities** and is not limited to only those groups with *legal** or *customary rights**.

Indicator 3.2.2 Per Annex F, when *management activities** may affect *rights** identified per Indicator 3.1.2, *The Organization* engages** through *culturally appropriate** means in a *Free, Prior, and Informed Consent** process with the *Native American** groups and does not implement the *management activities** until consent has been received from the *rightsholder**. If the *rightsholder** does not wish to *engage** in a *Free, Prior, and Informed Consent** process, *The Organization** ensures that the *rights** in question are not violated.

Indicator 3.2.3 Where evidence exists that *rights** of *Native American** groups have been violated through implementation of *management activities** by *The Organization**, the situation is corrected through *engagement** and, if necessary, through addressing the *Indicators** of Criterion 1.6.

Indicator 3.2.4 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.

FF Indicator 3.2.4 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 3.2 for *family forest* Management Units** is addressed through Indicators 3.2.2 and 3.2.3.

Indicator 3.2.5 *Tribal* forest* management planning** and implementation are carried out by an authorized *tribal** representative in accordance with *tribal** laws and customs and relevant federal laws.

Applicability: This indicator applies to *tribal** lands that are FSC certified.

C3.3 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. (new)

Indicator 3.3.1 When *Free, Prior, and Informed Consent** is granted by a *Native American** group, it is documented in writing.

Indicator 3.3.2 When *Free, Prior, and Informed Consent** is granted by a *Native American** group, the group is provided with an opportunity to monitor *The Organization's** compliance.

Guidance: What monitoring will be implemented and how the *rightsholder** will be engaged in the monitoring should be addressed as part of the *engagement** that occurs during the *Free, Prior, and Informed Consent** process.

C3.4 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). (C3.2 P&C V4)

The elements of the Criterion are addressed through all of the other Indicators* of this Principle* and through all of the Indicators* of Principle 9 as they pertain to certain High Conservation Values* (i.e., HCV 5* and HCV 6*). Therefore, no Indicators* are included here.*

C3.5 The Organization*, through *engagement** with *Indigenous Peoples**, shall identify sites which are of special cultural, ecological, economic, religious, or spiritual significance and for which these *Indigenous Peoples** hold *legal** or *customary rights**. These sites shall be recognized by *The Organization** and their management, and/or *protection** shall be agreed through *engagement** with these *Indigenous Peoples**. (C3.3 P&C V4)

Intent: The intent of the *Indicators** in this *Criterion** is to (per Indicator 3.5.1) proactively identify sites of special significance for which *Native American** groups hold *rights** and (per Indicator 3.5.2) implement protective measures for those sites, even if there are not any plans for *management activities** that could have an impact on the sites. However, if/when *management activities** are planned that may affect these sites, per Indicator 3.2.2, *The Organization** must *engage** in a *Free, Prior, and Informed Consent** process with the *Native American** group that holds the *rights** and may not implement the *management activities** until consent has been received from that group.

Applicability: These *Indicators** only apply to sites for which *Native American** groups hold *legal** and/or *customary rights**. Engagement with *Native American** groups regarding protection of significant sites for which they do not hold *legal** or *customary rights** is addressed through Indicator 3.1.1, Indicator 3.2.1, and Principle 9 (i.e., HCV 6).

Indicator 3.5.1 *The Organization**, through *engagement** with the *Native American** groups identified in Indicator 3.1.1 and use of other sources of *Best Available Information**, identifies sites of special cultural, ecological, economic, religious, or spiritual significance and for which these *Native American** groups hold *legal** and/or *customary rights**.

FF Indicator 3.5.1 (*Existing US FF Indicator 3.3.a*) *The Organization** maintains a list of sites of current or traditional cultural, archeological, ecological, economic or religious significance that have been identified by state conservation agencies and/or *tribal** governments on the *Management Unit** and that could be impacted by *management activities**.

Applicability: In regions where there are no established *tribal** representatives, this *Criterion** may be inapplicable and the landowner or manager should provide documentation to this effect.

Guidance: Examples of “sites of special cultural, ecological, economic, religious, or spiritual

significance” may include but are not limited to: ceremonial, burial, or village sites; areas used for hunting, fishing, or trapping; current areas for gathering culturally important materials (e.g., ingredients for baskets, medicinal plants, or plant materials used in dances or other ceremonies); and current areas for gathering subsistence materials (e.g., mushrooms, berries, acorns, etc.) and/or culturally and/or economically important materials.

Direct, *culturally appropriate** consultation with *tribal** representatives is the first preferred method of consultation. If this is not possible then regional databases or references that contain relevant data may be used to compile this information.

FF Indicator Applicability: Where state *conservation** agencies and tribal governments are not able to provide a list of sites, *The Organization** should rely on its own knowledge, and engagement conducted per Criterion 3.1.

FF Indicator Guidance: Direct consultation with *tribal** representatives is not required in order to identify or develop the list of sites (or document that there aren’t any). If sites do exist on the *Management Unit** then *The Organization** must invite input from *tribal** representatives per FF Indicator 3.5.2 . Criterion 3.2 and Criterion 3.3 may also apply.

Indicator 3.5.2 Through *engagement** with the *rightsholders**, *The Organization** develops, documents, and implements measures to protect or enhance sites of special significance identified per Indicator 3.5.1. For newly observed or discovered areas of special significance, *management activities** cease until this *engagement** has occurred.

FF Indicator 3.5.2 (New) Through consultation with *experts** and input invited from applicable *Native American** groups, *The Organization** develops measures to *protect** or enhance areas of special significance, including for any newly observed or discovered areas of special significance.

Applicability: This *Indicator** is only applicable if areas of special significance have been identified and *rights** have been established. Areas of special significance include special cultural, ecological, economic, religious, and/or spiritual sites.

Guidance: Compliance with cultural resource *Best Management Practices** that have been developed at a state or regional scale with *tribal** consultation may be adequate to meet this *Indicator** when identified *Native American** groups do not wish to *engage**.

The confidentiality of sensitive *tribal** knowledge is maintained in keeping with *applicable laws** or at the behest of *tribal** representatives. If necessary, public summaries of *management plans** may omit detailed location and identification data pertaining to sensitive resources.

FF Indicator Guidance: Cultural sites identified per Principle 9 (HCV 6) should also be considered.

C3.6 *The Organization** shall *uphold** the right of *Indigenous Peoples** to *protect** and utilize their traditional *knowledge** and shall compensate *local communities** for the utilization of such knowledge and their *intellectual property**. A *binding agreement** as

per Criterion 3.3 shall be concluded between *The Organization** and the *Indigenous Peoples** for such utilization through *Free, Prior, and Informed Consent** before utilization takes place, and shall be consistent with the *protection** of *intellectual property** rights. (C3.4 P&C V4)

FF Indicators for Criterion 3.6 (New): All indicators in this *Criterion** have a low risk of non-conformance for *family forest* Management Units** due to the *scale** and management *intensity** of *family forest* Management Units**, which normally result in very little use of *tribal* traditional knowledge** and *intellectual property**.

FF Indicator Intent: *Indicators** that have been designated as ‘low risk’ for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 3.6.1 *The Organization** respects the confidentiality of and *protects* tribal* traditional knowledge** and *intellectual property** and uses such knowledge only with consent obtained through a *Free, Prior, and Informed Consent** process (per Annex F).

Guidance: Annex F explicitly addresses situations where consent is needed for *management activities** that may affect *rights** held by *Native American** groups. A similar *Free, Prior, and Informed Consent** process with *culturally appropriate* engagement** that advances in *good faith** with the intent of reaching an agreement is also required for situations where consent is needed for use of *traditional knowledge** or *intellectual property**.

Indicator 3.6.2 When *traditional knowledge** or *intellectual property** is used, written protocols are jointly developed prior to such use and signed by *tribal* representatives* or *tribal* members* to protect and *fairly compensate** them for such use.

PRINCIPLE 4: COMMUNITY RELATIONS

*The Organization** shall contribute to maintaining or enhancing the social and economic well-being of *local communities**. (P4 P&C V4)

NOTE: Family forest ‘not applicable’ designations are proposed for Indicators 4.3.2, 4.4.1, and 4.5.2. Alternate family forest indicators are proposed for Indicators 4.1.1, 4.3.1, and 4.5.1.

Guidance: Due to the well-established *legal** structure in the United States for property rights, the *rights** of non-*tribal* traditional peoples** or *local communities** are established within the *legal** system, including any *customary rights**; therefore, for these non-*tribal** groups, *customary rights** do not need to be considered separately. Additionally, while *The Organization** must assess the existence of *rights** held by non-*tribal* traditional peoples** or *local communities**, there is very limited occurrence in the US of these kinds of *rights** and most *Organizations** will not need to address them. Further, a *Free, Prior, and Informed Consent** process is only required for these non-*tribal* rightsholders** if they are *traditional peoples** or *forest-dependent* local communities**.

*Rights** held by individuals are addressed through the *Indicators** of Criterion 1.2, Criterion 1.6, and Criterion 7.6. *Rights** held by *Native American** groups are addressed through the *Criteria** and *Indicators** of Principle 3. *Rights** held by non-tribal* communities as a whole are addressed by Criterion 4.1 and Criterion 4.2 but, as noted above, these kinds of *rights** are very rare in the US.

If no *rights** are identified per Indicator 4.1.1, conformance with Indicator 4.2.1 is not required.

C4.1 The Organization* shall identify the *local communities** that exist within the *Management Unit** and those that are affected by management activities. *The Organization** shall then, through *engagement** with these *local communities**, 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**. (new)

Indicator 4.1.1 *The Organization** identifies *local communities** that exist in the *Management Unit** and that may be affected by *management activities**, and, through *engagement** per Annex F, identifies and documents *legal** rights applicable to the *Management Unit** that are held by these communities.

FF Indicator 4.1.1 (New) *The Organization** makes reasonable efforts to identify *local communities** and *rights** held by these communities that may be affected by *management activities**. The assessment and the *engagement** may be informal.

Guidance: *Engagement** with *local communities** should focus on communication with representatives who have delegated authority from the community, such as a mayor, commissioner, or other elected representative. If this is not possible, other individuals who can represent the community as a whole are preferred, such as community elders or other civic leaders. Further guidance on *culturally appropriate** communications with *local communities** is provided in Annex F.

C4.2 The Organization* shall recognize and *uphold** the *legal** and *customary rights** of *local communities** to maintain control over management activities within or related to the *Management Unit** to the extent necessary to protect their *rights**, resources, *lands, and territories**. Delegation by *local communities** of control over management activities to third parties requires *Free, Prior, and Informed Consent**. (C2.2 P&C V4)

Indicator 4.2.1 *The Organization** allows the exercise of *rights** applicable to the *Management Unit** identified per Indicator 4.1.1, and when *management activities** may affect these *rights**, *The Organization** *engages** with the *rightsholder** to ensure that the *rights** in question are not violated. If the *rightsholder** is a non-tribal* *traditional people** or *forest-dependent* local community**, this *engagement** is through a *Free, Prior, and Informed Consent** process (per Annex F) with the *rightsholder** to secure consent prior to implementing the *management activities**. If the *rightsholder** does not wish to engage in a *Free, Prior, and Informed Consent** process, *The Organization** ensures that the *rights** in question are not violated.

C4.3 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. (C4.1 P&C V4)

FF Indicator Intent (New): Supporting *local communities** is important, regardless of the *scale** or *intensity** of the *Management Unit**. However, conformance with FF Indicator 4.3.1 should be sufficient for ensuring that this is done to the extent possible on *family forest* Management Units**.

The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest* Management Units**.

Indicator 4.3.1 The Organization* provides work opportunities to qualified *local** applicants and seeks opportunities for purchasing *local** goods and services of equal price and quality.

FF Indicator 4.3.1 (Existing US FF Indicator 4.1.e) Within its sphere of influence, The Organization* supports *local** services.

Intent: The Organization* should make consistent efforts to source goods and services from *local communities** to the extent that they are available and reasonably cost competitive.

Guidance: Efforts to source *locally** may include, among others: *local** residents and businesses are included on a list, maintained by The Organization*, of potential contractors and service providers (e.g., foresters, loggers); work opportunities are advertised in area newspapers.

Indicator 4.3.2 Commensurate with the size and scale of operation, The Organization* provides and/or supports vocational learning opportunities associated with *forest** management.

FF Indicator 4.3.2 (Existing US FF Indicator 4.1.f) Not applicable for *family forest* Management Units**. Conformance with Criterion 4.3 for *family forest* Management Units** is addressed through FF Indicator 4.3.1.

C4.4 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 socioeconomic impact of its management activities. (C4.4 P&C V4)

Indicator 4.4.1 The Organization* participates in *local** economic development and civic activities, based on *scale** of operation and where such opportunities are available.

FF Indicator 4.4.1 (Existing US FF Indicator 4.1.g) Not applicable for *family forest* Management Units** due to the *scale** and management *intensity** that limits capacity to affect social and economic development.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this *Indicator**.

C4.5 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. (C4.4 P&C V4)

Guidance: *Indicators** of Criterion 4.5 are intended to be applicable to potential community-level impacts and not applicable to impacts related to individuals. Examples of potential impacts at the community level include: excessive job losses such that it impacts the local tax base or home values, road use/maintenance that impacts an entire community versus individual residents, and impacts to a viewscape that is a regional attraction.

Indicator 4.5.1 Through *culturally appropriate* engagement** with *local communities**, measures are implemented to identify, avoid, and mitigate significant negative social and environmental impacts of *management activities**. Items to be addressed include:

- a. archeological sites and sites of cultural, historical, and *local community** significance (on and off the *Management Unit**);
- b. environmental resources, including air, water, and food (hunting, fishing, collecting); and
- c. aesthetics

FF Indicator 4.5.1 (Existing US FF Indicator 4.4.a) *The Organization** understands the likely social impacts of *management activities** and incorporates this understanding into management planning and *management activities**, and implements mitigation measures.

Intent: Environmental impacts evaluated are not intended to be redundant to other parts of the Standard such as the Principle 6 *Indicators**. Rather, evaluation is intended to address the direct impact on communities. Examples include the impact on air quality within a community when an *Organization** conducts controlled burns or alters viewsheds important to a community. The focus is on human/community impacts as compared to the ecological impacts, which are addressed in other parts of the Standard.

FF Indicator Guidance: Evaluation of social impact may be limited to informal evaluation of the potential impacts of *management activities** on surrounding landowners.

Indicator 4.5.2 Through *culturally appropriate* engagement** with *local communities**, measures are implemented to identify, avoid, and mitigate significant negative economic impacts of *management activities**. Items to be addressed include:

- a. community goals for *forest** and natural resource use and protection such as employment, education, subsistence, recreation, and health; and
- b. community economic opportunities

FF Indicator 4.5.2 (New) Not applicable for *family forest* Management Units** due to the *scale** and management *intensity** that limits capacity to affect the local economy.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this *Indicator**.

C4.6 The Organization*, through *engagement** with *local communities**, shall have mechanisms for resolving grievances and providing *fair compensation** to *local communities** and individuals with regard to the impacts of management activities of *The Organization**. (C4.5 P&CV4)

Intent: Annex D provides background on the framework of the *dispute** management system employed in this Standard and provides guidance for *Organizations**. If a *dispute** is identified regarding the impacts of management activities on affected *local communities** and other *affected stakeholders**, the *Indicators** of Criterion 1.6 are addressed for the identified *dispute**.

C4.7 The Organization*, through *engagement** with *local communities**, shall identify sites which are of special cultural, ecological, economic, religious, or spiritual significance, and for which these *local communities** hold *legal** or *customary rights**. These sites shall be recognized by *The Organization**, and their management and/or *protection** shall be agreed through *engagement** with these *local communities**. (new)

The elements of the Criterion are addressed through the Indicators* of Criteria 4.1, 4.2, and 4.5, and, as such, no Indicators* are included here. Any nonconformances shall be assessed to the Indicators* of these other Criteria*.*

C4.8 The Organization* shall *uphold** the right of *local communities** to *protect** and utilize their *traditional knowledge** and shall compensate *local communities** for the utilization of such knowledge and their *intellectual property**. A *binding agreement** as per *Criterion** 3.3 shall be concluded between *The Organization** and the *local communities** for such utilization through *Free, Prior, and Informed Consent** before utilization takes place, and shall be consistent with the *protection** of *intellectual property** rights. (new)

This Criterion is believed to be not applicable in a US context. There is no traditional knowledge* specific to non-tribal* local communities* in the forest* domain that could be considered intellectual property*. Traditional knowledge* specific to Indigenous Peoples* is addressed in Criterion 3.6.*

However, if found to be applicable in a specific situation, assessment of conformance should be completed with the Criterion 4.8 FSC International Generic Indicators (FSC-STD-60-004).

PRINCIPLE 5: BENEFITS FROM THE *FOREST**

*The Organization** shall efficiently manage the range of multiple products and services of the *Management Unit** to maintain or enhance *long-term** *economic viability** and the range of social and environmental benefits. (P5 P&C V4)

NOTE: Family forest 'not applicable' designations are proposed for Indicators 5.2.1, 5.2.2, 5.3.1, and 5.4.2. Family forest 'low risk' designations are proposed for Indicators 5.1.1, 5.1.2, and 5.4.1. An alternate family forest indicator is proposed for Indicator 5.2.4. Additionally, family forest-specific guidance is proposed for Indicator 5.5.1.

C5.1 *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. (C5.2 and 5.4 P&C V4).

FF Indicator Intent: *Indicators** that have been designated as 'low risk' for *family forest** *Management Units** do not need to be audited for *family forest** *Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 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 *ecosystem services** applicable to the *Management Unit** (e.g., timber, *non-timber forest products**, water, carbon sequestration, recreation).

FF Indicator 5.1.1 (New) *Low risk** of non-conformance, due to the limited capacity of *management activities** to affect the local economy.

Indicator 5.1.2 Consistent with *management objectives**, *The Organization** strives to diversify the economic use of the *forest** according to Indicator 5.1.1 .

FF Indicator 5.1.2 (New) *Low risk** of non-conformance, due to the limited capacity of *management activities** to affect the local economy.

Applicability: For *public lands**, diversification of the economic use of the *forest** is a requirement.

Intent: Economic diversification is expected to be evaluated in terms of its ecological impacts and not impede maintaining *forest** composition, structure, function, and other requirements present in this Standard. Developing new markets should also be consistent with *management objectives**.

Guidance: Diversification of economic uses may include but is not limited to: recreation; ecotourism; hunting; fishing; specialty products and lesser-used *species** of trees, grades of logs, and lumber; *non-timber forest products**; and emerging markets in new commodities such as water in its value to provide in-stream water flows.

Indicator 5.1.3 *The Organization** complies with FSC-PRO-30-006 when making FSC promotional claims regarding *ecosystem services**.

C5.2 *The Organization** shall normally harvest products and services from the *Management Unit** at or below a level which can be permanently sustained. (C5.6 P&C V4)

CONSULTATION QUESTION: FSC previously identified stakeholder interest in Sustained yield as it relates to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have sustained yield and conformance with Criterion 5.2 been addressed appropriately in this draft? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

FF Indicator Intent (New): Sustainable harvest is essential, regardless of the *scale** or *intensity** of the *Management Unit**. However, conformance with Indicator 5.2.3 and FF Indicator 5.2.4 should be sufficient for ensuring that sustainable harvests occur on *family forest* Management Units**.

The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest* Management Units**.

Indicator 5.2.1 In *Management Units** where products are being harvested, *The Organization** calculates the *sustained yield harvest level** for each sustained yield *planning unit**, and provides clear rationale for determining the size and layout of the *planning unit**. The *sustained yield harvest level** calculation is documented in the *management plan**.

The *sustained yield harvest level** calculation for each *planning unit** is based on *Best Available Information**, including:

- a. documented growth rates applicable for particular sites, and/or acreage of *forest** types, *age-classes**, and *species** distributions;
- b. mortality, decay, and other factors such as large-scale disturbance events that affect net growth;
- c. areas reserved from harvest or subject to harvest restrictions to meet other management goals;
- d. *silvicultural** practices that will be employed on the *Management Unit**; and
- e. *management objectives** and *desired future conditions**.

The calculation is made by considering the effects of repeated prescribed harvests on the product/*species** and its *ecosystem**, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.

FF Indicator 5.2.1 (Existing US FF Indicator 5.6.a) Not applicable for *family forest* Management Units**. Conformance with Criterion 5.2 for *family forest* Management Units** is addressed through Indicator 5.2.3 and FF Indicator 5.2.4.

Intent: The term “*sustained yield harvest level*” refers to harvest levels and rates that do not exceed growth over successive harvests, that contribute directly to achieving *desired future conditions**, and that do not diminish the *long-term** ecological integrity and productivity of the site.

The method used to calculate the *sustained yield harvest level** for timber products is commensurate with the *scale** and *intensity** of the *forest** management operation.

For *Management Units** in which harvesting occurs infrequently, harvest levels and/or re-entry frequencies are set consistent with achieving and/or maintaining *desired future conditions**.

Indicator 5.2.2 Average annual harvest levels, over rolling periods equal to the duration of the management planning period (per Indicator 7.4.1), are recorded and do not exceed the calculated *sustained yield harvest level**.

FF Indicator 5.2.2 (*Existing US FF Indicator 5.6.b*) Not applicable for *family forest** *Management Units**. Conformance with Criterion 5.2 for *family forest** *Management Units** is addressed through Indicators 5.2.3 and 5.2.4.

Guidance: If the intent is to change the *species** balance in a stand or *planning unit**, or to achieve a desired *age class** structure, or to manage a catastrophic or natural event such as fire or pest outbreak, a particular *species** might be harvested at a higher-than-sustainable rate until its optimal stand occupancy can be achieved (e.g., by restocking via planting, etc).

Indicator 5.2.3 Rates and methods of timber harvest lead to achieving desired conditions and improve or maintain health and quality across the *Management Unit**. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management are returned to desired stocking levels and composition at the earliest practicable time as justified in *management objectives**.

Indicator 5.2.4 For commercial harvest of *non-timber forest products** (i.e., NTFP), *The Organization** calculates and does not exceed a *sustained yield harvest level**. This harvest level is based on *Best Available Information**.

FF Indicator 5.2.4 (*New*) Rates and methods of *non-timber forest product** commercial harvest maintain health and quality across the *Management Unit**.

C5.3 *The Organization** shall demonstrate that the positive and negative *externalities** of operations are included in the *management plan**. (C5.1 P&C V4)

Indicator 5.3.1 Using *Best Available Information**, benefits and costs related to social, economic, and environmental impacts of *management activities** (i.e., *externalities**), including the costs of preventing and mitigating negative impacts, are estimated.

FF Indicator 5.3.1 (*New*) Not applicable for *family forest** *Management Units** due to the limited *scale** and frequency of *management activities** that occur on *family forest** *Management Units**

Intent: The *Organization** should estimate *externalities**, to the best of their ability, to help them understand the impacts (both positive and negative) of their *management activities**, and incorporate this information into the *management plan** per Indicator 7.2.19.

Guidance: *Externalities** are a side effect or consequence of an industrial or commercial activity that affects other parties without this being reflected in the cost of the goods or services involved. A positive example is improved deer habitat and deer hunting opportunities that result from *management activities**. A negative example is introduction, via equipment used for *management activities**, of an *invasive species** into an area not previously colonized by that *species**.

At minimum, the values addressed by *The Organization** per Criterion 4.5 should be considered.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest* Management Units**.

C5.4 *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 locally available, *The Organization** shall make *reasonable** attempts to help establish these services. (C5.2 P&C V4)**

Indicator 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.

FF Indicator 5.4.1 (*Existing US FF Indicator 5.2.a*) Low risk of non-conformance, and if a non-conformance were to go undetected, there is a low risk of negative impacts to social or environmental value due to the limited capacity of *management activities** to affect local service.

FF Indicator Intent: *Indicators** that have been designated as 'low risk' for *family forest* Management Units** do not need to be audited for *family forest* Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

Indicator 5.4.2 *Reasonable** attempts are made to encourage and/or support capacity where *local** goods, services, processing, and value-added facilities are not adequate or available.

FF Indicator 5.4.2 (*New*) Not applicable for *family forest* Management Units** due to the limited capacity of *management activities** to affect local services.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest** *Management Units**.

Indicator 5.4.3 On *public lands** where *forest** products are harvested and sold, some sales of *forest** products or contracts are scaled or structured to allow small businesses to bid competitively.

Applicability: This *Indicator** is only applicable to *public lands**.

Intent: This *Indicator** focuses on the ability of small businesses to bid competitively, and does not assume that the bid will be awarded. Factors such as price, equivalent skills, experience, and abilities to perform the required tasks must be taken into account in awarding sales and contracts.

C5.5 The Organization* shall demonstrate through its planning and expenditures proportionate to *scale, intensity and risk**, its commitment to *long-term** *economic viability**. (C5.1 P&C V4)

Indicator 5.5.1 The *Organization** is financially able to implement core *management activities**, including:

- a. all environmental, social, and operating costs, required to meet this Standard; and
- b. investment and reinvestment in *forest** management.

FF Guidance (New): The *Organization** is not required to share their personal finances with the *Certification Body**. Examples of how this could be demonstrated:

- Financial investment in *management activities** and infrastructure
- Contracted services with a forestry professional
- Use of cost-share programs

Indicator 5.5.2 Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.

Intent: Short-term financial factors may include but are not limited to: fluctuations in the market, requirements for cash flow, and the need for sawmill equipment and log supplies.

Guidance: "Responses to short-term financial factors" may include but are not limited to: increases in harvests or debt load, deferred maintenance of roads, and staff reductions.

PRINCIPLE 6: ENVIRONMENTAL VALUES* AND IMPACTS

The Organization* shall maintain, *conserve**, and/or *restore** *ecosystem services** and *environmental values** of the *Management Unit**, and shall avoid, repair, or mitigate negative environmental impacts. (P6 P&C V4)

NOTE: Family forest 'not applicable' designations are proposed for Indicators 6.6.1 and 6.8.1. A family forest 'low risk' designation is proposed for Indicator 6.4.4. Alternate family forest indicators are proposed for Indicators 6.1.1, 6.2.1, 6.5.1, 6.5.2, and 6.7.3. Additionally, family forest-specific guidance is proposed for Indicators 6.5.3, 6.5.4, 6.5.6, 6.6.4, and Criterion 6.2.

Intent: Principle 6 focuses on maximizing positive environmental impacts and minimizing adverse environmental impacts from *management activities**.

Within the scope of Principle 6 are issues and concepts about which there remains considerable uncertainty; in cases of uncertainty, the use of a *precautionary approach** is present both implicitly and explicitly in several aspects of the *Principle** because mitigation, repair and *restoration** is often difficult, more costly, and sometimes impossible.

See Glossary for definition of *biological diversity**.

C6.1 The Organization* shall assess *environmental values** in the *Management Unit** and those values outside the *Management Unit** potentially affected by *management activities**. This assessment shall be undertaken with a level of detail, scale, and frequency that is proportionate to the *scale**, *intensity**, and *risk** of *management activities**, and is sufficient for the purpose of deciding the necessary *conservation** measures, and for detecting and monitoring possible negative impacts of those activities. (new)

Intent: The primary intent of Criteria 6.1 through 6.3 is to avoid creating significant negative environmental impact by conducting baseline assessments of resource attributes, assessing the potential environmental impact of proposed *management activities**, and then incorporating the results of these assessments into management planning. Assessments, per Criterion 6.1, are undertaken with an adequate level of detail and frequency sufficient for the purpose of establishing management prescriptions and monitoring protocols designed to achieve conformance per Criteria 6.2 and 6.3.

Guidance: Criteria 6.1 through 6.3 follow a logical sequence in which an assessment of current conditions is completed and compared to historic conditions in order to understand the effects of the short-term and *long-term** impacts of management and to determine where *restoration** may be warranted, and then management approaches are developed and implemented that minimize and mitigate for these impacts.

Environmental values within the *landscape** of the *Management Unit** (both within and outside the *Management Unit**) that may be affected by *management activities** occurring within the *Management Unit** are to be included in the assessment process. Examples of situations with *management activities** occurring within the *Management Unit** affecting environmental values outside of the *Management Unit** include impacts on downstream water quality, and *rare, threatened, and endangered species** and/or *rare ecological communities** that extend from the *Management Unit** onto adjacent lands.

Assessments include consideration of all aspects of site-disturbing operations for which *The Organization** has direct control, such as: activities associated with timber management, recreational uses, transportation, on-site wood processing facilities, grazing, mineral extraction, transmission line siting, and other activities conducted in the *Management Unit**.

*Best Available Information** for Criteria 6.1 through 6.3 may include, as appropriate:

- *Representative Sample Areas** showing environmental values in their *natural condition**
- field surveys
- databases relevant to the environmental values
- consultation with local and regional *experts**
- *culturally appropriate** *engagement** with *Indigenous Peoples**, *local communities**, and *affected stakeholders** and *interested stakeholders**
- climate change vulnerability assessments

Indicator 6.1.1 Using the results of *credible scientific analysis**, *Best Available Information** (including relevant databases), and *local** knowledge and experience, 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:

- a. *forest** community types, size class, and/or *successional** stages, and associated *natural disturbance regimes**;
- b. *rare, threatened, and endangered species** and *rare ecological communities** (including plant communities);
- c. other *habitats**, *ecosystems**, and *species** of management concern;
- d. water resources and associated *riparian areas** and hydrologic functions;
- e. *soil** resources;
- f. *forest** *ecosystem services** and resources that support human well-being (e.g., community drinking water, commercial and recreational fisheries, carbon storage, carbon sequestration, recreation, and tourism);
- g. *historic conditions** on the *Management Unit** related to forest community types, size class, and/or *successional** stages;
- h. a broad comparison of *historic conditions** and current conditions; and
- i. potential future impacts of climate change and *catastrophic natural disturbances**.

FF Indicator 6.1.1 (*Existing US FF Guidance for Indicator 6.1.a*) At minimum , available Natural Heritage databases are consulted and an evaluation of environmental values in the *Management Unit** is conducted that includes: (1) summary of size class and/or *successional** stages; (2) the condition of unique, vulnerable, rare, and threatened communities; (3) all state and federally listed sensitive, *rare, threatened, and endangered species** and their *habitats**; (4) water resources and *riparian areas** ; (5) *soil** resources; and (6) consideration of potential future impacts on these values of climate change.

Intent: Indicator 6.1.1 establishes *historic conditions**, current conditions and potential future conditions for assessing environmental impacts. The purpose of establishing *historic conditions** is to facilitate creating a baseline for assessing environmental impacts of operations, to facilitate establishing *desired future conditions**, and to determine when *restoration** may be needed. When *historic conditions** are not available, best estimates from available sources may be used. *Historic conditions** should be used as guidelines for estimating ecological components of naturally occurring conditions. The expectation is not that *The Organization** will attempt to exactly re-create the conditions of a particular point in time, but that it will use the *historic condition** information to better understand ecological complexity, changes over time and potential within the *Management Unit** to inform *desired future conditions** and *management objectives**. However, the potential future impacts of climate change may limit the value of *historical condition** information in some situations.

The assessment for *rare, threatened, and endangered species** and *rare ecological communities** includes G1–G3, S1–S2, and some S3 species. These “G” and “S” ranks are conservation status ranks used by NatureServe and Natural Heritage Programs to provide an assessment of imperilment (1 [critically imperiled] through 5 [secure]) at global (“G”) and state (“S”) scales. The evaluation to determine which S3-ranked *species** warrant recognition as *rare, threatened, and endangered species** and which communities warrant recognition as *rare ecological communities** should be based on the following: S3 *species*/communities* that are candidates for federal or state listing should be considered *rare, threatened, and endangered species*/rare ecological communities**. S3 *species*/communities* that have been proposed for federal or state listing should also be given priority. The assessment should be designed to identify and recognize as *rare, threatened, and endangered species** those S3 *species*/communities* that are more imperiled across their natural ranges, and that are more sensitive and vulnerable to impact from the types of *management activities** that will occur on the *Management Unit** .

Item (f) is intended to address *forest* ecosystem services** and resources that are associated with public values and not duplicate those addressed in Principles 4 and 9. *Forest* ecosystem services** and resources may vary with ownership type (e.g., public vs. private), size, and region, and may include, but are not limited to, watersheds, fisheries, and other non-timber *forest** values and services such as recreation, and carbon storage and sequestration.

The reference to carbon storage and sequestration is to have *forest** managers recognize

carbon storage as an important *ecosystem service** and public value. It is not intended to preclude harvest that is consistent with other parts of this Standard, nor is *The Organization** required to quantify carbon storage and sequestration. *The Organization** should consider the values associated with carbon and integrate it into management decisions as is done with watersheds, fisheries, and recreation.

Guidance: The *forest** community and successional* stage classification system may be based on regional norms or a landowner-specific system (e.g., the FMO's stand classification system). At minimum, the classification must include sufficient specificity and differentiation to account for *forest** sites' natural diversity and tree *species**, *habitat** types, stand structures, and their distribution (or lack thereof), including all *successional** stages from regeneration through *old growth** characteristic of regional forest dynamics (see also Indicator 6.6.1).

The above element of the assessment process will also generate information that is relevant to the assessments required for *Representative Sample Areas** (Criterion 6.5) and *High Conservation Values** (Principle 9).

Primary sources of information include state Natural Heritage Programs, NatureServe, LANDFIRE, state wildlife agencies, US Fish and Wildlife Service, and the National Marine Fisheries Service. Depending on the *scale** and *intensity** of operations and potential for *risk** as indicated by consultation with *conservation** agencies, on-site searches for *rare*, *threatened*, and *endangered species** may be applicable.

In states where S1, S2, S3, or G3 *species** and communities are not mapped by the Natural Heritage Program, or where *rare*, *threatened*, and *endangered species** information is incomplete, the *Best Available Information** for S1–S3 and G3 *species** and communities' occurrences and finest resolution of classification commonly available in that state should be used.

Resources for helping to determine potential future impacts of climate change are included in the Climate Change Toolkit in Annex L.

"Other *habitats** and *species** of management concern" may include a) Species of Greatest Conservation Need and Priority Habitats identified in state "Wildlife Action Plans" and priorities identified by state and federal conservation agencies; b) areas identified in science-based *conservation** plans developed by other *conservation** organizations (e.g., The Nature Conservancy or NatureServe); c) *habitats** for other *species** potentially at *risk** due to management; and d) climate change refugia. See also Indicators 6.7.1 and 10.2.1.

C6.2 Prior to the start of site-disturbing activities, *The Organization shall identify and assess the *scale*, *intensity*, and *risk** of potential impacts of management activities on the identified *environmental values**. (C6.1 P&C V4)**

FF Guidance (*From existing US Criterion 6.1*): The expectations for meeting this *Criterion** are scale-dependent and the rigor of the assessment is commensurate to the level of disturbance. Less-extensive and less-technical assessments may be adequate for *family forest* Management Units** to demonstrate conformance .

Indicator 6.2.1 Prior to commencing site-disturbing activities, *The Organization** assesses and documents the potential short-term and *long-term** impacts of planned *management activities** on environmental values identified per Indicator 6.1.1. The assessment incorporates the *Best Available Information**, drawing from scientific literature and *experts**. The impact assessment will at a minimum include identifying resources that may be impacted by *management activities** (e.g., streams, *habitats** of management concern, *soil** nutrients).

FF Indicator 6.2.1 (New) Prior to commencing site-disturbing activities *The Organization** conducts an informal impacts assessment that addresses and documents the effects on environmental values identified per Indicator 6.1.1 that are likely to result from the activities. The assessment incorporates the *Best Available Information**, drawing from scientific literature and *experts**.

Intent: This *Indicator** focuses on assessing potential impacts to environmental values identified per Indicator 6.1.1, considering scales of impacts from the stand level to the landscape level.

“Short-term impacts” are those that can be measured during or within a short period of the *management activity** (e.g., within one year). “*Long-term** impacts” are those that persist for longer periods and include *cumulative impacts** (e.g., cumulative *habitat** changes or *cumulative impacts** to *soils** from whole-tree removal). *Cumulative impacts** may occur over time at one site (e.g., depletion of *soil** nutrients) or at the *landscape** or ownership scale (e.g., the *cumulative impact** of many harvests on wildlife *habitat**).

“Assessments of environmental impacts” do not require a formal “Environmental Impact Assessment” as defined under federal and state laws and regulations.

Guidance: Additional detail (i.e., detailed description or quantification of impacts) will vary depending on the uniqueness of the resource, potential *risks**, and steps that will be taken to avoid and minimize *risks**.

Potential impacts to site-specific features (e.g., unique *habitats**, *water bodies**, identification of sensitive *soils**) are typically addressed in operations plans and/or prescriptions. *Long-term** and *cumulative impacts** are addressed in the *management plan**, while short-term impacts may be addressed in harvest plans or in separate management guidelines that describe potential *risks**. While not all impacts can be easily distinguished as “*long-term**” or “short-term,” it is important that they are included in either the *management plan** or the harvest plan.

FF Indicator Guidance (*For existing US Indicator 6.1.b*): For family forest* *Management Units**, assessment and documentation of long-term impacts are not always necessary or appropriate. Harvest prescriptions, techniques, site preparation, timing, and equipment used should be included in considerations of long-term impacts.

C6.3 The Organization* shall identify and implement effective actions to prevent negative impacts of *management activities** on the *environmental values**, and to mitigate and repair those that occur, proportionate to the *scale**, *intensity**, and *risk** of these impacts. (C6.1 P&C V4)

Indicator 6.3.1 Using the findings of the impact assessment (per Indicator 6.2.1), effective management approaches and field prescriptions are developed and implemented that: 1) prevent or minimize negative short-term and *long-term** impacts; and 2) maintain and/or enhance the environmental values identified per Indicator 6.1.1.

Intent: This *Indicator** focuses on developing/implementing management measures to avoid or minimize impacts identified in Indicator 6.2.1 . Emphasis should be placed first on avoidance and then on minimizing and mitigating negative impacts.

Guidance: Management approaches to address potential *long-term** impacts, including *cumulative impacts**, will typically be addressed in the *management plan**. They should also be addressed in operational plans.

Management approaches and field prescriptions to address short-term impacts from *management activities** that recur throughout the implementation of the plan may be addressed in the *management plan** or in separate management guidelines that are designed to avoid potential *risks**.

Prescriptions to site-specific features (e.g., unique *habitats**, *water bodies**, identification of sensitive *soils**) are typically addressed in operations plans and/or prescriptions.

Indicator 6.3.2 Unless it is being used to achieve ecological *management objectives**, whole-tree removal:

- a. does not occur on nutrient-poor *soils** or *soils** sensitive to compaction or other disturbance;
- b. does not occur in *wetlands**, rare *ecosystems**, or other ecologically sensitive areas;
- c. if it does occur, is not planned to occur again in the subsequent rotation unless research indicates *soil** productivity and belowground carbon sequestration will not be compromised; and
- d. if it does occur, leaves roots and stumps on-site.

Applicability: This indicator is applicable to harvesting operations that remove the above-ground portions of the trees, including stems, branches, twigs, and leaves, from the *harvest unit** and all of these materials are either left on the landing or are transported off-site. A key element is that material is removed from the *forest** and is utilized off the site.

This indicator is not applicable to harvesting operations that remove whole trees to the landing, process them by removing tops and limbs, and then distribute a significant portion of those tops and limbs back into the woods or on skid trails (in conformance with Indicators 6.6.3 and 10.11.4).

Indicator 6.3.3 Where negative impacts to environmental values identified per Indicator 6.1.1 occur as a result of *management activities** implemented by *The Organization**, measures are adopted to prevent further damage, and negative impacts are mitigated and/or repaired.

Intent: In this context, the intent of “repair” is to repair the damage done to environmental values that resulted from *management activities**. It is not intended to require the formation of more *natural conditions** in sites that have been heavily degraded or converted to other land uses.

Indicator 6.3.4 On *public lands**, assessments developed per Indicator 6.1.1 and management approaches developed per Indicator 6.3.1 are made available to the public in draft form for review and comment prior to finalization. Final assessments are also made available.

Applicability: This *Indicator** is only applicable for *public lands**.

Guidance: Information that the manager and *Certification Body** deem necessary to keep confidential (e.g., location of *rare, threatened, and endangered species**) may be kept confidential.

C6.4 *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**. (C6.2 P&C V4)

Intent: This Criterion establishes safeguards for *rare, threatened, and endangered species**

that were identified per Criterion 6.1. Safeguards for *rare ecological communities** identified per Criterion 6.1 are addressed in Criterion 6.6 .

*The Organization** has the discretion to keep the specific location of rare populations confidential.

Indicators 6.4.1 through 6.4.3 follow a logical sequence in which applicants are required to develop a list of *rare, threatened, and endangered species** present in the forest, modify *management plans** accordingly, and implement *management activities** to maintain or enhance *habitats** for the *species**. Where adequate plans or information do not exist and the likely presence of *rare, threatened, and endangered species** is indicated, *The Organization** is required to follow a *precautionary approach** and manage as though they are present.

Indicator 6.4.1 If there is a likely presence of *rare, threatened, and endangered species** as identified per Indicator 6.1.1 then either a field survey to verify the *species** presence or absence is conducted prior to site-disturbing *management activities**, or *management activities** occur with the assumption that potential *rare, threatened, and endangered species** are present.

Surveys are conducted by individuals with the appropriate expertise in the *species** of interest and with appropriate qualifications to conduct the surveys. If a *species** is determined to be present, its location is reported to the manager of the appropriate database.

Intent: “Likely” is a judgment decision by *The Organization** in consultation with *experts** (and verification by the *Certification Body**), and is determined by occurrences in the area (e.g., county) of harvest and/or the similarity of *habitat** as indicated by input from appropriate natural resource agencies such as state wildlife agencies, the Natural Heritage programs, NatureServe, the National Marine Fisheries Service, and knowledge of *historic conditions**.

Guidance: Depending on the type of *Management Unit** (e.g., scale, scope, degree of *risks**) *The Organization** may be required to have surveys conducted by independent *experts** representing no conflict of interest. It may also include a secondary review.

Indicator 6.4.2 When *rare, threatened, and endangered species** are present, or assumed to be present, modifications in *management activities** are made to maintain, *restore**, and/or enhance the extent, quality, and viability of *species** and their *habitats**. *Conservation zones** and/or *protected areas** are established for *rare, threatened, and endangered species**, including those S3 *species** that are considered rare, where they are necessary to maintain or improve the short-term and *long-term** viability of the *species**. Conservation strategies are based on *Best Available Information** .

Intent: The goal of this *Indicator** is to be aware of *rare, threatened, and endangered species** and to manage appropriately in situations where they are present. This may require

establishing *conservation zones** or *protected areas** where warranted. *Conservation zones** are not considered “set asides” and active management within these areas is allowed where appropriate.

Guidance: In states where S1, S2, S3, or G3 *species** are not mapped by the local Natural Heritage Program or where *rare, threatened, and endangered species** information is incomplete, the best available data should be used.

For the purposes of this indicator, *Best Available Information** includes relevant science, guidelines, and/or consultation with relevant, independent *experts** as necessary to achieve the *conservation** goal of the *Indicator**.

When possible, provide for *connectivity** to allow for genetic mixing of *rare, threatened, and endangered species**, and also consider *connectivity** of potential *habitats** at different ecological gradients, which may assist *species** adaptation to climate change (e.g., to potential *habitats** at various elevations or latitudes).

Indicator 6.4.3 For *medium** and *large** public *management units** , *management plans** and *management activities** are designed to support *species** recovery as well as *landscape**-level *biodiversity** conservation goals.

Applicability note: This Indicator is only applicable for *public lands**.

Indicator 6.4.4 Within the capacity of *The Organization** , hunting, fishing, trapping, collecting, and other activities are controlled to avoid the risk of impacts to *rare, threatened, and endangered species** and *rare ecological communities** (see also Criterion 1.4).

On *tribal** lands and where *Native American** groups have retained *use rights** on lands that were ceded to the US government, implementation of the activities mentioned above for ceremonial purposes, in recognition of *Native Americans** sovereignty and unique ownership, avoids risk to populations of *rare, threatened, and endangered species** or *rare ecological communities** and conforms with applicable *national laws** and *local laws** or with an agreement between a *Native American** group and the US Fish and Wildlife Service.

FF Indicator 6.4.4 (New) Low *risk** of non-conformance due to the *scale** of the *Management Unit**.

Intent: This indicator focuses on application of the *precautionary approach** in order to avoid irreversible negative consequences to *rare, threatened, and endangered species** and their *habitats** from extractive and recreational activities.

FF Indicator Intent: This *Indicator** has been designated as ‘low risk’ for *family forest**

*Management Units**, and therefore does not need to be audited for these *Management Units** unless the *Certification Body** observes and/or is presented with information which suggests that it is possible that *The Organization** is not in conformance with the *Indicator**.

C6.5 *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**. (C6.4 and 10.5 P&C V4 and Motion 7:2014)

CONSULTATION QUESTION: FSC previously identified stakeholder interest in Representative Sample Areas (RSA) as they relate to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have RSAs and conformance with Criterion 6.5 been addressed appropriately in this draft? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

NOTE: Within FSC Forest Management Groups, conformance with RSA requirements may be reduced for family forest group members by shifting the responsibility to other group members (per the FSC Forest Management Groups Standard, FSC-STD-30-005 V2-0).

Intent: The goal of this *Criterion** is to manage or *restore** sites to favor or form *viable** examples of native *ecosystems** that are typical of the locality, and that would naturally occur in the *Management Unit**. *Representative Sample Areas** should reflect the full diversity of native *ecosystems**, not just those that are *forested**. However, they should not disproportionately represent non-forested *ecosystems**.

*Representative Sample Areas** are portions of the *Management Unit** delineated for the purpose of *conserving** or *restoring** *viable** examples of an *ecosystem** that would naturally occur in that ecological region. *Representative Sample Areas** may also:

- a. serve to *conserve** or *restore** an underrepresented ecological condition (i.e., *forest* successional* phases, ecological communities*); and/or
- b. serve as a set of *protected areas** or *refugia** for *species**, communities, and/or community types not addressed in other *Criteria** of this Standard.

*Representative Sample Areas** will generally be fixed in location, unless representative of *ecosystems** within a shifting mosaic of *ecosystems**, such as those resulting from frequent natural (or mimicked) disturbance.

Protection of High Conservation Values* ; rare, threatened, and endangered species* ; communities; and ecosystems* with special ecological values are also addressed and protected* in other parts of this Standard (see Criteria 6.4 and 6.6, and Principle 9). One of the primary provisions in Criterion 6.5 is to ensure that examples of ecosystem* types that are not protected* elsewhere in this Standard are protected* in their natural state within the landscape.*

Guidance: Management activities within Representative Sample Areas* are not prohibited, but per Indicator 6.5.4 are limited to activities that do not detract from the Representative Sample Area* objectives for ecosystem* conservation* or restoration*. Representative Sample Areas* representing underrepresented conditions may be manipulated to maintain the desired conditions.*

Additional guidance is included in Annex G.

Indicator 6.5.1 Per Annex G and using *Best Available Information**, *The Organization** assesses and documents: a) the native *ecosystems** that would naturally occur on the *Management Unit**, including those that do not currently occur on the *Management Unit**; and b) their representation, status, and *protection** in the *landscape**.

The assessment for *medium** and *large* Management Units** include some or all of the following: a) *GAP analyses**; b) collaboration with state Natural Heritage Programs; c) public agencies; d) regional, landscape, and watershed planning efforts; and e) collaboration with universities and/or local *conservation** groups.

FF Indicator 6.5.1 (*Existing US FF Indicator 6.4.a*) *The Organization* makes reasonable efforts to identify native ecosystems* that would naturally occur on the Management Unit*. The assessment may be informal.*

Guidance: Assessments should generally be in writing. The Organization should describe the rationale for how determinations of representativeness, status, and level of existing protection* have been made.*

Guidance on scaling for assessments of Representative Sample Areas:- The Organization* for small* and medium* Management Units* may comply with this Indicator* through more informal consultation.*

Indicator 6.5.2 Based upon the assessment completed per Indicator 6.5.1, *Representative Sample Areas** are established per Annex G to conserve identified *ecosystems** that have *viable** occurrences on the *Management Unit** and *restore** identified *ecosystems** that do not have *viable** occurrences on the *Management Unit**.

FF Indicator 6.5.2 (New) *Representative Sample Areas** are established to conserve native *ecosystems** that occur on the *Management Unit** or could be *restored**.

Intent: *Representative Sample Areas** are to be established within the *Management Unit**, except in a limited number of situations that are described in Annex G.

Guidance: Overall, within *The Organization's** established *Representative Sample Areas**, the expectation is for a greater emphasis on *ecosystems** and ecological conditions that are in greater need of *conservation** assistance. Annex G provides further considerations for which *ecosystems** to emphasize, including when *Representative Sample Area** establishment is not essential for a particular *ecosystem**.

FF Indicator Guidance: Annex G Step 4 Items (a), (b), (d) and (e) under 'Considerations for which ecosystems to emphasize, and all items under 'Considerations for each RSA' provide guidance for establishing *Representative Sample Areas**.

Indicator 6.5.3 Per Annex G, the extent of *Representative Sample Areas** established is proportionate to the level of protection of native *ecosystems** within the *landscape**, the size of the *Management Unit**, and the *intensity** of *forest** management.

FF Guidance (New): *Family forest* Management Units** are expected to have at least one *Representative Sample Area**, unless they are less than 124 acres and the criteria established in FSC Forest Management Interpretation INT-STD-01-001_09 are met (see Annex G to see the language of this interpretation).

Indicator 6.5.4 *Management activities** within *Representative Sample Areas** are limited to activities that support or do not detract from the *Representative Sample Area** objectives for *ecosystem* conservation** or *restoration**.

Guidance: The primary purpose of a *Representative Sample Area** is to *conserve** (i.e., maintain or enhance) or *restore** a particular native *ecosystem** as an ecological reference area. Management to achieve this purpose may range from a more "hands-off" approach through to much more intensive management. Other *management activities** may occur within a *Representative Sample Area** as long as they support, or do not detract from, the primary purpose. In rare occurrences, when an activity is essential for achieving overall *management objectives**, and any alternative would result in extensive damage to environmental or social values outside of the *Representative Sample Area**, but could be accomplished within the *Representative Sample Area** with limited negative impacts to the *Representative Sample Area**, the activity may be implemented, as long as it is still possible to achieve the primary purpose of the *Representative Sample Area**.

When *forest* management activities** (including timber harvest) create and maintain

conditions that emulate an intact, mature *forest** or other *successional** phases that may be underrepresented in the *landscape**, the management system that created those conditions may be used to maintain them, and the area may be considered as a representative sample for the purposes of meeting this *Criterion**. *Representative Sample Areas** serving as ecological reference areas will generally not be managed for timber harvest, unless it is a part of the *conservation** strategy to maintain or enhance the *ecosystem**. Threats such as wildfire, natural pests, or pathogens may warrant *management activities** as a means to *conserve** the *ecosystem**.

FF Guidance (New): Annex G Step 5 provides some resources to assist with management decisions for *Representative Sample Areas**.

Indicator 6.5.5 The *Representative Sample Area** assessment (per Indicator 6.5.1) is reviewed as part of the review of the *management plan** and, if necessary, updated; the designation of *Representative Sample Areas** (per Indicator 6.5.2) is revised accordingly.

Guidance: When different components of the *management plan** are reviewed at different times, *The Organization** should review the *Representative Sample Area** assessment in coordination with review of the applicable portion(s) of the *management plan**.

Indicator 6.5.6 *Representative Sample Areas**, in combination with other components of the *conservation areas network**, comprise a minimum 10% area of the *Management Unit**.

Intent: The *conservation areas network** is established within the *Management Unit**, except in a limited number of situations that are described in Annex H.

Guidance: Annex H provides additional guidance regarding identification of areas that may be identified as part of the *conservation areas network**.

FF Guidance (New): *Family forest** group members within a group certification have the option of conforming with this *conservation areas network** requirement at the level of the group (per FSC Forest Management Interpretation INT-STD-20-007_45).

Indicator 6.5.7 *Large**, contiguous *public land** *Management Units** establish and maintain a network of *conservation zones** and/or *protected areas** sufficient in size to maintain *species** dependent on interior core *habitats**.

Applicability: this *Indicator** only pertains to *large**, contiguous *public lands** .

Guidance: In order to survive, some *species** need *forest* habitat** that is away from the influence of *forest** edges and open *habitats**. The amount of interior core *forest** needed to

be sufficient will depend on which *species** may be present and the shape of the *forest** block. A *forest** that is closer to a circle in shape provides much more interior core *habitat** than a *forest** block with the same number of acres but that is linear in shape (i.e., longer and thinner).

C6.6 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. (C6.2 and C6.3 P&C V4)

Indicator 6.6.1 To the extent feasible, given the size of the ownership, management maintains, enhances, or *restores** *habitat** conditions suitable for well-distributed populations of animal *species** that are characteristic of *forest** *ecosystems** within the *landscape**.

FF Indicator 6.6.1 (New) Not applicable for *family forest** *Management Units**, due to the limited capacity of management activities to affect well-distributed populations of animal species.

Applicability: This *Indicator** addresses *habitats** required by *species** that are not explicitly covered by Criterion 6.4, Criterion 6.8, and Indicator 6.6.7 , with particular consideration of animal *species** or *species** guilds whose populations are influenced by *forest** management at the multi-stand scale.

Intent: This *Indicator** is intended to cover *habitat** diversity of *species** not specifically associated with riparian or *aquatic habitats**, which are addressed in Criterion 6.7.

This *Indicator** addresses management for elements of *habitat** diversity across the *Management Unit** and includes consideration of diversity at the *landscape** scale. *Habitat** *connectivity** at the multi-stand scale is also considered and is based on the *habitat** needs of *species** that are vulnerable to *habitat** *fragmentation**.

Guidance: *Species** that are characteristic of *forests** within the *landscape** may include: *forest** interior specialists; early *successional** *forest** specialists; mature *forest** specialists; *forest** understory *species**; *species** with large territories or home ranges whose populations may be dependent on specific *habitat** conditions; *species** at risk from *habitat** *fragmentation**; and *species** with very restricted ranges limited by specific *habitat** conditions.

It is not expected that all *species** be identified and considered individually. Rather, management may be based on broad *habitat** conditions used by a wide range of *species** (e.g., early *successional** deciduous *forests** or large patches of relatively mature coniferous *forests**) as indicated by the *forest** types and other *ecosystems** found on the *forest**. Consideration of individual *species** may be warranted in the case of listed *species** or other

*species** of management concern, and for unique population occurrences, concentrations, remnants or use areas. Examples include *habitat** for declining neotropical migrant warblers, nesting areas, *refugia**, and deer wintering areas.

The level of detail in management and quantification of *habitat** conditions may vary with the *scale** and *intensity** of management, and, as appropriate to ownership size, *landscape** context, *forest** community type, and *natural disturbance regimes** across the *Management Unit**. Greater consideration of the area, location, and type of *habitat** is expected when *species** or *species** guilds associated with particular *habitat** conditions (e.g., large blocks of mature *forests**, or *forest** understory *species**) are adversely affected by *management activities**. At minimum, *The Organization** is expected to be able to use cover type maps as a *habitat** assessment tool. The plant community type and successional stage or *age class** data generated in Indicators 6.1.1 and 6.4.2 (e.g., a community/-successional stage matrix table) may be used as a basic measurement for this *Indicator**.

“Well-distributed” means that the population is viable. As feasible considering the *forest** size, sites, and *ecosystems** found on the *forest**, management provides conditions for the population to occur in multiple locations across the *Management Unit** to enhance its viability, rather than limiting the occurrence to one or very few locations.

Ownership size considerations: The range of *species** and *habitat** conditions that can be accommodated at any one time will vary by ownership size. On smaller ownerships (generally, tens to thousands of acres), management should meet the requirements of this *Indicator** by managing for *habitat** diversity for the entire *forest** and consider the role of the ownership within the surrounding *landscape**. However, ownership size will limit the type and amount of diversity that can be provided.

Very large ownerships should address this *Indicator** on appropriately scaled *landscape** *planning units**. These units may be based on *forest** boundaries or *landscape** features and will generally be scaled to accommodate all but extreme large-scale natural disturbances and the *habitat** requirements of animals with large home ranges (or seasonal *habitats** in the case of migratory animals). Depending on the *ecosystem** and regions, a *landscape** *planning unit** might be thousands or tens of thousands of acres in size.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with *Indicators** that have been designated as ‘not applicable’ for *family forest** *Management Units**.

Indicator 6.6.2 At a stand or site scale, management practices maintain or enhance plant species composition, distribution, and frequency of occurrence similar to those that would naturally occur on the site.

Guidance: While some site-specific treatments that simplify diversity may be necessary for specific *management objectives** (e.g., planting and control of competing vegetation), in general, management should strive to maintain a diversity of *native species** within stands.

Management practices that address maintenance of natural *species** diversity include, but are not limited to: use of natural regeneration methods; intermediate treatments that retain and encourage a diversity of *species**; use of site preparation; control of competing vegetation; type and number of *species** selected for tree planting; *conservation** of *species** at the edge of their ranges; *conservation** of representative disease-resistant pockets in areas where plant *species** are being impacted by disease; diversified planting schemes; and creating conditions for understory plants and other biota. In fire-dependent ecosystems, prescribed fire may be a beneficial management practice.

The plant *species** to be maintained or enhanced include tree *species** and understory vegetation, based on the composition of the *forest** *ecosystem** native to the site.

Indicator 6.6.3 At a stand or site scale, management maintains, enhances, or *restores** *habitat** components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include large live trees, live trees with decay or declining health, *snags**, and well-distributed coarse down and dead *woody debris**. *Legacy trees** where present are not harvested;

- a. provide vertical and horizontal complexity;
- b. are generally representative of the *species** naturally found on the site; and
- c. are maintained over successive harvests and are buffered by green trees and other vegetation where needed and available to maintain microclimate and reduce windthrow.

Specific to the Southwest Region

Regional Supplement1 *Forest** management maintains and/or *restores** an average of at least three *snags** per acre dispersed across the *landscape**. *Snags** are representative of the larger sizes of dominant *species** and “hard” and “soft” decay classes.

Intent for All Regions: The intent of this *Indicator** is to ensure that *The Organization** provides adequate *habitat** for *species** associated with large and/or decaying trees and dead wood. This Indicator applies to all *stands**, *silvicultural** systems, and harvest objectives, including normal operations, salvage harvests, intermediate and final harvests, and *stands** regenerated by natural means or by planting.

Guidance for All Regions: Some *stands** may take some time to develop these structural elements. Evidence of conformance may include measurable goals (e.g., numbers and sizes of trees), and application of *silvicultural** systems and harvesting practices that develop and maintain these structures over time. *Long-term** passive approaches may be used to develop

*snags** and coarse down and dead *woody debris** by allowing *retention** trees (e.g., large live decay trees) to die naturally, rather than girdling and/or felling trees specifically for that purpose.

Trees with decay or declining health include but are not limited to cavity trees.

While *species** selected for retention should be generally representative of the *species** found on the site, flexibility in the proportions of *species** retained may be based on ecological and financial objectives.

Specific for the Ozark-Ouachita Region: *The Organization** should take into account maintenance of high-quality seed trees in the *stand**, and presence of advanced regeneration (hardwoods) before harvest.

Specific for the Pacific Coast Region: In some dry regions, retaining approximately 10 tons of *woody debris** per acre may be sufficient. In wetter regions, retaining 20 tons of *woody debris** per acre may be sufficient. *Woody debris** should be well distributed spatially and by size and decay class, with a goal of at least four large pieces (approximately 20" diameter x 15' length) per acre. Three to 10 *snags** per acre (averaged over 10 acres) should be maintained or recruited. *Snags** should be well represented by size, *species**, and decay class.

Indicator 6.6.4 *The Organization** develops and implements a written strategy to prevent or control *invasive species**. It includes:

- a. an assessment of the presence and extent of *invasive species** and the degree of threat to *native species** and *ecosystems**;
- b. *management activities** that minimize the risk of *invasive species** establishment, growth, and spread;
- c. eradication or control of established *invasive species** populations when feasible; and
- d. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling *invasive species**.

Intent: This *Indicator** minimizes the risk of *invasive species** to native *ecosystems** on the *Management Unit**.

Guidance: A combination of assessment methods may be appropriate, such as including *invasive species** in periodic *forest** inventories, mapping their location and extent, screening sites during harvest planning, and informal observations by *forest** managers in the field.

Practices that minimize the risk of establishment and growth of *invasive species** include: washing equipment prior to moving on-site; avoiding seed mixes that contain potential *invasive species**; using weed-free mulch during *erosion**-control operations; seeding landings and other disturbed areas with *native species**; altering *silvicultural** treatments; and effective

*forest** monitoring and early detection.

In prioritizing *invasive species** control, *The Organization** should consider the relative risk of *invasive species** infestations relative to other threats to the *forest** (e.g., fire, insects, disease, etc.). Control measures should match the scale of the infestation and the potential risks and/or actual impacts to *native species** and *ecosystems**.

Feasibility and consistency with Criterion 6.1 may be considered when developing the *invasive species** strategy .

State listings of *invasive species** are recommended as sources of information.

FF Guidance (*From existing US Indicator 6.3.h*): Monitoring of control measures can be informal yet sufficient to assess their effectiveness .

Indicator 6.6.5 When *even-aged** *silvicultural** systems are employed and during salvage harvests, the 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** or rehabilitation. The regional supplementary requirements that follow also apply for portions of *Management Units** within the specified FSC-US Regions (per the FSC-US Regional Map in Annex B).

Guidance for All Regions: The method of *retention**, especially patch size and location, should generally reflect the type of live vegetation that would be found given *natural disturbance regimes** and should be sufficient to provide a variety of “lifeboat” conditions for sensitive understory plant *species**, fungi, and lichens and *habitat** elements for animals. When feasible, retained vegetation should be located to protect *snags**, down *woody debris**, and other *retention** components from windthrow, and to maintain their microclimate and desired function.

*Retention** objectives and requirements will vary with *harvest unit** size, the condition of surrounding *stands** and *silvicultural** systems applied to those *stands**, and relative rarity of the *ecological community**. For example, no *retention** may be needed if the *harvest unit** is small and the adjacent *stand** will be managed with an uneven-aged system. The levels of green-tree *retention** depend on such factors as: opening size, *legacy trees**, adjacent *riparian areas**, slope stability, upslope management, presence of critical *refugia**, and *scale** and *intensity** of harvesting across the *Management Unit**. Where *stands** have been degraded, less *retention** can be used to improve both merchantable and non-merchantable attributes. However, it is generally expected that the level of *retention** will exceed the minimum requirements of this *Indicator** and will include trees of all sizes as well as understory plants.

*Retention** should be distributed as clumps and dispersed individuals, appropriate to site conditions. “Clump” *retention** may include *riparian management zones**, wildlife corridors and other special zones. “Dispersed” *retention** may include desirable overstory and understory *species** while allowing for regeneration of shade-intolerant and intermediate *species** consistent with overall management principles. Retained trees should comprise a diversity of *species** and size classes, which includes large and old trees.

Specific to the Appalachian Region

Regional Supplement1 When *even-aged silviculture** (e.g., clearcut, seed tree, regular or irregular shelterwood, deferment cuts) is employed, live trees and native vegetation are retained and opening sizes created within the *harvest unit** are in a proportion and configuration consistent with the characteristic *natural disturbance regime** in each community type as evidenced by *Best Available Information** and documented in the *management plan**, unless *retention** at a lower level is necessary for *restoration** or rehabilitation purposes.

Guidance: *Even-aged silviculture** should be used only where naturally occurring *species** are maintained or enhanced. *Retention** within *harvest units** can include *riparian area* buffers** and other special zones. Where *stands** have been degraded, or where harvest practices implemented by previous management created conditions that limit *silvicultural** options (e.g., shelterwood establishment), less *retention** may be used with the intent of improving future *stand** conditions or releasing advanced regeneration. When considering maximum opening size with no *retention**, *The Organization** should consider potential *aesthetic** impacts, *age class** diversity on the *landscape**, regeneration goals, and *natural disturbance patterns**. Generally, individual harvest openings with no *retention** should average less than 10 acres across the *Management Unit** in a given year, and no single opening without *retention** should exceed 25 acres.

Specific to the Ozark-Ouachita Region

Regional Supplement2 *Even-aged silviculture** is employed on no more than 10% of the timber-producing area within the *Management Unit** per decade.

Regional Supplement3 When *even-aged silviculture** is employed, diameter-limit cuts are not implemented, and natural regeneration is required, except when necessary for restoring specific *habitats**, *stand** types, or *species**. Additionally:

In the Ozark subregion, harvest openings are limited to 2 acres with no *retention**, and 20 acres with *retention** of at least 20%–30% of the canopy.

In the Ouachita subregion, harvest openings are limited to 20 acres.

Specific to the Pacific Coast Region

Regional Supplement4 Within harvest openings larger than 6 acres, 10%–30% of pre-harvest basal area is retained. The levels of green-tree retention depend on such factors as: opening size, *legacy trees**, adjacent *riparian areas**, slope stability, upslope management, presence of critical *refugia**, and extent and intensity of harvesting across the *Management Unit**. *Retention** is distributed as clumps and dispersed individuals, appropriate to site conditions. Retained trees comprise a diversity of *species** and size classes, which includes large and old trees. Regeneration harvest blocks in even-aged stands average less than 40 acres. No individual block is larger than 60 acres.

Regional Supplement5 *Even-aged silviculture** may be employed where:

- a. *native species** require openings for regeneration or vigorous young-stand development;
- b. it *restores** the *native species** composition; or
- c. it is needed to *restore** structural diversity in a *landscape** lacking openings while maintaining *connectivity** of older intact *forests**.

Regional Supplement6 For even-aged regeneration harvests, if the rotation length does not allow a stand to achieve 80% of *culmination of mean annual increment** compared to natural *stands** of the same *forest** type and site class, *retention** is at the upper end (i.e., >20%) of the range required (in Regional Supplement4). Where rotation lengths meet or exceed *culmination of mean annual increment**, *retention** may be within the lower end (i.e. 10%–20%) of the range required.

Guidance: If the *Management Unit** does not have growth and inventory data for similar natural *stands** on the *Management Unit** needed to establish *culmination of mean annual increment**, growth and inventory data from similar *forest** types and site classes of natural *forests** off the *Management Unit** should be used to establish *culmination of mean annual increment**. Historical data from *public lands** such as National Forests may be the best source of information for calculating *culmination of mean annual increment**.

Regional Supplement7 No logging unit adjacent to a logged even-aged regeneration unit may be harvested using an even-aged regeneration method unless/until the prior even-aged regeneration unit is adequately stocked by a *stand** of trees in which the dominant and co-dominant trees average at least 5 feet tall and three years of age from the time of establishment on the site, either by planting or by natural regeneration. If the requirement to achieve adequate stocking is to be met with trees that were present at the time of harvest, there is a period not less than five years following the completion of

operations before an adjacent even-aged regeneration harvest may occur.

Specific to the Mississippi Alluvial Valley Region

Regional Supplement8 When *even-aged silviculture** is employed, the average size of the *harvest unit** within the *Management Unit** is no larger than 40 acres; *retention** is established in *harvest units** adjacent or nearly adjacent to another logged even-aged regeneration unit; and harvest openings with no *retention** are limited to 20 acres. For most *stand** types, *retention** is 20%–30%, but less *retention** is appropriate for *stands** dominated by shade-intolerant *species**.

Specific to the Rocky Mountain Region

Regional Supplement9 *Even-aged silviculture** is employed only where it is ecologically appropriate to the *forest** type, or when human activity (e.g., high grading, fire exclusion, introduction of *non-native species**) has created an imbalance in the *natural disturbance regime** that can be remedied only by this method.

Specific to the Southwest Region

Regional Supplement10 *Even-aged silviculture** is employed only in predominantly even-aged *forest** types, such as aspen.

Regional Supplement11 When *even-aged silviculture** is employed, the size of harvest openings is based on the natural regeneration requirements of the *species** on the site, and requirements to protect the site (e.g., *soil**, hydrology).

Specific to the Southeast Region

Guidance: *Even-aged silviculture** should not be used in *semi-natural forest* stands** where the majority of trees are greater than 100 years old, or *natural forests**. *Even-aged silviculture** may be used in *semi-natural forest**, even-aged *stands** of hardwood, and cypress, but the size of openings should be conservative. It also may be used in even-aged *stands** of pine and pine/hardwood, but the size of openings should not be higher than the limit for *plantations** and should be justified by natural regeneration requirements.

Exceptions to the above may be made in order to meet ecological objectives. *Even-aged silviculture** may be used in *natural forest* stands** as a tool for maintaining

*ecosystems** that are dependent on large, contiguous openings, when supported by scientific literature.

Indicator 6.6.6 For purposes of *restoration**, *The Organization** has the option to develop a plan to allow for departures from the opening size limits associated with Indicator 6.6.5.. The plan is:

- a. developed by *experts** in ecological and/or related fields (e.g., wildlife biology, hydrology, landscape ecology, forestry/silviculture*);
- b. based on *Best Available Information**, including peer-reviewed science regarding *natural disturbance regimes** for the *Management Unit**;
- c. spatially and temporally explicit and includes maps of proposed openings or areas;
- d. able to demonstrate that the variations will result in equal or greater benefit to wildlife, water quality, *ecosystem** processes, and other values compared to Indicator 6.6.5 (without any supplementary regional requirements), including for sensitive and *rare, threatened, and endangered species**; and
- e. developed in collaboration with affected *rights holders**, *affected stakeholders**, and *interested stakeholders**.

Applicability: This *Indicator** is applicable only under situations where *The Organization** has opted to develop rationale for opening sizes that depart from explicit regional limits set forth in the regional supplementary requirements of Indicator 6.6.5 .

Indicator 6.6.7 When a *rare ecological community** is present, *The Organization** maintains, *restores**, or enhances community viability. Based on the vulnerability of the existing community, *conservation zones** and/or *protected areas** are established where warranted.

Applicability: This *Indicator** applies to occurrences of rare communities known to state Natural Heritage Programs and occurrences identified in planning or implementing *forest** operations.

In states where S1, S2, or S3 communities are not mapped by the Natural Heritage Program, the best available data for S1–S3 communities' occurrences and finest resolution of classification commonly available in that state should be used. See Guidance and Intent in Criterion 6.1 for information on S1–S3 classifications, as well as the Glossary listing for *rare, threatened, and endangered species**.

Rare communities include some S3 communities. Indicator 6.1.1 outlines the process for identifying which S3 communities must be *protected** and managed as a rare community.

Guidance: *Conservation** measures should be based on relevant science, guidelines and/or consultation with relevant *experts** as necessary to achieve the *conservation** goal of the *Indicator**.

Field foresters should have an understanding of rare *forest** communities that may be encountered during *forest** operations. At minimum, this generally includes classification at the Alliance or Natural Community levels, although a more coarse classification may be appropriate in cases where community types are highly diverse and difficult to classify.

Indicator 6.6.8 *The Organization** demonstrates that effective strategies are in place to manage and control hunting, fishing, trapping and collecting of *native species**.

C6.7 *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. (C6.5 and 10.2 P&C V4)

CONSULTATION QUESTION: FSC previously identified stakeholder interest in requirements for written guidelines to reduce impacts to environmental values (primarily soil and water resources) as they relate to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have requirements for written guidelines and conformance with Criterion 6.7 been addressed appropriately in this draft? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

Intent: This Standard differentiates between “*riparian area**” and “*riparian management zone**” (i.e., RMZ), but recognizes that this is an artificial construct, as there are few situations in the United States where the purposes of these two types of areas are not overlapping and/or intermixed—the intent of management is the differentiator between the two terms. *Riparian areas** are delineated and managed to conserve the plant and wildlife *habitat** characteristics of the area and to protect adjacent *aquatic habitats** and *ecosystems**. *Riparian management zones** are designed to *protect** *water quality** and *aquatic habitat**. *Riparian areas** vary in width according to biotic and abiotic characteristics and may be wider than a *riparian management zone**. Both *riparian areas** and *riparian management zones** encompass the interface between upland communities, which include complex *ecosystems** that provide food, *habitat**, and movement corridors for both aquatic and land communities. In practice, on FSC-certified *Management Units**, most *riparian management zones** function as *riparian areas**.

Regionally, various terms are used in place of *riparian management zone**, including streamside management zones (SMZs), special management zones, buffers, and/or buffer zones (when specifically in reference to *water quality** and *aquatic habitats**).

Indicator 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**.

Intent: This Indicator is intended to cover the *habitat** and functions of *riparian areas** around rivers, *perennial streams**, *intermittent streams**, ponds, lakes, *wetlands**, *vernal pools** and tidal waters. In this context, the intent of “restore” is the formation of more *natural conditions** in sites that have been heavily degraded or converted to other land uses.

Guidance: Depending on the *ecosystem** and region, *riparian areas** frequently extend beyond, and may have different management guidelines than, those required by Indicator 6.7.. *Management activities** in *riparian areas** are acceptable as long as ecological objectives are met.

Aquatic *species** that breed in surrounding uplands include turtles and cavity-nesting ducks; terrestrial *species** that breed in *aquatic habitats** include some amphibians; *species** that use *riparian areas** for feeding, cover, and travel include some birds, mammals, reptiles, amphibians, and insects.

In general, it is expected that areas for *habitat** management will vary in width with ecological importance and with the *intensity** of timber harvest adjacent to the areas. *The Organization** may use ecologically appropriate guidelines, such as those that are available in some states or regions, or other approaches (e.g., focal species) to determine areas width and characteristics. Flexibility rather than uniform areas widths is appropriate if based on scientifically based outcomes that maintain or *restore** ecological function.

Indicator 6.7.2 *Management activities** meet or exceed *best management practices** (i.e., BMPs) for the protection of water quality and quantity.

Intent: *Best management practices** for *water quality**, *erosion** control, *protection** of *forest** resources during harvesting, road construction, and all other mechanical disturbances provide a foundational minimum for compliance with this *Criterion**.

*Best management practices** include both voluntary and mandatory state and regional *best management practices**, as well as analogous terms used in certain states (e.g., Site Level Guidelines).

Isolated and minor situations of noncompliance with *best management practices** may or may not result in a finding of nonconformance with the *Indicator**.

Indicator 6.7.3 The *transportation system** is designed, constructed, and maintained to reduce and minimize short-term and *long-term** environmental impacts and adverse *cumulative effects**. Access and off-road travel is controlled, while allowing for customary uses and *use*

*rights**. Effort is made to identify and prioritize roads for closure and rehabilitation.

Environmental impacts could be caused by, but are not limited to, the following-:

- a. road density;
- b. *soil** and water disturbance, including *erosion* and sediment discharge to streams;
- c. fragmentation of wildlife *habitat** and migration corridors; and
- d. area converted to roads, landings, and skid trails.

FF Indicator 6.7.3 (New) The Organization reduces environmental impacts of the transportation system by minimizing *soil** and water disturbance, including *erosion* and sediment discharge to streams, and making efforts to rehabilitate degraded roads.

Guidance: Control measures that reduce environmental impacts may include, but are not limited to:

- controlling access to and closing roads;
- limiting use of roads without a weather-resistant surface to periods of weather when conditions are favorable to minimize road damage, surface *erosion**, and sediment transport;
- restricting access on roads that are not immediately necessary for management purposes;
- posting or monitoring enforcement;
- constructing roads on slopes in excess of 60% with full bench cuts or minimal side cast;
- removing roads, bridges, culverts, and water bars when roads are decommissioned;
- recontouring or revegetating slopes, and establishing ecologically functional drainage patterns;
- locating landings on ecologically suitable sites, and minimizing ~~and~~ the size and the number of landings;
- seeding, mulching, or covering landings with slash after use;
- minimizing *riparian area** crossings;
- installing stream crossings at an angle that causes least ecological disturbance;
- using water diversion structures according to locally applicable guidelines; and
- reducing road density and/or mitigating its impact in *habitats** for salmonids and other threatened and endangered aquatic *species**.

Cooperative transportation planning with agencies, such as watershed management councils, is encouraged to minimize negative *cumulative impacts** across the *landscape**.

*The Organization** should design culverts and take other steps to ensure fish passage in order to maintain or enhance the *biodiversity** of the stream, although it is understood that there may be some situations where free upstream and downstream passage is not possible.

Indicator 6.7.4 Stream and *wetland** crossings are avoided when possible. Unavoidable crossings are located and constructed to minimize impacts on *water quality**, hydrology, and

fragmentation of *aquatic habitat**. Crossings do not impede the movement of aquatic *species**. Temporary crossings are *restored** to original hydrological conditions when operations are finished.

Guidance: Crossing structures should be designed to match the natural stream width, depth, velocities, and substrate through the crossing structure.

Specific for the Pacific Coast Region: Stream crossings should be designed to accommodate a 100-year peak flood event or to limit the consequences of an unavoidable failure.

Indicator 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 *restoring** *water quality** and hydrologic conditions in all *water bodies** and hydrologically sensitive areas (e.g., rivers and stream corridors, *wetlands**, *vernal pools**, seeps and springs, lake and pond shorelines, karst). The guidelines include vegetative *buffer** widths and *protection** measures that are acceptable within those *buffers**. The regional supplementary requirements that follow also apply for portions of *Management Units** within the specified FSC US Regions (per the FSC-US Regional Map in Annex B).

Applicability for All Regions: Among regions, *riparian management zones** may be referred to as streamside management zones (SMZs), special management zones, buffers, and/or buffer zones (when referencing *water quality** and *aquatic habitats**). Additionally, while *riparian management zones** represent complex *ecosystems** that provide food, *habitat**, and movement corridors for both aquatic and land communities, they differ from *riparian areas** in that their primary focus is on *protecting** *water quality**. *Riparian management zones** also commonly have strictly defined width and operational requirements that vary according to region.

Intent for All Regions: The focus of this *Indicator** is on stream and *water quality** *protection**, and also involves *riparian management zones** and stream management zones. See Indicator 6.7.1 for requirements addressing plant and wildlife *habitat** values adjacent to *water bodies**.

Guidance for All Regions: Guidelines should meet or exceed regional recommendations (e.g., *water quality best management practices**) as necessary to meet the objective of *water quality protection** and *restoration** measures. Measures for all stream segments include, but are not limited to:

- developing *buffer** widths sufficient to *protect** and *restore** *water quality**, considering: temperature, sedimentation, chemical runoff, recruitment of *woody debris** and stream structure, and the timing of water flows sufficient to meet water quality standards for both humans and aquatic *species**, including invertebrates, fish, and amphibians;
- providing filter strips that vary with slope and *soils** that are sufficient to trap sediment from upslope sites;

- minimizing *soil** disturbance;
- providing adequate shade to protect water temperature;
- minimizing or precluding harvest within core portions of *buffer** strips;
- protecting stream banks;
- maintaining tree cover and minimizing disturbance of floodplain areas to ensure that proper aquatic function will be provided when channels shift;
- ensuring recruitment of coarse *woody debris** where needed for aquatic *habitats**; and
- regulating harvest and road construction on upslope areas to ensure proper hydrological function, including the timing, intensity, and location of water delivery.

Specific to the Appalachian Region

Applicability: The *riparian management zone** is designed to allow harvesting and provide flexibility for *forest** management.

Regional Supplement1 All *perennial streams** have *riparian management zones** (i.e., RMZs or buffers) that include an inner *riparian management zone** and an outer *riparian management zone**. *Riparian management zone** sizes are minimum widths that are likely to provide adequate riparian *habitat** and prevent siltation. If functional riparian *habitat** and minimal siltation are not achieved by *riparian management zones** of these dimensions, wider *riparian management zones** are needed.

Table 1. Widths of inner and outer *riparian management zones. Widths of outer *riparian management zones** are applicable where data do not support narrower widths¹**

Riparian zone type	SLOPE CATEGORY				
	1%–10%	11%–20%	21%–30%	31%–40%	41% +
Inner Zone (perennial)	25	25	25	25	25
Outer Zone (perennial)	55	75	105	110	140
Total for perennial	80	100	130	135	165
Zone for Intermittent	40	50	60	70	80

¹All distances are in feet -slope distance and are measured from the high-water mark.

Regional Supplement2 The inner *riparian management zone** for “non-high-quality waters” (see state or local listings describing the highest-quality waters in the state or region) extends 25 feet from the-high water mark. Single-tree selection or small group selection (two to five trees) is allowed in the inner *riparian management zone**, provided that the integrity of the stream bank is maintained and canopy reduction does not exceed 10% (90% canopy maintenance). Trees are directionally felled away from

streams. Note: The inner *riparian management zone** is designed as a virtual no-harvest zone, while allowing the removal of selected high-value trees.

Regional Supplement3 Along *perennial streams** that are designated as “high-quality waters” (see state or local listings describing the highest-quality waters in the state or region), no harvesting is allowed in the inner *riparian management zone** (25 feet from the high-water mark), except for the removal of windthrown trees.

Regional Supplement4 Outer *riparian management zones**, outside and in addition to inner *riparian management zones**, are established for all *intermittent streams** and *perennial streams**, as well as other waters. When the necessary information is available, the width of a *riparian management zone** is based on the landform, erodibility of the *soil**, stability of the slope, and stability of the stream channel as necessary to protect *water quality** and repair *habitat**. When such specific information is not available, the width of the *riparian management zone** is calculated according to Table 1.

Regional Supplement5 Harvesting in outer *riparian management zones** is limited to single-tree and group selection, while maintaining at least 50% of the overstory.

Regional Supplement6 (New) Roads, skid trails, landings, and other similar *silviculturally** disturbed areas are constructed outside of the *riparian management zone**, except for designated stream crossings or when placement of disturbance-prone activities outside of the *riparian management zone** would result in more environmental disturbance than placing such activities within the *riparian management zone**.

Regional Supplement7 The entire *riparian management zone** of *intermittent streams** is managed as an outer *riparian management zone** .

Regional Supplement8 The *management activities** do not result in observable siltation of intermittent streams.

Specific to the Ozark-Ouachita Region

Regional Supplement9 Table 2 provides *riparian management zone** (i.e., streamside management zone) widths.

Table 2. <i>Riparian management zone</i>* widths for perennial and intermittent watercourses^{1,2}						
Soil erosion susceptibility	Slope Category (%)					
	0%	10%	20%	30%	40%	50%
Slight	75	75	80	105	130	155
Moderate	75	75	100	140	170	200
Severe	75	90	130	170	210	250

¹ No-cut zone rules are covered in the text of Regional Supplement9.

² Widths are horizontal measures (per side) in feet from the mean high-water mark.

Regional Supplement10 *Riparian management zones** are established for all *perennial streams** and *intermittent streams** . Single-tree harvest may be carried out in *riparian*

*management zones**, except in no-cut zones. A minimum of 80% crown cover is maintained throughout the *riparian management zone**. A 10-foot no-cut zone (from each bank) is established to maintain streambank stability for *perennial streams** and *intermittent streams**.

Regional Supplement11 Use of chemicals is prohibited in *riparian management zones**, unless necessary to control *invasive species** that would otherwise threaten the viability of the *ecosystem**.

Regional Supplement12 Skid trails and operation of heavy equipment are prohibited in *riparian management zones**, except at designated crossings.

Specific to the Southeast Region

Regional Supplement13 *Riparian management zones** (i.e., streamside or special management zones) are specifically described and/or referenced in the *management plan**, included in a map of the *forest** management area, and designed to *protect** and/or *restore* water quality** and aquatic and riparian populations and their *habitats**. At a minimum, management of *riparian management zones** has the following characteristics:

- a. *Riparian management zone** design and management is based on state *best management practices**.
- b. *Riparian management zone** width reflects changes in *forest** condition, stream width, slope, erodibility of *soil**, and potential hazard from windthrow along the length of the watercourse.
- c. *Riparian management zones** provide sufficient vegetation and canopy cover to filter sediment, limit nutrient inputs and chemical pollution, moderate fluctuations in water temperature, stabilize stream banks, and provide *habitat** for riparian and aquatic flora and fauna.
- d. Characteristic diameter-class distributions, *species** composition, and structures are adequately maintained within the *riparian management zone**.

Specific to the Mississippi Alluvial Valley Region

Regional Supplement15 *Riparian management zones** are created and maintained in accordance with Table 36.

Table 3 Riparian Management Zone* Widths¹							
		Slope					
Stream Class	Soil erosion susceptibility²	0%	10%	20%	30%	40%	50%
		Total RMZ width (ft) per side³					
Perennial	Slight	75	75	80	105	130	155
	Moderate	75	75	100	140	170	200
	Severe	75	90	130	170	210	250

Intermittent	All erosion categories	30	30	30	30	30	30
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¹ Table 3 was modeled after the Forestry Best Management Practices of the State of Mississippi, publication #107.

² Soil erosion susceptibility is defined at the series level by USDA-NRCS State Soil Surveys.

³ Distances are horizontal measures per side of stream, and are measured from the mean high-water mark as evidenced by lack of terrestrial vegetation.

Regional Supplement16 For *perennial streams**, the inner zone of the *riparian management zone** is defined as the area within 30 feet of the mean high-water mark. Within that zone, timber harvest is limited to single-tree selection, and canopy cover is sufficient to maintain shade adequate to moderate water temperature. Harvesting in this zone maintains the composition, structural complexity, and functions of the *riparian management zone**.

Regional Supplement17 For *perennial streams**, timber harvest in the outer zone of the *riparian management zone** is limited to either single-tree selection or small group selection. Canopy cover and vegetation are maintained to provide filtration of runoff into a stream.

Regional Supplement18 Within intermittent *riparian management zones**s, *regeneration harvest** may be conducted provided other vegetation and/or ground cover remains to protect the *forest** floor and the stream bank in a manner that will maintain *water quality**.

Regional Supplement19 Prescribed burning is allowed in *riparian management zones** when *water quality** and the structures and composition of the *forest** within the *riparian management zones** can be maintained.

Specific to the Southwest Region

Regional Supplement20 *Riparian management zones** (i.e., buffer zones) are established for all natural streams and watercourses with definable banks, and for ponds, lakes, and *wetlands**. *Riparian management zones** are measured horizontally (in such a way that ground slope does not reduce the distance) from the following:

- the upland edge of the riparian vegetation (if present);
- each bank of a stream or water course (in the absence of riparian vegetation); or
- the edge of the *wetland** or *water body**. (Note: Where *wetlands** abut watercourses, the edge of the *riparian management zone** is measured from the edge of the *wetland**.)

Regional Supplement21 *Riparian management zone** width is determined as follows:

- where riparian vegetation is present, at least 30 feet beyond the edge of the riparian vegetation or 100 feet from the stream edge, whichever is greater;
- where riparian vegetation is not present, at least 50 feet on either side of all *perennial streams**, or *intermittent streams** that flow two to three or more months of the year, or along the edge of *water bodies**; such *riparian management zones** extend wider on steep or erosive slopes;

- c. where sideslopes exceed 35%, the width is at least 100 feet;
- d. as necessary along ephemeral drainage patterns that exhibit a definable bank to *protect** the functions of the *riparian management zone** ; and
- e. width is increased in areas of *riparian management zone** sensitivity (e.g., unstable slopes), which is ultimately determined by the potential for resource damage or degradation of the functions of the *riparian management zone**.

Regional Supplement22 Management in the *riparian management zone** maintains, enhances, or *restores** the condition of the *riparian area** or streamside zone. For example:

- a. Thinning from below and planting trees may be carried out for purposes of controlling *erosion** *restoration**.
- b. Ecological, aquatic, and riparian functions (e.g., the maintenance or restoration of riparian microclimates) are demonstrably the priority *silvicultural** objective of any commercial harvesting. 6.5.e.1.c (SW only)

Regional Supplement23 *Transportation systems** and mechanical operations (including any form of significant ground-disturbing activity) in *riparian management zones** do not compromise the filtration, shading, nutrient, and habitat functions of the *riparian management zone** . For example:

- a. Permanent roads are maintained or installed only as necessary to cross streams at a perpendicular or other angle that causes the least ecological disturbance. Temporary roads or designated skid trails across a *riparian management zone** may be permitted in rare instances after preparation of a pre-operation plan that protects riparian values.
- b. Operation of wheeled or tracked equipment is restricted to roads and designated crossings.
- c. Storage, handling, or use of hazardous materials is prohibited in *riparian management zones** .

Note: Full-suspension yarding is also an option so long as it does not compromise the *riparian management zone** .

Specific to the Rocky Mountain Region

Applicability : Some discretion may be applied to stream segments that support no fish, rarely contribute surface flow to other streams or other *water bodies**, and normally have surface flow less than six months of the year. In such instances *riparian management zone** widths should follow those designated, but management restrictions should be more flexible, as long as riparian concerns continue to receive highest priority. *The Organization** should identify and provide adequate *protection** for all streams, lakes, *wetlands**, and associated *riparian areas**, including through establishment of *riparian management zones**, and restore them to their properly functioning condition, when feasible. When *riparian management zones** are

established, the extent and protection that they provide should be adequate to serve all the functions and objectives of such zones in *forests** under *natural conditions**. These functions include, but are not limited to: 1) control of *erosion** of *soil** and organic debris; 2) control of stream sedimentation; 3) stabilization of surface water and groundwater flow fluctuations; 4) stabilization of water temperatures; 5) provision of organic debris (including large-diameter wood) for the aquatic *habitat**; and 6) provision of *habitat** (shelter, water, food, travel corridors, etc.) for many *species** of plants and animals.

Regional Supplement24 *Riparian management zone** (i.e., SMZ) width is at least 50 feet on either side of the ordinary high-water mark, extending wider on steep or erosive slopes. Where slopes of *riparian management zones** exceed 35%, the *riparian management zone** boundary is at least 100 feet. If wetlands touch the *riparian management zone**, then the *riparian management zone** boundary is extended to include the *wetland**. *Riparian management zone** width is extended wherever necessary to protect riparian functions.

Regional Supplement25 Management in the *riparian management zones** takes a conservative approach that puts aquatic and riparian concerns above timber consideration. Roads are prohibited in *riparian management zones**, except for permanent roads necessary to cross the stream at a perpendicular or other angle that causes the least ecological disturbance. Operation of wheeled or tracked equipment is prohibited in the *riparian management zone**, except on permanent roads. Temporary roads or designated skid trails across the *riparian management zone** may be permitted in rare instances after preparation of a pre-operation plan that *protects** riparian values. Logging operations retain at least half of the merchantable trees, representative of the pre-harvest stand, with heavier *retention** of bank-edge and leaning trees, shrubs, and sub-merchantable trees. Appropriate techniques are used to maintain existing roads and ditches to prevent adverse impacts to *water quality**. Storage, handling, or use of hazardous materials is prohibited in *riparian management zones**.

Specific to the Pacific Coast Region

Guidance: This section uses the following definitions.

- **Category A stream:** A stream that supports or can support populations of native fish and/or provides a domestic water supply.
- **Category B stream:** *Perennial streams** that do not support native fish and are not used as a domestic water supply.
- **Category C stream:** An *intermittent stream** that nevertheless has sufficient water to host populations of non-fish aquatic species.
- **Category D stream:** A stream that flows only after rainstorms or melting snow and does not support populations of aquatic species.

Regional Supplement26 For Category A streams, and for lakes and wetlands larger than 1 acre, an inner *riparian management zone** (i.e., buffer zone) is maintained. The

inner *riparian management zone** is at least 50 feet wide (slope distance) from the active high-water mark (on both sides) of the stream channel and increases depending on *forest** type, slope stability, steepness, and terrain. Management activities in the inner *riparian management zone** :

- a. maintain or *restore** the native vegetation;
- b. are limited to single-tree selection *silviculture**;
- c. retain and allow for recruitment of large live and dead trees for shade and stream structure;
- d. retain canopy cover and shading sufficient to moderate fluctuations in water temperature, to provide habitat for the full complement of aquatic and terrestrial *species** native to the site, and maintain or *restore** riparian functions;
- e. exclude use of heavy equipment, except to cross streams at designated places, or where the use of such equipment is the lowest impact alternative;
- f. avoid disturbance of mineral *soil** (where disturbance is unavoidable, mulch and seed are applied before the rainy season);
- g. avoid the spread of pathogens and noxious weeds; and
- h. avoid road construction and reconstruction.

Regional Supplement27 For Category A streams, and for lakes and wetlands larger than 1 acre, an outer *riparian management zone** is maintained. This buffer extends from the outer edge of the inner *riparian management zone** to a distance of at least 150 feet from the edge of the active high-water mark (slope distance, on both sides) of the stream channel. In this outer *riparian management zone** , harvest occurs only where:

- a. single-tree or group selection *silviculture** is used;
- b. post-harvest canopy cover maintains shading sufficient to moderate fluctuations in water temperature, provide *habitat** for the full complement of aquatic and terrestrial *species** native to the site, and maintain or restore riparian functions;
- c. new road construction is avoided, and reconstruction enhances riparian functions and reduces sedimentation; and
- d. disturbance of mineral *soil** is avoided (where disturbance is unavoidable, mulch and seed are applied before the rainy season).

Regional Supplement28 For Category B streams, a 25-foot (slope distance) inner *riparian management zone** is created and managed according to provisions for inner *riparian management zones** for Category A. A 75-foot (slope distance) outer *riparian management zone** (for a total buffer of 100 feet) is created and managed according to provisions for outer *riparian management zone** for Category A.

Regional Supplement29 For Category C streams, and for lakes and wetlands smaller than 1 acre, a *riparian management zone** 75 feet wide (on both sides of the stream) is established that constrains *management activities** to those that are allowed in outer *riparian management zones** of Category A streams.

Regional Supplement30 For Category D streams, management:

- a. maintains root strength and stream bank and channel stability;
- b. recruits coarse wood to the stream system; and
- c. minimizes management-related sediment transport to the stream system.

Indicator 6.7.6 In limited circumstances, or if minor in extent, variations from the stated minimum *riparian management zone** widths and layout for specific stream segments, *wetlands**, and other *water bodies** are permitted, provided *The Organization** demonstrates that the alternative configuration maintains the overall extent of the *buffers** and provides equivalent or greater environmental *protection** than Indicator 6.7.5 (without the regional supplementary requirements) for those stream segments, *wetlands**, and other *water bodies**, based on site-specific conditions and *Best Available Information**. *The Organization** develops a written set of supporting information, including a description of the riparian *habitats** and *species** addressed in the alternative configuration.

Indicator 6.7.7 *Restoration** activities are implemented when *protection** measures fail to *protect** *water bodies**, *riparian areas**, or *water quality** and quantity from impacts of activities on the *Management Unit**. Where past *protection** measures implemented by the present or previous owner are no longer effective, *The Organization** implements measures to mitigate negative impacts to, and, if possible, *restore** the *water body**, *riparian area**, or *water quality** and quantity.

Where activities on the *Management Unit** that are not within its direct control (e.g., road maintenance, right-of-way construction) have the potential to significantly affect *water bodies** and/or *riparian areas**, *The Organization** works within its sphere of influence to attempt to implement *protective** measures and remedy instances in which past measures are no longer effective.

Intent: The goal of this *Indicator** is to address damaging activities (not just *management activities**) initiated by *The Organization** or by others. While there may be some limitations as to what *The Organization** may feasibly be able to do to address others' activities, *The Organization** does have a responsibility to try and control activities of individuals within the *Management Unit**.

In this case, "restore" means to repair the damage done to environmental values that resulted from legal or illegal activities. However, *The Organization** is not necessarily obliged to fully *restore** those environmental values that have been affected by factors beyond the control of *The Organization**, for example by natural disasters, by climate change, or by the legally authorized activities of third parties, such as public infrastructure, mining, hunting, or settlement. FSC-POL-20-003, The Excision of Areas from the Scope of Certification, describes the processes by which such areas may be excised from the area certified, when appropriate.

Indicator 6.7.8 Authorized recreation use on the *Management Unit** is managed to avoid negative impacts to *soils**, water, plants, wildlife, and wildlife *habitats**.

Intent: This <i>Indicator</i> * focuses on recreation use and not recreation trails, which are covered in

Indicators 6.7.4 and 10.10.1. Unauthorized use of vehicles on the *Management Unit** is considered trespassing, which is an illegal activity and should be addressed accordingly.

Guidance: This includes on-trail and off-trail recreation use. Recreation use includes but is not limited to: motorized and non-motorized vehicles, horses, hiking, and mountain biking.

Indicator 6.7.9 Grazing by domesticated animals is controlled to protect in-stream *habitats** and *water quality**, the *species** composition and viability of the riparian vegetation, and the banks of the stream channel from erosion.

Guidance: The location and *intensity** of grazing (livestock numbers) and/or season of use (grazing duration) should be managed to avoid adverse impacts. Unauthorized grazing should be treated as any other illegal activity on the *Management Unit** and addressed accordingly.

C6.8 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 that region, and for enhancing environmental and economic *resilience**. (C10.2 and 10.3 P&C V4)

Indicator 6.8.1 The Organization* maintains, enhances, and/or restores* a mosaic of *species** and underrepresented *successional** stages that would naturally occur on the types of sites 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 managed to enhance and/or *restore** old *forest**, late, and early *successional** characteristics.

FF Indicator 6.8.1 (New) Not applicable for *family forest** *Management Units**, due to the limited capacity of *management activities** to affect mosaics, resilience and other values at a landscape-level.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest** *Management Units**.

Indicator 6.8.2 When present, management maintains the area, structure, composition, and processes of all *Type 1* and *Type 2 old growth**. *Type 1* and *Type 2 old growth** are also *protected** and buffered as necessary with *conservation zones**, unless an alternative plan is developed that provides greater overall *protection** of *old growth** values.

*Type 1 old growth** is protected from harvesting and road construction. *Type 1 old growth** is also protected from other timber *management activities**, except as needed to maintain the

ecological values associated with the *stand**, including *old growth** attributes (e.g., remove *non-native species**, conduct controlled burning, and thinning from below in dry *forest** types when and where *restoration** is appropriate).

*Type 2 old growth** is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in *Type 2 old growth** must maintain *old growth** structures, functions, and components, including individual trees that function as *refugia**.

On *public lands**, *Type 1* and *Type 2 old growth** are protected from harvesting, as well as from other timber *management activities**, except if needed to maintain the values associated with the *stand** (e.g., remove *non-native species**, conduct controlled burning, and thinning from below in *forest** types when and where *restoration** is appropriate).

On *tribal** lands, timber harvests may be permitted in *Type 1* and *Type 2 old growth** in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where:

- a. *old growth** *forests** comprise a significant portion of the *tribal** ownership;
- b. a history of *forest** stewardship by the *tribe** exists;
- c. *High Conservation Values** are maintained or enhanced;
- d. *old growth** structures are maintained;
- e. *conservation zones** representative of *old growth** *stands** are established;
- f. *landscape*-level considerations are addressed; and
- g. *rare, threatened, and endangered species** are *protected**.

Applicability: On all ownerships, when *management activities** (including timber harvest) create and maintain conditions that emulate *Type 2 old growth** *stands**, but don't meet the definition of *Type 2 old growth** due to those ongoing *management activities**, the management system that created those conditions may be used to maintain them.

Indicator 6.8.3 Where there are regionally specific maximum opening sizes (both average and absolute) per Indicator 6.6.5, and rotation lengths meet or exceed *culmination of mean annual increment** for *natural forest** stands of similar *forest** type and site class, maximum opening sizes (both average and absolute) may be increased by 20% above those specified. For each 10-year increase in rotation length, opening sizes may be increased by an additional 20%.

Intent: This *Indicator** encourages *stands** with longer rotation lengths by providing greater flexibility in opening sizes when the regional supplementary requirements of Indicator 6.6.5 provide limits on opening sizes.

Guidance: If the *Management Unit** does not have growth and inventory data for similar *natural stands** on the *Management Unit** needed to establish *culmination of mean annual increment**, growth and inventory data from similar *forest** types and site classes of *natural*

forests* off the *Management Unit** are expected to be used to establish *culmination of mean annual increment**. Historical data from *public lands** such as National Forests may be the best source of information for calculating *culmination of mean annual increment**.

C6.9 *The Organization shall not convert natural forest to *plantations**, nor natural forests or *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 area of the *Management Unit**;
 - 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**.
- (C6.10 P&C V4 and Motion 2014#7)

Applicability: Criterion 6.9 references *conversion** from “natural forest” to *plantation** or to non-forest uses, but uses the term “natural forest” as it is defined globally. The US definition is different and only represents a part of what is defined as “natural forest” globally. “*Natural forest**” and “*semi natural forest**,” as defined in this Standard, when combined together represent the concept of “natural forest” as it is used in this *Criterion**.

Intent: All three circumstances must be met in order for *conversion** to be allowed.

Guidance on “*conversion**”: In general, improvements to land (including provision of utilities, improved roads, and surveyed blocks) that are likely to result in development are considered precursors to *conversion**. Advanced cases of improvements are considered *conversion**. For example, surveying and demarcating the land in and of itself does not constitute *conversion**, but installation of roads to each parcel is considered *conversion**. Although it may be difficult to distinguish some *management activities** that are geared toward development from acceptable *silvicultural** prescriptions (e.g., “real estate cuts” versus “shelterwood cuts”), it is the responsibility of the *The Organization** to disclose the future goals for that management to the *Certification Body**.

Note that the following are not considered to be *conversion** per Indicator 6.9.1: Restoration plantations established on degraded, *semi-natural forests**; and *plantations** established on former *plantations**, on agricultural lands, and on non-forested lands that were historically naturally forested, but have been used for non-forest purposes since before 1994 (see additional conditions in Criterion 6.10).

Definition of “non-forest land”: Non-forest land consists of land that is managed for reasons other than the production of *forest** products, values, or amenities. Non-forest land includes land that does not classify as a *forest* ecosystem** (including old agricultural fields,

grasslands). “Non-forest land uses” include land that is forested, but current zoning and/or conditional use permits present intentions for future conditions of the land that will result in the loss of, or degradation of, production of *forest** products, values, or amenities (e.g., commercial or industrial development, residential use).

Indicator 6.9.1 There is no *conversion** of *natural forest** or *semi-natural forest** to *plantations**, nor *conversion** of *natural forest** or *semi-natural forests** to non-forest land use, nor *conversion** of *plantations** to non-forest land use when on sites directly *converted** from *natural forest** or *semi-natural forest**, except when the *conversion**:

- a. affects a *very limited portion** of the *Management Unit**;
- 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**.

Applicability: Lands that are *converted** for *forest** management purposes (e.g., roads, landings, management buildings) are not included in calculations of the *very limited portion** of the *Management Unit**.

*Plantations** may be established on *forest** sites that lack the vast majority of the native *forest** *ecosystem** components, as these lands do not fit the definitions of *natural forest** or *semi-natural forest**. Guidance for classifying forests as *natural forest** or *semi-natural forest** vs. *plantation** is provided in Annex I.

Intent of “clear, substantial, additional, secure, *long-term* conservation** benefits across the *forest* Management Unit**”: Conditions that enable these *conservation** benefits are limited by the following:

- *The Organization** provides documentation that any *conversion** to non-forest uses will result in additional *conservation** and/or *restoration** of *natural forest**, particularly *High Conservation Value Areas** and/or *rare, threatened, and endangered species* habitats**, at levels above and beyond those otherwise required by this Standard, and carries out that increased *conservation** and *restoration**.
- Negative environmental impacts of *conversion** to non-forest uses may be offset through compensatory *management activities**. The *conservation** benefits used to offset *conversion** to non-forest use must lead to equal or greater *conservation** values than those lost by the *conversion**. The compensatory activities may include establishment of conservation easements, contributions to local land trusts, transfer of lands to land trusts or public ownership, etc.
- In general, maintenance of an FSC certificate for the remainder of *forest** lands does not constitute sufficient *conservation** benefit.

Indicator 6.9.2 Areas *converted** to non-forest use for facilities associated with severed rights that were transferred or retained by prior owners, or with other *conversion** outside the control of

*The Organization**, are identified on maps. *The Organization** consults with the *Certification Body** to determine if removal of these areas from the scope of the certificate is warranted. To the extent allowed by these transferred rights, *The Organization** exercises control over the location of surface disturbances in a manner that minimizes adverse environmental and social impacts.

If *The Organization** at one point held these rights and then sold them, subsequent *conversion** of *forest** to non-forest use would be subject to Indicators 6.9.1. and 6.9.2.

Applicability: This *Indicator** applies to situations where *The Organization** holds the surface rights to lands where other individuals or organizations also have the right to implement activities, such as when surface rights and mineral rights have been severed and the holder of the mineral rights wishes to access those minerals, or when *The Organization** owns the land but another entity has *use rights** for the land (e.g., utility and access rights-of-way). In these situations, while the other *rights holder** has the right to implement certain activities, *The Organization** may still be able to set some expectations for how the activities will be implemented and/or for *restoration** after they are completed.

Guidance: If the *conversion** will result in significant loss of *forest** resources, and where financially feasible, then *The Organization** should make a *good faith** effort to buy the rights before *conversion** occurs.

C6.10 *Management Units containing *plantations** that were established on areas converted from *natural forest** after November 1994 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**. (C10.9 P&C V4)**

Applicability: This *Criterion** only applies to *plantations** established in areas converted from *natural forests** or *semi-natural forests**. *Plantations** that are established in other *ecosystems** (steppe, grassland, etc.) are not covered by this *Criterion**. See additional conditions regarding *plantation** establishment on rare or threatened non-forest *habitats** in Criterion 6.9.

Intent: The November 1994 cutoff date refers to the date of *conversion**, not the date of *plantation** establishment. The subsequent requirements do not address *plantation** areas (or *harvested units**) that have been harvested and replanted as *plantations** since 1994 if the date of *conversion** was prior to the cutoff date.

Indicator 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**.

Indicator 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**.

Indicator 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. A *very limited portion** of the *Management Unit** may remain *plantation** (consistent with (b) of Criterion 6.10).

Applicability: This *Indicator** is only applicable to those conditions where the current owner or manager was not responsible for the *conversion** as stipulated in Indicator 6.10.2.

Intent: This *Indicator** limits certification of *plantations** established in areas *converted** from *natural forest** or *semi-natural forest** after November 1994.

Guidance: Younger *plantations** with significant capital invested may need to be managed with a moderate level of intensity to recoup investment before full or significant *restoration** measures are fully implemented. In these cases, *restoration** may be phased in as *stands** reach merchantable ages. Contractual supply obligations and binding supply agreements are generally not acceptable as rationale for delaying *restoration**.

Examples of activities that are carried out in restoration plantations include:

- modification of the *management plan** from commercial to *restoration**;
- enrichment plantings of *native species**;
- management of *soils** and coarse *woody debris** to restore or enhance *soil** fertility;
- *restoration** and/or enhancement of native wildlife *habitats**;
- *restoration** and/or enhancement of *structural diversity** by recruiting mid-story and/or understory components;

- control of unwanted vegetation, limited to levels that allow *restoration** of *native species**;
- *restoration** of the fire regime common to natural *stands**, when feasible.

PRINCIPLE 7: MANAGEMENT PLANNING

The *Organization shall have a *management plan** consistent with its policies and *objectives** and proportionate to *scale**, *intensity**, and *risks** of its *management activities**. The *management plan** shall be implemented and kept up to date based on monitoring information in order to promote *adaptive management**. The associated planning and procedural documentation shall be sufficient to guide staff, inform *affected stakeholders** and *interested stakeholders**, and to justify management decisions. (P7 P&CV4)**

NOTE: Family forest 'not applicable' designations are proposed for Indicators 7.1.1, 7.2.2-7.2.19, 7.3.1, 7.5.1, 7.6.1, and 7.6.3 (private lands only). Alternate family forest indicators are proposed for Indicators 7.1.2, 7.2.1, and 7.6.2. Additionally, family forest-specific guidance is proposed for Criterion 7.2.

CONSULTATION QUESTION: FSC previously identified stakeholder interest in the management plan as it relates to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have the management plan and conformance with Principle 7 been addressed appropriately in this draft? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

Intent: This *Principle** is intended to ensure that management of the *Management Unit** is described in a comprehensive *management plan**. The plan should be developed with expertise and public input appropriate to the *scale** of the operation. The *management plan**, and the process of its development, should embody and consider all of the *Principles** and *Criteria** in this Standard.

The *management plan** may consist of a variety of documents or an umbrella document that describes how a collection of management documents relate to an integrated strategy for managing the *forest**. This may include a combination of ownership-level plans, unit plans, site-level plans (e.g., harvest plans), GIS, published guidelines (e.g., regional *silviculture** or *best management practice** guides), landowner policies, and other information.

Guidance on *scale** and *intensity** of operations: All *management plans**, regardless of the *scale** and *intensity** of operations must address the Indicators of Criterion 7.1 and Criterion 7.2 unless otherwise noted below.

C7.1 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. (C7.1a P&C V4)

Intent: Criterion 7.1 ensures that a written *management plan**, as described in the *Principle**-level intent and guidance above, exists for the *Management Unit ** within the scope of the certificate. The *management objectives** detailed in the plan are specific, achievable, measurable, and adaptive. They are also sufficient to meet the requirements of this Standard.

Whenever the term “*management plan**” is used, it refers to any combination of documents and systems that meet the intent of the *Indicator**.

Indicator 7.1.1 *Visions and values** and associated policies contribute to meeting the requirements of this Standard, and are summarized in the *management plan**.

FF Indicator 7.1.1 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 7.1 for *family forest* Management Units** is addressed through FF Indicator 7.1.2.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this Indicator.

Indicator 7.1.2 The *management plan** describes: a) current conditions of the timber and non-timber *forest** resources being managed; b) *historic conditions**; c) *desired future conditions**; and d) applicable *management objectives** to move the *Management Unit** toward *desired future conditions**, including those to achieve compliance with the Standard.

FF Indicator 7.1.2 (Existing US FF Indicator 7.1.a) A written *management plan** exists for the *Management Unit** and includes *management objectives** to achieve conformance with the standard.

Guidance: “Current conditions” are based on *forest** inventories or other information sources, as applicable. The level of detail in the plan may be a summary of the inventory data or more general in nature as indicated by the resource, and is commensurate with the resource and *intensity** of management (e.g., general descriptions of *water body** or *wetland** types and extent may suffice).

“*Desired future conditions**” are the characteristics that describe the *long-term** (e.g., 30–50 years) vision of the *Management Unit**, such as the amount and age or development class

distribution of *forest** types, *species** composition, products, *habitats** and values, and other resources. *Desired future conditions** must be consistent with the requirements of this Standard.

The purpose of establishing *historic conditions** is to facilitate creating a baseline for assessing environmental impacts of operations, to facilitate establishing *desired future conditions**, and to determine when *restoration** may be needed. When *historic conditions** are not available, best estimates from available sources may be used. *Historic conditions** should be used as guidelines for estimating ecological components of naturally occurring conditions.

“*Management objectives**” are typically time specific, measurable results that correspond to the goals. It is acceptable for *The Organization** to include objectives in their *management plan** that are not specifically related to achieving conformance with the Standard, as long as those objectives do not conflict with the requirements of the Standard. Additionally, *The Organization** is not limited to implementing only those *management objectives** and activities that are described in the *management plan** (as long as additional objectives and activities are not in conflict with requirements of the Standard). However, *management plans** must be updated (even if the time period identified in Indicator 7.4.1 has not yet expired) when there is new information from monitoring, and incorporation of these other activities should be achieved at the same time.

*Forest** resources include timber, fish and wildlife, and *non-timber forest products**.

C7.2 *The Organization shall have and implement a *management plan** for the *Management Unit** which is fully consistent with the policies and *management 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. (C7.1 P&C V4)**

FF Guidance (*From existing US Criterion 7.1*): The *management plan** needs only to be as complex as the forest and activities to which it applies.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with *Indicators** in this *Criterion** that are designated as being, ‘Not applicable’ for *family forest** *Management Units**.

Indicator 7.2.1 The *management plan** describes activities to achieve the *management objectives** defined in Indicator 7.1.2.

FF Indicator 7.2.1 (Existing US FF Indicator 7.1.a) The *management plan** includes the following components:

- a. Quantitative and qualitative description of the *forest** resources to be managed, including at minimum *stand**-level descriptions of the land cover, including *species** and size/age class and referencing inventory information.
- b. Description of silvicultural and/or other management systems, prescriptions, rationale, and typical *harvest** systems (if applicable) that will be used.
- c. Description of *harvest** limits (consistent with Criterion 5.2) and *species** selection.
- d. Description of environmental assessment and safeguards based on the assessment, including approaches to: (1) pest and weed management, (2) fire management, and (3) protection of *riparian management zones**; (4) protection of representative samples of existing *ecosystems** (see Criterion 6.5), and management of *High Conservation Values** (see Principle 9).
- e. Description of location and protection of *rare, threatened, and endangered species** and plant community types.
- f. Description of procedures to monitor the *forest**, including *forest** growth and dynamics, and other components as outlined in Principle 8.
- g. Maps representing property boundaries, use rights, land cover types, topography, *soils**, hydrologic features, infrastructure, age classes/seral stages, adjoining land use, and special features in a manner that clearly relates to the *forest** description and management prescriptions.
- h. Description of the extent and location of areas selected within a *plantation** for *restoration**, as well as the rationale for their selection, if applicable.
- i. The *management plan** considers the potential impact of climate change related risks and vulnerabilities on achievement of *management objectives** and desired future conditions, and describes what *climate change adaptation** strategies, if any, are being implemented to address identified impacts.

Indicator 7.2.2 The *management plan** identifies the ownership and *legal** status of the *Management Unit** and its resources, including *rights** held by the owner(s) and established *rights** held by others (per Criteria 1.2, 3.1, and 4.1).

FF Indicator 7.2.2 (New) Not applicable for *family forest** *Management Units**. Conformance for *family forest** *Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1.

Guidance: *Legal** status information may be summarized in the *management plan** as appropriate to the *scale** and complexity of the ownership and the relevance of applicable *legal** constraints on *management activities**.

Ownership status includes ownership type (e.g., fee, easement, lease).

*Rights** held by others may include: *use rights**; *Indigenous Peoples** *rights**; conservation easements, deed restrictions, and other easements or *rights** held by others; and leasing

arrangements.

Indicator 7.2.3 The *management plan** describes the history of land use and past management, current *forest** types and associated size class and/or *successional** stages, and *natural disturbance regimes** that affect the *Management Unit** (per Indicator 6.1.1).

FF Indicator 7.2.3 (New) Not applicable for *family forest** *Management Units**. Conformance for *family forest** *Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1.

Guidance: This *Indicator** refers to information already compiled in Indicator 6.1.1.

*Natural disturbance regimes** include wind, fire, insects, and pathogens. Typical disturbance events in terms of opening size, intensity of disturbance, range, and frequency of disturbance are described to the extent they are known.

Indicator 7.2.4 The *management plan** considers the potential impact of climate change–related risks and vulnerabilities on achievement of *management objectives** and *desired future conditions**, and describes what *climate change adaptation strategies**, if any, are being implemented to address identified impacts.

FF Indicator 7.2.4 (New) Not applicable for *family forest** *Management Units**. Conformance for *family forest** *Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1.

Guidance: Considerations should address the *Best Available Information** (per the Climate Change Toolkit in Annex L), acknowledge that response plans for future disturbances may be beyond historic parameters, and identify if climate change–related changes in conditions are likely within the timeframe of a given management decision (e.g., rotation length).

*Climate change adaptation strategies** associated with *ecosystems** and *biodiversity** are generally categorized into three types: resistance, resilience, and facilitated transformation. Resistance strategies maintain the current system for as long as possible even as changes occur. Resilience strategies help a system cope with a changing climate, particularly through maintenance of critical ecological processes. Facilitated transformation strategies facilitate transitions within a system to better align the system with anticipated future climate conditions. The types of strategies implemented by *The Organization**, if any, will likely be influenced by the information available to *The Organization** and its *management objectives**.

Indicator 7.2.5 The *management plan** includes a description of the *landscape** within which the *Management Unit** is located and describes how *landscape**-scale *habitat** elements described in Criterion 6.8 will be addressed.

FF Indicator 7.2.5 (Existing US FF Indicator 7.1.d) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Guidance: The *landscape** description and *landscape* management objectives** consider elements such as:

- land uses and trends in the surrounding *landscape**;
- a general description of *forest*-ownership* types and parcel sizes in the *landscape**;
- *forest** types, type of management, and general condition of *forests** within the *landscape**;
- significant *water bodies** and other features that cross the *Management Unit** boundary;
- diversity of *habitats** across the ownership, as indicated by *forest* type; and
- *species** or *species** groups that may be significantly affected by *habitat** loss or fragmentation on the *Management Unit**.

Indicator 7.2.6 The *management plan** includes a description of the following resources and outlines activities to *conserve**:

- a. *rare, threatened, and endangered species** and natural communities (per Criterion 6.4);
- b. plant *species** and community diversity and wildlife *habitats** (per Criterion 6.6);
- c. water resources (per Criterion 6.7);
- d. *soil** resources (per Criterion 6.7);
- e. *Representative Sample Areas** (per Criterion 6.5); and
- f. other special management areas.

FF Indicator 7.2.6 (Existing US FF Indicator 7.1.e) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Guidance: The *management plan** should have sufficient detail to describe the current resources and how *The Organization** complies with the referenced Criteria .

The *management plan** may reference supporting guidelines and policies that describe specific management practices. Site-specific information and practices may be included in operational plans.

Indicator 7.2.7 The *management plan** describes the *High Conservation Value** assessment results and the *management strategies** necessary to ensure the maintenance and/or enhancement of all *High Conservation Values** (per Principle 9).

FF Indicator 7.2.7 (New) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1.

Indicator 7.2.8 If *invasive species** are present, the *management plan** describes *invasive species** conditions and applicable *management objectives**, and summarizes the *invasive species** prevention and control strategies (per Indicator 6.6.4).

FF Indicator 7.2.8 (*Existing US FF Indicator 7.1.f*) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Guidance: The plan may reference supporting guidelines and policies that describe specific management practices.

Indicator 7.2.9 The *management plan** describes how current or anticipated impacts of insects and diseases on *forest** conditions and *management objectives** will be addressed (per Criteria 10.7 and 10.8).

FF Indicator 7.2.9 (*Existing US FF Indicator 7.1.g*) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Intent: Disease may include biotic factors (e.g., fungi and other pathogens) and abiotic factors (e.g., acidic deposition).

Guidance: Potential impacts on stocking or harvest are described.

The *management plan** may reference supporting guidelines and policies that describe specific *management activities** .

This description is commensurate with the likelihood of outbreaks or infestations.

Indicator 7.2.10 If *pesticides** are used, the plan describes how the management system conforms with Criterion 10.7.

FF Indicator 7.2.10 (*Existing US FF Indicator 7.1.h*) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Indicator 7.2.11 If *biological control agents** are used, the *management plan** describes how the management system conforms with Criterion 10.8 .

FF Indicator 7.2.11 (Existing US FF Indicator 7.1.i) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Indicator 7.2.12 The *management plan** incorporates the results of the evaluation of social impacts, including:

- a. traditional cultural resources and *rights** (per Criteria 3.1 and 4.1);
- b. potential conflicts with *rights** (per Criteria 1.2, 3.2, and 4.2);
- c. management of ceremonial, archeological, and historic sites (per Criteria 3.5 and 4.5);
- d. management of *aesthetic** values (per Indicator 4.5.1);
- e. public access to and use of the *forest** and other recreation issues; and
- f. local and regional socioeconomic conditions and economic opportunities, including creation and/or maintenance of quality jobs (per Criterion 2.4 and Indicator 4.3.1), *local** purchasing opportunities (per Indicator 4.3.1), and participation in *local** development opportunities (per Indicators 4.4.1 and 5.4.2).

FF Indicator 7.2.12 (Existing US FF Indicator 7.1.j) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Indicator 7.2.13 The *management plan** describes the general purpose, condition, and maintenance needs of the *transportation system** (see Indicator 6.7.4).

FF Indicator 7.2.13 (Existing US FF Indicator 7.1.k) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Intent: The *transportation system** includes roads, skid trails, landings, and stream crossings. Management needs include maintenance, upgrades, closures, etc.

Indicator 7.2.14 The *management plan** describes the *silvicultural** and other management systems used and how they will sustain, over the *long term**, *forest* ecosystems** . For *plantations**, this includes describing the relationship between the *plantations** and *natural forest* conservation** and *restoration** objectives within the *management unit**.

FF Indicator 7.2.14 (Existing US FF Indicator 7.1.l) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Guidance: Per Indicator 5.2.3, *The Organization** must use *silvicultural** management systems that improve or maintain health and quality across the *management unit**; per Indicator 10.1.2, regeneration must be to pre-harvest or more *natural conditions**; and per Indicator 10.5.1,

*silvicultural** practices must be ecologically appropriate for the site and *management objectives**. The requirements of these *Indicators** help to ensure that management systems sustain *forest** *ecosystems** over the *long term**.

Harvesting practices that do not improve or maintain health and quality of the residual *stand** and the regeneration of potential future *stands**, and that are driven by short-term economic gain, can be collectively referred to as “exploitative” harvests. These kinds of practices will not sustain *forest** *ecosystems** over the *long term** and do not meet the requirements of Indicator 5.2.3, Indicator 10.1.2, Indicator 10.5.1, nor Indicator 7.2.14. “High-grading” is one broad type of exploitative harvesting where the highest-value trees are removed without regard for the residual *stand** or regeneration objectives. Other exploitative practices are commonly referred to as a “commercial clearcut” and “selective harvest,” but such terms may also be mistakenly applied to acceptable *silvicultural** practices. The implementation of diameter-limit harvests also can have results that do not achieve the outcomes required by this Standard. However, these terms are difficult to quantify and vary in their usage across the US. The terms are less important than the outcomes achieved.

“Other management systems” refers to management systems where the primary objective is not timber production, such as *restoration** areas in *plantations**.

Indicator 7.2.15 The *management plan** describes how harvest rate calculations were developed to meet the requirements of Criterion 5.2.

FF Indicator 7.2.15 (Existing US FF Indicator 7.1.m) Not applicable for *family forest** *Management Units**. Conformance for *family forest** *Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Guidance: The *management plan** describes the methods used to calculate the harvest level, and describes how that level is consistent with the composition, structures, and functions of the *Management Unit** in accordance with Criterion 6.6 and other applicable *Criteria**.

Indicator 7.2.16 The *management plan** includes a description of monitoring procedures necessary to address the requirements of Criterion 8.2.

FF Indicator 7.2.16 (Existing US FF Indicator 7.1.n) Not applicable for *family forest** *Management Units**. Conformance for *family forest** *Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Indicator 7.2.17 The *management plan** includes maps describing the resource base, the characteristics of general management zones, special management areas, *restoration** areas, *conservation zones**, and *protected areas** at a level of detail to achieve *management objectives** and *protect** sensitive sites.

FF Indicator 7.2.17 (Existing US FF Indicator 7.1.o) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Intent: “Sensitive sites” is used in reference to sites that are more sensitive and vulnerable to impact from the types of *forest** management practices that will occur on the *Management Unit**.

Guidance: Depending on the map scale (e.g., *forest**-level vs. *stand**-level) and purpose and *intensity** of management, maps should include:

- property boundaries and ownership;
- roads and trails;
- planned *management activities**, including *forest** product harvest areas;
- *forest** types by *age class**;
- topography, *soils**, water courses, and *water bodies**;
- wetlands and *riparian areas** ;
- archeological and cultural sites and customary use areas;
- locations of unique and sensitive natural communities, *habitats**, and features;
- *rare, threatened, and endangered species**;
- *Representative Sample Areas**; and
- designated *protected areas** and *High Conservation Values** .

The location of sensitive sites (e.g., rare plants or archaeological sites) need not be made publicly available to *protect** the resource.

Indicator 7.2.18 The *management plan** describes the stakeholder consultation process.

FF Indicator 7.2.18 (Existing US FF Indicator 7.1.r) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1 .

Indicator 7.2.19 The *management plan** includes estimates of benefits and costs related to social, economic, and environmental impacts of *management activities** (i.e., *externalities** per Indicator 5.3.1).

FF Indicator 7.2.19 (New) Not applicable for *family forest* Management Units**. Conformance for *family forest* Management Units** is addressed through FF Indicators 7.1.2 and 7.2.1.

Indicator 7.2.20 Activities undertaken on the *Management Unit** are consistent with the *management plan**.

C7.3 The *management plan shall include *verifiable targets** by which progress towards each of the prescribed *management objectives** can be assessed. (new)**

Indicator 7.3.1 *Verifiable targets** are established for each *management objective** and are used as the basis for monitoring, as described in Principle 8.

FF Indicator 7.3.1 (New) Not applicable for *family forest** *Management Units** due to the limited *scale** and frequency of *management activities** that occur on *family forest** *Management Units**.

Guidance: Targets are measurable (where possible), address short-term and *long-term** time frames (as applicable), and each is supported by a rationale, including underlying assumptions.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with *Indicators** that have been designated as 'not applicable' for *family forest** *Management Units**.

C7.4 The *Organization shall update and revise periodically the management planning and procedural documentation to incorporate the results of monitoring and evaluation, stakeholder *engagement**, or new scientific and technical information, as well as to respond to changing environmental, social, and economic circumstances. (C7.2 P&C V4)**

Indicator 7.4.1 The *management plan** is kept up to date. It is reviewed on an ongoing basis and is updated to incorporate results of monitoring or new scientific and technical information or *stakeholder** *engagement**, as well as to respond to changing environmental, social, and economic circumstances. The *management plan** is reviewed and revised at least every 10 years (unless a longer planning period is a statutory requirement, but not to exceed 15 years).

Intent: The rigor of the review and update is contingent upon the *scale** and *intensity** of management, and updates should focus on those aspects of the *management plan** where changes are necessary.

It is not the intent that a hard-copy *management plan** is re-written every time there is a harvest or a natural disturbance (wildfire or pest infestation) on some part of the *Management Unit**. When the impact is large enough to require changes in management strategy, it may require revision of specific parts of the *management plan**.

Reasons for modifying the *management plan** may include but are not limited to: 1) in response to, and to incorporate, the results of monitoring as outlined in Principle 8; 2) whenever changes are proposed to the plan's primary objectives or management system; 3)

whenever a significant environmental impact, threat or natural disturbance occurs; 4) whenever significant changes in uses of the *Management Unit** occur; and 5) when there are significant changes in socioeconomic circumstances.

The management system may incorporate ongoing and dynamic processes or data such as GIS.

C7.5 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. (C7.4 P&C V4)

Intent: The owner or manager of a private *forest** may withhold proprietary information (e.g., timber volumes by size and *age class**, marketing strategies, and other financial information) but is required to share information from the plan that informs *stakeholders** of *management activities** and implementation of the *Principles**, *Criteria**, and *Indicators** found in this Standard.

Indicator 7.5.1 While respecting *confidential information**, the *management plan** or a *management plan** summary that outlines the elements of the plan described in Criterion 7.1 and Criterion 7.2 is available to the public at no charge.

FF Indicator 7.5.1 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 7.5 for *family forest* Management Units** is addressed through FF Indicator 7.5.2.

Guidance: See Criterion 8.4 for more information on respecting landowner confidentiality and what is acceptable to provide in a public summary. Limited elements of the plan may be excluded to protect the security of environmentally sensitive and/or proprietary information.

When possible, *The Organization** should post a summary of the *management plan** on their website, but at a minimum, this summary is made available upon request.

Information that is considered confidential can be presented in such a way as to protect its confidentiality, including data on production, inventory, growth, costs of operation, and other information deemed to provide a competitive advantage or proprietary in nature. This information can be represented in the public summary as trends, percentages, or in terms of its relation to the goals and limits outlined in the *management plan**.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this Indicator.

Indicator 7.5.2 While respecting *confidential information**, relevant components of the *management plan** are provided upon request to *affected stakeholders**, at cost for reproduction and handling.

Indicator 7.5.3 For *public lands**, *The Organization** makes draft and final *management plans**, revisions, and supporting documentation easily accessible for public review and comment prior to their implementation. *The Organization** addresses public comments and modifies plans to ensure compliance with this Standard.

Applicability: This *Indicator** is applicable only to *public lands** .

C7.6 *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. (C4.4 P&C V4)

Intent: Engagement with *stakeholders** in monitoring processes is addressed per Indicator 8.2.2 and is therefore not addressed in the *Indicators** of this *Criterion**.

Guidance: *The Organization** is expected to “consider in good faith” management planning input provided by *stakeholders** and *rights holders**. This means that *The Organization** must honestly consider whether the input can be addressed in planning, whether it is aligned with the Standard and can be achieved without detracting from *The Organization’s** ability to conform with the rest of the Standard (including Indicator 5.5.1’s requirement for ensuring *long-term* economic viability**), whether it conflicts with input received from other stakeholders and/or *experts**, and whether it is feasible given the ecological context of the site and/or *management unit**. Input regarding *legal** rights must also be considered from the perspective of ensuring that the *rights** are not violated.

*The Organization** is encouraged to document significant *stakeholder** input and how it was used or why it was not used, and then respond directly to the *stakeholder** with this information.

Indicator 7.6.1 *The Organization** seeks and considers in good faith input in management planning from *affected stakeholders** and affected *rights holders**.

FF Indicator 7.6.1 (Existing US FF Indicator 4.4.b) Not applicable for *family forest* Management Units**. Conformance with Criterion 7.6 for *family forest* Management Units** is addressed through FF Indicator 7.6.2.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest** *Management Units** with this Indicator.

Indicator 7.6.2 *Affected stakeholders** and affected *rights holders** are apprised of relevant activities in advance of the action and provided an opportunity to offer input.

FF Indicator 7.6.2 (New) *Affected stakeholders** and affected *rights holders** are apprised of relevant activities in advance of the action and provided an opportunity to offer input. This input is considered in good faith in management planning.

Intent: This *Indicator** focuses on stakeholder consultation in operations that may directly and negatively affect stakeholders, such as logging, burning, spraying, or traffic.

Guidance: To apprise likely affected neighbors and other *stakeholders** of specific management operations, *The Organization** may post signs or other measures that are readily noticeable by likely *affected stakeholders** but that do not necessarily require direct communication. Some situations may warrant direct communication.

Advance notice should be within a time frame appropriate to the situation.

FF Indicator Guidance: While *stakeholder** *engagement** is not required during management planning, any input that *The Organization** receives per Indicator 7.6.2 should be considered when the *management plan** is next revised.

Indicator 7.6.3 Upon request, *interested stakeholders** are provided with an opportunity for *engagement** regarding planning for *management activities** that affect their interests. *The Organization** considers their input in good faith.

FF Indicator 7.6.3 (New) On private ownerships, not applicable for *family forest** *Management Units**. Conformance with Criterion 7.6 for privately owned *family forest** *Management Units** is addressed through FF Indicator 7.6.2.

FF Indicator Applicability: Public ownerships conform with the base indicator.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of privately owned *family forest** *Management Units** with this Indicator.

Indicator 7.6.4 For *public lands**, engagement includes the following components:

- a. Clearly defined and accessible methods for public participation are provided in both short term and *long term** planning processes, including harvest plans and operational plans.

- b. Public notification is sufficient to allow *interested stakeholders** the chance to learn of upcoming opportunities for public review and/or comment on the proposed management.
- c. An accessible appeals process to planning decisions is available.

Applicability: This Indicator only applies to *public lands**.

Intent: FSC certification does not preclude any individual or group from seeking legislative or judicial relief.

Guidance: *Interested stakeholders** may be wide-ranging geographically.

Public *engagement** should be accessible to individuals, organizations, and other social units that could be affected economically, environmentally, or socially by *management activities** on the *Management Unit**. This minimally includes all citizens of the relevant entity (county, city, state or nation).

PRINCIPLE 8: MONITORING AND ASSESSMENT

***The Organization** shall demonstrate that progress toward achieving the *management objectives**, the impacts of *management activities**, and the condition of the *Management Unit** are *monitored** and evaluated proportionate to the *scale**, *intensity**, and *risk** of *management activities**, in order to implement *adaptive management**. (P8 P&C V4)**

NOTE: A family forest 'not applicable' designation is proposed for Indicator 8.1.2. Alternate family forest indicators are proposed for Indicators 8.1.1, 8.2.1, 8.2.2, 8.2.3, 8.3.1, 8.3.2, 8.4.1, and 8.5.3. Additionally, family forest-specific guidance is proposed for Principle 8.

CONSULTATION QUESTION: FSC previously identified stakeholder interest in monitoring as it relates to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have monitoring and conformance with Principle 8 been addressed appropriately in this draft? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

Intent: A key aspect of *forest** management is monitoring to ensure that current conditions are known and can be compared with *desired future conditions** and *management objectives**, and as necessary to adjust management techniques to address social, economic, or environmental effects. Monitoring ensures that management, conservation, and *restoration** objectives continue to be met as effectively as possible, even given unanticipated outcomes and/or changing conditions. Principle 8 is concerned with design and implementation of the monitoring program. Principle 8 also identifies requirements that enable an FSC *chain-of-*

*custody** to operate.

Monitoring programs should be designed appropriate to the *scale** and *intensity** of *forest** management. The monitoring protocols required per Indicator 8.1.1 and Indicator 8.2.1 may consist of a variety of documents or an umbrella document that describes how a collection of monitoring documents relate to an integrated program for monitoring as required by this *Principle**. This may include a combination of ownership-level, unit, and/or site-level monitoring approaches, GIS, published guidelines, landowner policies, and other information.

Guidance: Monitoring should be focused on data that are of sufficient detail to evaluate current conditions; the effects of management on economic, environmental, and social resources of the *Management Unit**; and to track progress toward *desired future conditions**, *verifiable targets**, and *management objectives**.

The monitoring protocol(s) should describe procedures and their frequency, and be sufficient to ensure that current conditions are known and can be compared with *desired future conditions** and *management objectives**.

Scale of Operations: *Medium** and *large** ownerships are expected to have systematic and robust data collections for resources that are affected by management, while smaller operations may have informal and qualitative requirements for data collection.

*Intensity** and frequency of operations: More and/or better data are needed for resources that are significantly or frequently altered (e.g., timber stocking composition and *stand** structure) than for those that are minimally impacted (e.g., *protected areas** where there are no operations).

FF Guidance (*From existing US Principle 8*): On *family forest* Management Units**, an informal, non-technical and qualitative monitoring approach will likely be adequate to ensure compliance for most elements of the monitoring plan. Attributes such as *harvest** volume, and stand stocking, will require quantitative monitoring. Any approach pursued must assure that regular monitoring of the condition of the *forest** is occurring.

C8.1 The Organization* shall monitor* the implementation of its management plan*, including its policies and management objectives*, its progress with the activities planned, and the achievement of its verifiable targets*. (new)

Indicator 8.1.1 The Organization* develops and consistently implements a regular and replicable written protocol to monitor its policies associated with *visions and values**, *management objectives**, and achievement of *verifiable targets** relevant to the Standard.

FF Indicator 8.1.1 (Existing US FF Indicator 8.1.a) *The Organization** describes and implements a protocol to monitor achievement of *management objectives**.

Indicator 8.1.2 The protocol, per Indicator 8.1.1, includes specific procedures to monitor and evaluate: a) how changes in the assessed potential impact of climate change–related risks and vulnerabilities may affect achievement of *management objectives** and *desired future conditions**; and b) the effectiveness of *climate change adaptation strategies** implemented to address identified impacts (per Indicator 7.2.4).

FF Indicator 8.1.2 (New) Not applicable for *family forest* Management Units**. Conformance with Criterion 8.1 for *family forest* Management Units** is addressed through FF Indicator 8.1.1.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this *Indicator**.

C8.2 *The Organization** shall **monitor*** and evaluate the environmental and social impacts of the activities carried out in the *Management Unit**, and changes in its environmental condition. (C8.2 P&C V4)

Indicator 8.2.1 *The Organization** develops and consistently implements a regular and replicable written protocol to monitor and evaluate the environmental and social impacts of *management activities** and changes in environmental conditions, aligned with Annex J.

FF indicator 8.2.1 (New) The social and environmental impacts of *management activities** are monitored, aligned with Annex J.

Intent: Indicators 6.6.4, 9.4.1, 10.2.2, 10.3.2, 10.7.5, and 10.8.1 explicitly require monitoring and therefore must be addressed in the monitoring protocol. While the other elements of Annex J are not explicitly required, monitoring at some level (for applicable elements of Annex J) will most likely be needed for conformance with and/or demonstration of conformance with the rest of the Standard. Therefore, Annex J provides a structure to assist *The Organization** with developing its monitoring protocol.

Guidance: The frequency, scale and intensity of monitoring will be unique to the *Management Unit** due to its unique context and activities. Similar to the guidance for Indicator 8.1.1, the *scale**, *intensity**, and frequency of *management activities** that occur within the *Management Unit** will affect the level of monitoring needed for any particular element of Annex J. However, some level of monitoring will most likely be needed for all applicable elements. Non-applicable elements of Annex J are those associated with an activity or value that does not occur on the *Management Unit**, and/or values that occur outside of the management unit that are not affected by activities occurring on the *Management Unit**.

FF Indicator Guidance: Monitoring is not expected for the aspects of *management activities** that are associated with *Indicators** that have low *risk** designations in this Standard. Monitoring may be informal, but still needs to be documented.

Indicator 8.2.2 *The Organization** seeks input in monitoring processes from *affected stakeholders**, and engages *interested stakeholders** on request. When stakeholder input on monitoring and/or responses to *management activities** are received, they are considered in good faith.

FF Indicator 8.2.2 (New) When *stakeholder** responses to *management activities** are received, they are considered in good faith when developing monitoring approaches.

Guidance: *The Organization** is expected to “consider in good faith” monitoring input provided by *stakeholders** and *rights holders**. This means that *The Organization** must honestly consider whether the input can be addressed through the monitoring program, whether it is aligned with the Standard and can be achieved without detracting from *The Organization’s** ability to conform with the rest of the Standard (including Indicator 5.5.1’s requirement for ensuring *long-term* economic viability**), whether it conflicts with input received from other *stakeholders** and/or *experts**, and whether it is feasible given the ecological context of the site and/or *management unit**.

*The Organization** is encouraged to document significant *stakeholder** concerns and how the input was used or why it was not used, and then respond directly to the *stakeholder** with this information.

FF Indicator Guidance: While stakeholder engagement is not required during development of monitoring approaches, any input that *The Organization** receives from stakeholder in response to *management activities** should also be assessed for applicability to monitoring approaches.

Indicator 8.2.3 For cultural sites identified per Indicator 3.5.1 that are significant to a *Native American** group and for which the *Native American** group holds *rights**, the opportunity to jointly monitor the sites is offered to *tribal** representatives. Where feasible, the opportunity to jointly monitor other sites and resources of interest to a *Native American** group is also offered to *tribal** representatives.

FF Indicator 8.2.3 (New) Cultural sites identified per Indicator 3.5.1 are monitored. Applicable *Native American** groups are invited to jointly monitor the sites.

FF Indicator Guidance: Monitoring may be informal, but still needs to be documented.

C8.3 The Organization* shall analyze the results of monitoring and evaluation and feed the outcomes of this analysis back into the planning process. (C8.4 P&C V4)

Indicator 8.3.1 Where monitoring indicates that *management objectives** and *verifiable targets** are not being met, or if changing conditions indicate that a change in management strategy is required for conformance with the Standard , the *management plan* is revised.

FF Indicator 8.3.1 (New) Where monitoring indicates that *management objectives** are not being met, or if changing conditions indicate that a change in management strategy is required for conformance with the Standard , the *management plan** is revised.

Intent: This *Indicator** requires that the results of monitoring be reflected in the implementation of the *management plan**. Revisions to the *management plan** as a result of monitoring are also addressed in Criterion 7.4 .

Indicator 8.3.2 If monitoring shows that the *management objectives** and *verifiable targets** are not sufficient to ensure conformance with this Standard, then they are modified.

FF Indicator 8.3.2 (New) If monitoring shows that the *management objectives** are not sufficient to ensure conformance with this Standard, then they are modified.

Intent: This *Indicator** requires that the results of monitoring be reflected in the implementation of the *management plan**. Revisions to the *management plan** as a result of monitoring are also addressed in Criterion 7.4 .

C8.4 The Organization* shall make *publicly available** a summary of the results of monitoring free of charge, excluding *confidential information**. (C8.5 P&C V4)

Indicator 8.4.1 While protecting *confidential information**, either full monitoring results or an up-to-date summary of the most recent monitoring information is readily available (per Criteria 8.1 and 8.2) and is available to the public, upon request, at no cost.

FF Indicator 8.4.1 (New) While respecting *confidential information**, relevant components of the monitoring protocol are provided upon request to *affected stakeholders**, at cost for reproduction and handling.

C8.5 The Organization* shall have and implement a tracking and tracing system proportionate to *scale**, *intensity**, and *risk** of its *management activities**, for demonstrating the source and volume in proportion to projected output for each year, of all products from the *Management Unit** that are marketed as FSC certified. (C8.3 P&C V4)

Intent: *Chain of custody** (i.e., CoC) is an important aspect of the FSC system. For products claimed to be sourced from FSC-certified *forests**, *chain of custody** tracks certified products from the *forest** of origin throughout the supply chain. The critical first link in the supply chain, and the focus of this *Criterion**, is from the point of harvest to the transfer of ownership, and it is the responsibility of *The Organization** to maintain the integrity of certified products within this first link in the supply chain.

Indicator 8.5.1 When *forest** products, including *non-timber forest products**, are being sold as FSC-certified, *The Organization** implements a documented system to track and trace all products sold from the *Management Unit** until the point of ownership transfer .

Intent: This *Indicator** does not require *The Organization** to maintain a separate *chain of custody** certificate, but rather to be able to sell an FSC-certified product as certified to a *chain of custody** business. Tracking and tracing prevents the mixing of FSC-certified and non-certified *forest** products prior to the point of ownership transfer.

Guidance: The point of ownership transfer is also known as the “forest gate” and may be identified as, for example, the stump, on-site concentration yard, off-site mill/log yard, lump-sum sale/per unit/pre-paid agreement, or log landing.

Indicator 8.5.2 *The Organization** maintains records of forest products that are sold for a minimum of five years. Records adequately ensure that the requirements under Criterion 5.2 are met. Compiled information includes the following:

- a. *species** group;
- b. product name, description, or grade;
- c. volume (or quantity) of product;
- d. information to trace the material to the point of origin;
- e. date or timeframe when the product was harvested, hauled outside the forest gate, or delivered to the purchaser; and
- f. whether the material was sold or delivered as FSC-certified.

Guidance: Actual volumes are used for per unit sales and estimated volumes are used for lump-sum sales.

Indicator 8.5.3 Sales invoices for the point of ownership transfer and transport documents are kept for a minimum of five years for all FSC-certified products sold or delivered by *The Organization**. Sales invoices identify, at a minimum, the following information:

- a. name and address of purchaser;
- b. the date of ownership transfer;

- c. *species** group;
- d. product name, description, or grade;
- e. the volume (or quantity) of product sold;
- f. *The Organization's** certificate code; and
- g. the FSC claim "FSC 100%," identifying products sold as FSC-certified.

Where sales invoices do not accompany transportation of the product, transport documents and/or other documentation related to certified products track, at a minimum, the following information:

- a. *The Organization's** certificate code;
- b. identification of the purchaser and destination;
- c. the date of transport or delivery;
- d. *species** group;
- e. product name, description, or grade;
- f. the volume (or quantity) delivered;
- g. load or batch reference number; and
- h. reference linking the shipment to the sales invoice.

FF Indicator 8.5.3 (New) Sales documents are kept for a minimum of five years for all FSC-certified products sold. Sales documents identify, at a minimum, the following information:

- a. name and address of purchaser;
- b. the date of ownership transfer;
- c. product name, description, or grade;
- d. the volume (or quantity) of product sold;
- e. *The Organization's** certificate code; and
- f. the FSC claim "FSC 100%," identifying products sold as FSC-certified.

*Species** group information is reported as part of annual audits.

Guidance: Actual volumes are used for per-unit sales and estimated volumes are used for lump-sum sales. Transfer documents are synonymous with delivery documents.

In some situations, *The Organization** that holds the FSC Forest Management certificate and *The Organization** that holds the FSC Chain of Custody certificate are the same entity, and therefore a sales invoice is not generated for materials that are transferred from the Management Unit* to a primary manufacturing facility. In these situations, alternative documentation that contains the information detailed in Indicator 8.5.3, and that can be linked to the materials transferred, will need to be maintained for a minimum of five years.

PRINCIPLE 9: *HIGH CONSERVATION VALUES**

The Organization* shall maintain and/or enhance the *High Conservation Values** in the *Management Unit** through applying the *precautionary approach**. (P9 P&C V4)

NOTE: A family forest 'not applicable' designation is proposed for Indicator 9.4.2. Alternate family forest indicators are proposed for Indicators 9.1.3 and 9.4.1 (private lands only). Additionally, family forest-specific guidance is proposed for Principle 9 and Indicator 9.2.2.

CONSULTATION QUESTION: FSC previously identified stakeholder interest in High Conservation Values (HCV) as they relate to the Family Forest Indicators. **Considering the scale, intensity and risk associated with family forest management units, have HCVs and conformance with Principle 9 been addressed appropriately in this draft (including consideration of the HCV Checklist for Family Forest Management Units in Annex K)? Are these requirements achievable (i.e., considering available technical and financial resources) for family forests? Please explain.**

Intent: *High Conservation Values** are managed to maintain or enhance their identified values. In some cases, active management is consistent with these attributes, and in other cases (e.g., *primary forests**), active management is specifically precluded.

FSC introduced the concept of High Conservation Value Forests (HCVFs) in 1999 to ensure identification and proper management of *forest** areas with exceptional conservation value. With Principle and Criteria Version 5, FSC re-framed the concept to focus on the values (i.e., *High Conservation Values**) themselves, while also recognizing the importance of the areas that are necessary for the existence and maintenance of the *High Conservation Values** (i.e., *High Conservation Value Area**, HCVA).

The FSC US National *High Conservation Values** Framework (Annex K) may be used as a resource for assessing the presence of *High Conservation Values** on the *Management Unit**, as well as managing and monitoring those that are identified. .

C9.1 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**:

HCV 1 – Species diversity. Concentrations of *biological diversity**, including endemic species and rare, threatened, or endangered species, that are *significant** at global, regional, or national levels.

HCV 2 – *Landscape-level *ecosystems** and mosaics.** *Intact Forest Landscapes** and large *landscape**-level *ecosystems** and *ecosystem** mosaics that are *significant** at global, regional, or national levels, and that contain viable populations of the great

majority of the naturally occurring species in natural patterns of distribution and abundance.

HCV 3 – *Ecosystems and *habitats**.** Rare, threatened, or endangered *ecosystems**, *habitats**, or *refugia**.

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.

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**.

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**. (C9.1 P&C V4 and Motion 7:2014)

FF Guidance (*From existing US Criterion 9.1*): The complexity of the assessment is to be based on the *scale** and *intensity** of the operation as well as the likelihood of *high conservation value** presence and the potential of *risk** to *high conservation values**. A simplified checklist approach is available for *family forest* Management Units** in Section 11 of Annex K.

Indicator 9.1.1 A documented assessment is completed using *Best Available Information** that records the location and status of *High Conservation Values**, as defined in *Criterion** 9.1 and the *High Conservation Value Areas** on which they rely, in a manner consistent with the *High Conservation Value** Framework in Annex K. If *The Organization** learns of new applicable information, the assessment is updated to incorporate the information.

Indicator 9.1.2 The assessment includes identification of *Intact Forest Landscapes** that existed within the *Management Unit** as of January 1, 2017.

Indicator 9.1.3 *The Organization** conducts *culturally appropriate* engagement** with affected *rightsholders**, *affected stakeholders**, and *interested stakeholders** and uses the resulting input in the assessment.

FF Indicator 9.1.3 (New) *Engagement** necessary for completion of the *family forest** checklist in Annex K is completed. *Affected stakeholders** whose interests overlap with the *high conservation value** definitions in Criterion 9.1 are given an opportunity to provide input into the assessment. If received, input from *interested stakeholders** is also considered in good faith.

Indicator 9.1.4 For *public lands**, *The Organization** conducts a transparent and accessible public review of proposed *High Conservation Values**, *High Conservation Value Areas**, and *management strategies** (per Criterion 9.2). Relevant information from stakeholder consultations and other public review is integrated into *High Conservation Value** and *High Conservation*

*Value Area** descriptions, delineations, and *management strategies**.

Applicability: This *Indicator** only applies to *public lands**.

Guidance: If it is not possible to integrate information received from stakeholder consultations and public review, *The Organization** should document the reason why it was not integrated. Examples of when this situation may occur include stakeholder recommendations that would not result in conformance with the Standard, stakeholder feedback that is in conflict with information received from other stakeholders and/or *experts**, recommendations that are infeasible given the ecological context of the site or *Management Unit**, etc.

C9.2 *The Organization shall develop effective strategies that maintain and/or enhance the identified *High Conservation Values**, through *engagement** with *affected stakeholders**, *interested stakeholders**, and *experts**. (C9.2 P&C V4)**

Indicator 9.2.1 *The Organization** identifies the threats to *High Conservation Values** and develops *management strategies** necessary to ensure *High Conservation Value** maintenance and/or enhancement consistent with the *High Conservation Value** Framework in Annex K.

Indicator 9.2.2 *The Organization** holds consultations with affected *rightsholders**, *affected stakeholders**, *interested stakeholders**, and *experts** to confirm that effective *management strategies** for the maintenance and/or enhancement of the *High Conservation Values** and *High Conservation Value Areas** have been adopted.

Guidance: *Experts** are normally independent, but may include employees of *The Organization** who possess the requisite expertise. However, external stakeholders with experience pertinent to the *High Conservation Value** must always be consulted.

FF Guidance (From existing US Indicator 9.2.a): If the *high conservation value** assessment completed by *The Organization** per Criterion 9.1 indicates that there are no *high conservation values** in the *Management Unit**, a consultation with *stakeholders** to confirm effective *management strategies** is not necessary.

Indicator 9.2.3 The *vast majority** of each *Intact Forest Landscape** identified per Indicator 9.1.2 is designated as *core area** and *management strategies** are developed to *protect** these *core areas**. The *management strategies** may allow limited *industrial activity** within *core areas**, but only if all effects of the *industrial activity**, including *fragmentation**:

- a. are restricted to a *very limited portion of the core area**;
- b. do not reduce the *core area** below 123,500 acres; and
- c. will produce clear, substantial, additional *long-term** environmental and social benefits.

C9.3 *The Organization shall implement strategies and actions that maintain and/or enhance the identified *High Conservation Values**. These strategies and actions shall implement the *precautionary approach** and be proportionate to the *scale**, *intensity**, and *risk** of *management activities**. (C9.3 P&C V4)**

Indicator 9.3.1 *The Organization** implements the *management strategies** identified per Criterion 9.2. Any other *management activities** implemented in *High Conservation Value Areas** must maintain or enhance the *High Conservation Values** and the extent of the *High Conservation Value Area**, including defined *core areas** of *Intact Forest Landscapes**. All activities are implemented in a manner consistent with the *precautionary approach**. *High Conservation Values** are considered to be critical, fundamental, *significant**, or valuable, and therefore any threat to a *High Conservation Value** is considered to be a threat of severe or irreversible damage.

Indicator 9.3.2 *The Organization** responds immediately to mitigate negative impacts to *High Conservation Values** resulting from activities implemented by *The Organization** or others and actions are taken to *restore** and protect the *High Conservation Values**.

Intent: The goal of this *Indicator** is to address damaging activities (not just *management activities**) initiated by *The Organization**, or by others, that represent a threat of severe or irreversible damage. While there may be some limitations as to what *The Organization** may feasibly be able to do to address others' activities, *The Organization** does have a responsibility to try and control activities of individuals within the *Management Unit**.

In this case, "restore" means to repair the damage done to environmental values that resulted from *legal** or illegal activities. However, *The Organization** is not necessarily obliged to restore those environmental values that have been affected by factors beyond the control of *The Organization**, for example by natural disasters, by climate change, or by the *legally** authorized activities of third parties, such as public infrastructure, mining, hunting, or settlement. FSC-POL-20-003, The Excision of Areas from the Scope of Certification, describes the processes by which such areas may be excised from the area certified, when appropriate.

Indicator 9.3.3 If the *High Conservation Values** or the *High Conservation Value Areas** on which they rely cross ownership boundaries, and where *High Conservation Values** maintenance would be improved by coordinated management, *The Organization** attempts to coordinate conservation efforts with adjacent landowners.

C9.4 *The Organization shall demonstrate that periodic monitoring is carried out to assess changes in the status of *High Conservation Values**, and shall adapt its management strategies to ensure their effective *protection**. The monitoring shall be proportionate to the *scale**, *intensity**, and *risk** of *management activities**, and shall**

include *engagement** with *affected stakeholders**, *interested stakeholders**, and *experts**.
(C9.4 P&C V4)

Indicator 9.4.1 *The Organization** monitors, or participates in a program to periodically monitor, the status of the specific *High Conservation Values**, including the effectiveness of the *management strategies** for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the *High Conservation Value** Framework in Annex K.

FF Indicator 9.4.1 (Existing US FF Indicator 9.4.a) On private ownerships, monitoring considers Annex K and is sufficient to identify and describe changes to *high conservation values**.

Intent: Except where *High Conservation Values** change rapidly or demonstrate ecological instability, or where site-disturbing *management activities** occur, annual monitoring of all *High Conservation Values** may not be necessary and/or may be combined with other field activities.

Guidance: *High Conservation Values** that are not managed and/or are not easily accessible may have a basic form of monitoring, but the monitoring needs to adequately allow *The Organization** to be able to evaluate whether the values are being impacted.

FF Indicator Applicability: Public ownerships conform with the base indicator.

Indicator 9.4.2 *The Organization** includes *engagement** with affected *rightsholders**, *affected stakeholders**, *interested stakeholders**, and *experts** in its monitoring program.

FF Indicator 9.4.2 (New) Not applicable for *family forest* Management Units**. Conformance with the intent of Indicator 9.4.2 for *family forest* Management Units** is addressed through FF Indicator 9.1.3.

Guidance: Engagement with *experts** will generally be during establishment of the monitoring program, although in some cases consultation with *experts** may be needed as part of implementing the program. For *rightsholders** and *stakeholders**, *engagement** should be part of both establishment and implementation of the monitoring program.

*The Organization** is expected to “consider in good faith” monitoring input provided by *stakeholders** and *rights holders**. This means that *The Organization** must honestly consider whether the input can be addressed through the monitoring program, whether it is aligned with the Standard and can be achieved without detracting from *The Organization’s** ability to conform with the rest of the Standard (including Indicator 5.5.1’s requirement for ensuring *long-term* economic viability**), whether it conflicts with input received from other *stakeholders** and/or *experts**, and whether it is feasible given the ecological context of the site and/or *Management Unit**.

*The Organization** is encouraged to document significant *stakeholder** concerns and how the input was used or why it was not used, and then respond directly to the *stakeholder** with this information.

FF Indicator Intent: The *Certification Body** is not expected to assess conformance of *family forest* Management Units** with this *Indicator**.

Indicator 9.4.3 *Management strategies** are adapted when monitoring or other new information shows that these strategies are insufficient to ensure the maintenance and/or enhancement of *High Conservation Values**.

Intent: *Management strategies** are adjusted to the extent allowed by law.

Where risks to *High Conservation Values** are beyond the control of *The Organization** (e.g., acid deposition, *invasive species** that are impractical to control), the rationale for lack of action to address those risks is documented.

PRINCIPLE 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES

Management activities* conducted by or for *The Organization** for the *Management Unit** shall be selected and implemented consistent with *The Organization**'s economic, environmental, and social policies and *objectives** and in compliance with the *Principles** and *Criteria** collectively. (new)

NOTE: Family forest-specific guidance is proposed for Indicator 10.7.5.

C10.1 After harvest or in accordance with the *management plan**, *The Organization** shall, by natural or artificial regeneration methods, regenerate vegetation cover in a timely fashion to pre-harvesting or more *natural conditions**. (new)

Indicator 10.1.1 Harvested sites are regenerated in a timely manner to maintain environmental values identified per Indicator 6.1.1.

Indicator 10.1.2 Regeneration activities are implemented in a manner that:

- a. 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**;
- b. for harvest of *natural forests** or semi-natural forests*, regenerate to *pre-harvest** or to more *natural conditions**; or
- c. for harvest of degraded semi-natural forests*, regenerate to more *natural conditions**.

Specific to the Southwest Region

Regional Supplement1 Regeneration is normally through natural regeneration. Artificial regeneration may be used as a supplement (e.g., to fill gaps, restore *species** diversity, for other *restoration**, or where seed trees are lacking).

Guidance: *Regeneration harvests** should create favorable conditions for natural seedling establishment (e.g., by considering seedbeds and light conditions, leaving seed trees upslope or upwind, and leaving seed trees with desirable phenotypic characteristics, such as straight boles and healthy crowns).

Specific to the Ozark-Ouachita Region

Regional Supplement2 Natural regeneration is used rather than plantings, except when necessary for *restoring** specific *habitats**, *stand** types, or *species**.

C10.2 The Organization* shall use species for regeneration that are ecologically well adapted to the site and to the *management objectives**. **The Organization*** shall use *native species** and local *genotypes** for regeneration, unless there is clear and convincing justification for using others. (C10.4 and C10.8 P&C V4)

Indicator 10.2.1 *Species** chosen for regeneration are ecologically well adapted to the site, are *native species**, and are of *local** provenance, unless written justification is provided for using non-*local** *genotypes** of the *native species**.

Intent: The goal of this *Indicator** is to maintain *local** genetic diversity.

Indicator 10.2.2 *The Organization** has the option to develop a plan to allow for the use of *non-native species** for regeneration when non-*local** *genotypes** of *native species** are either not adequate for maintaining or enhancing *local** diversity as part of *climate change adaptation strategies**, or not an option due to disease or pest vulnerabilities. A plan:

- a. prioritizes use of *non-native species** in the following manner:
 - i. *species** that are native to and sourced from the broader ecozone in which the *management unit** occurs;
 - ii. *species** that are native to and sourced from neighboring regions; and
 - iii. *species** that are native to and sourced from the North American continent.
- b. is based on *Best Available Information**, including peer-reviewed science that demonstrates that the performance of *non-native species** will result in greater benefit

to wildlife, *water quality**, climate change adaptation, and other values compared to *native species**;

- c. includes a documented plan to carefully monitor *non-native species** to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts;
- d. is spatially and temporally explicit and includes maps of planted areas; and
- e. is developed in collaboration with *experts** who have knowledge and experience with the *non-native species** being considered and potential ecological effects of its introduction.

C10.3 The Organization* shall only use *alien species** when knowledge and/or experience have shown that any invasive impacts can be controlled and effective mitigation measures are in place. (C6.9 and C10.8 P&C V4)

Intent: This *Criterion** applies to how *non-native species** are controlled and monitored when they are utilized, and includes all *non-native species**, including trees and other plants (e.g., herbaceous *erosion** control mixes or plants used for wildlife food and cover) and animals used in *forest** management.

Indicator 10.3.1 The use of *non-native species** is contingent on the availability of credible scientific data indicating that any such *species** is non-invasive and its application does not pose a risk to native *biodiversity**.

Intent: This *Indicator** also covers seed mixes and *species** used for *erosion** control.

Guidance: State lists of *invasive species** should generally be used as the basis for determining if a *species** is invasive. New cultivars, hybrids, and uncommon plants (e.g., some of those promoted for use on wildlife food plots) may not have been evaluated by state invasive plant councils. If such *species** and/or varieties are being used, then *The Organization** is expected to consult with a state *expert** in *invasive species**.

Unless evidence suggests otherwise, a *species** that is not identified as being invasive is assumed to not pose a risk to native *biodiversity**.

Indicator 10.3.2 If *non-native species** are used, their provenance and the location of their use are documented, their ecological effects are actively monitored and documented, and effective mitigation measures are in place to control their spread outside the area in which they are established.

Guidance: Monitoring intensity reflects the persistence and risk posed by the *species** and may be justified by consultation with regional *experts** or literature.

Indicator 10.3.3 *The Organization** takes timely action to control any adverse impacts resulting from their use of *non-native species**.

Applicability: If *The Organization** is compliant with Indicator 10.3.1 and an outbreak of a *non-native species** occurs, then the outbreak of the *non-native species** does not constitute non-compliance with Indicator 10.3.2.

Intent: This *Criterion** is specifically for cases that involve the intentional use of *non-native species**—it does not address *invasive species** (this is addressed in Indicator 6.6.4).

C10.4 *The Organization** shall not use *genetically modified organisms** in the *Management Unit**. (C6.8 P&C V4)

Indicator 10.4.1 *Genetically modified organisms** (i.e., GMOs) are not used.

Intent: FSC-POL-30-602 *Genetically Modified Organisms** provides a definition and guidance on the interpretation of Indicator 10.4.1.

Genetically improved organisms (e.g., Mendelian crossed) are not considered to be *genetically modified organisms** (i.e., results of genetic engineering) and may be used. The prohibition of *genetically modified organisms** applies to all organisms, including trees.

C10.5 *The Organization** shall use silvicultural practices that are ecologically appropriate for the vegetation, species, sites, and *management objectives**. (new)

Indicator 10.5.1 *Silvicultural** practices are implemented that are ecologically appropriate (per Indicator 7.2.15) for the site and *management objectives**.

C10.6 *The Organization** shall minimize or avoid the use of *fertilizers**. When *fertilizers** are used, *The Organization** shall demonstrate that use is equally or more ecologically and economically beneficial than use of *silvicultural** systems that do not require fertilizers, and prevent, mitigate, and/or repair damage to *environmental values**, including soils. (C10.7 P&C V4 and Motion 2014#7)

Applicability: Mitigation or repair of damage to environmental values (identified per Indicator 6.1.1) resulting from use of *fertilizer** is addressed through Indicator 6.3.3.

Indicator 10.6.1 The use of *fertilizers** is minimized or avoided. *Fertilizer** is applied only when all of the following conditions are met:

- a. *Soil** classification or foliar analysis indicates one or more nutrients are a limiting factor for *forest** productivity.
- b. The ecological benefits of using *fertilizers** are greater than the benefits of using *silvicultural** systems that do not require their use.
- c. The economic benefits of using *fertilizers** are greater than the benefits of using *silvicultural** systems that do not require their use.
- d. Where necessary, due to topography, *soils**, or other conditions, measures are taken to *protect** environmental values and prevent damage from *fertilizer** runoff or leaching. This includes preventing influences on native low-nutrient *ecological systems**, such as pitcher plant bogs, or on-ground and surface *water quality**, including through the use of *buffer zones**.
- e. *Fertilizer** application maintains or enhances *soil** condition and site productivity.
- f. *Fertilizer** types, rates, frequencies, and site of application are documented.

Guidance: *Fertilizer** use is normally avoided in *natural forests** and *semi-natural forests**.

C10.7 *The Organization** shall use integrated pest management and *silviculture** systems which avoid, or aim at eliminating, the use of chemical *pesticides**. *The Organization** shall not use any chemical *pesticides** prohibited by FSC policy. When *pesticides** are used, *The Organization** shall prevent, mitigate, and/or repair damage to *environmental values** and human health. (C6.6 and C10.7 P&C V4)

Applicability: Mitigation or repair of damage to environmental values (identified per Indicator 6.1.1) resulting from use of *pesticides** is addressed through Indicator 6.3.3.

Intent: This *Criterion** is guided by the FSC Pesticides Policy (FSC-POL-30-001 EN).

This *Criterion** and its *Indicators** require that *The Organization** strive to reduce the use of *chemical pesticides** and work toward their eventual phase-out whenever feasible, consistent with the *FSC Pesticides Policy*.

Guidance: A *pesticide** is any substance, or mixture of substances of chemical or biological ingredients, intended for repelling, destroying, or controlling any pest or regulating plant growth. This includes insecticides, rodenticides, acaricides, molluscicides, larvacides, nematocides, fungicides, and herbicides. A *chemical pesticide** is any synthetically produced *pesticide**.

Per the FSC Pesticides Policy, *The Organization** is required to use *integrated pest management** to consider the different control techniques available to them and look for non-

*pesticide** options, and more specifically non-*chemical pesticide** options, when they are economically feasible and will reduce *risks** to human and environmental health. If the *integrated pest management** indicates that use of a *chemical pesticide** is the best control technique, the FSC Pesticides Policy requires a comparison of different potential *chemical pesticides** to determine which will provide the best outcomes with the least *risk**, and then documentation of *risks** and mitigation associated with any *chemical pesticides** selected for use. These different components of an overall pest management approach are addressed by a number of *Indicators** in this *Criterion**, but may be addressed by *The Organization** in either a single document, or a collection of documents and documented information.

Indicator 10.7.1 *Integrated pest management** (i.e., IPM), including selection of *silviculture** systems, is used to avoid, or aim to eliminate, the frequency, extent, and amount of *chemical pesticide** applications, and result in non-use or overall reductions in applications. Use of *integrated pest management** is documented.

Intent: There is no termination point for the *integrated pest management**. The *integrated pest management** should continually aim to avoid and eliminate the use of *chemical pesticides** by considering information such as advancements in science and technology and market signals (i.e., those that make alternative control measures operationally or financially feasible).

Guidance: Strategies for controlling vegetation that minimize negative environmental effects may include: creation and maintenance of *habitat** that discourages pest outbreak; creation and maintenance of *habitat** that encourages natural predators; evaluation of pest populations and establishment of action thresholds; diversification of *species** composition and structure; use of low-impact mechanical methods; use of prescribed fire; use of longer rotations or selection harvest; use of uneven-age management.

Indicator 10.7.2 Prior to using *chemical pesticides**, the requirements of the Environmental and Social Risk Assessment (ESRA) framework for Organizations (FSC-POL-30-001 V3-0 FSC Pesticides Policy clause 4.12) are met.

Indicator 10.7.3 When *pesticides** are used:

- a. the selected *pesticide**, application method, timing and pattern of use offers the least *risk** to humans and non-target *species**; and
- b. objective evidence demonstrates that the *pesticide** is the only effective, practical, and cost-effective way to control the pest.

Indicator 10.7.4 When *pesticides** are used, a written prescription is prepared that describes the site-specific hazards and environmental *risks**, and the precautions that *workers** will employ to avoid or minimize those hazards and *risks**, and includes a map of the treatment area.

Guidance: *The Organization's* Environmental and Social Risk Assessment supports the conditions described in 10.7.4.

Indicator 10.7.5 When *chemical pesticides** are used, the effects are monitored and records are kept of pest occurrences, control measures, and incidences of *worker** exposure to chemicals.

FF Guidance (*From existing US Indicator 6.6.e*): Monitoring and recordkeeping may be brief and less technical for *family forest* Management Units**, such as keeping a log or list of chemical use and application dates, rates, methods of application, the application area and effectiveness.

Indicator 10.7.6 *Pesticide** transport, storage, handling, application, and emergency procedures for cleanup following accidental spillages are shown to comply with applicable *national laws** and *local laws** and regulations.

Indicator 10.7.7 Damage to human health from *pesticide** use is mitigated or repaired when it occurs, within *The Organization's** sphere of influence.

Intent: This *Indicator** addresses damage to human health that results from improper use of *pesticides** (i.e., use that contradicts the *pesticide** label and/or *The Organization's** Environmental and Social Risk Assessment).

C10.8 *The Organization** shall minimize, *monitor**, and strictly control the use of *biological control agents** in accordance with *internationally accepted scientific protocols**. When *biological control agents** are used, *The Organization** shall prevent, mitigate, and/or repair damage to *environmental values**. (C6.8 P&C V4)

Applicability: Mitigation or repair of damage to environmental values (identified per Indicator 6.1.1) resulting from use of *biological control agents** is addressed through Indicator 6.3.3.

Indicator 10.8.1 The use of *biological control agents** is minimized, *monitored**, and controlled. *Biological control agents** are used only as part of *The Organization's** integrated pest management* system per Indicator 10.7.1.

Indicator 10.8.2 Use of *biological control agents** complies with *internationally accepted scientific protocols** (e.g., Food and Agriculture Organization of the United Nations (FAO) Code of Conduct for the Import and Release of Exotic Biological Control).

Indicator 10.8.3 The use of *biological control agents** is recorded, including type, quantity, period, location, and reason for use.

C10.9 *The Organization** shall assess *risks** and implement activities that reduce potential negative impacts from *natural hazards** proportionate to *scale, intensity, and risk**. (new)

Indicator 10.9.1 *Management activities** are implemented to mitigate, within *The Organization's** sphere of influence, 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.

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.

Indicator 10.9.2 *Management activities** are implemented to increase the *resilience** of *ecosystems** to *catastrophic natural disturbances** identified per Indicator 6.1.1.

Guidance: In the context of climate change, linkages may exist between expected future impacts of climate change and *catastrophic natural disturbances**. The fuels management practices identified in Indicator 10.9.1 Guidance may be relevant in this context. The Climate Change Toolkit in Annex L provides additional resources.

C10.10 *The Organization** shall manage *infrastructural development**, transport activities, and *silviculture** so that water resources and soils are protected, and disturbance of and damage to *rare and threatened species**, *habitats**, *ecosystems**, and *landscape values** are prevented, mitigated, and/or repaired. (C6.5 P&C V4)

The elements of the Criterion are addressed through the Indicators* of Criteria 6.1, 6.3, 6.4, and 6.7 and as such no Indicators* are included here. Any non-conformances shall be assessed to the Indicators* of these other Criteria*.*

C10.11 *The Organization** shall manage activities associated with harvesting and extraction of timber and *non-timber forest products** so that *environmental values** are conserved, merchantable waste is reduced, and damage to other products and services is avoided. (C5.3 and C6.5 P&C V4)

Indicator 10.11.1 Written plans for harvesting and other significant site-disturbing *management activities** required to carry out the *management plan** are prepared prior to implementation. Plans clearly describe the activity, the relationship to *management objectives**, outcomes, measures to *protect** and/or enhance potentially affected environmental and social values, and health and safety measures, and include maps of adequate detail.

Intent: This *Indicator** ensures that potential impacts and outcomes of site-specific activities are addressed in a way that reflects the intent of a more general (not site-specific) *management plan**.

Desired outcomes include both the immediate post-activity condition (e.g., stocking and composition) and desired longer-term outcomes (e.g., regeneration).

Other significant site-disturbing *management activities** may include, but are not limited to: site preparation, prescribed burns, use of chemicals or *biological control agents**, and road building or significant road maintenance.

Guidance: Operation plans may be integrated into the *management plan** (more likely on small ownerships) or be a separate document prior to the activity (e.g., a form or narrative, with associated map).

Harvest activity descriptions include the *silvicultural** system and specific practice, and desired post-harvest condition and other outcomes (e.g., regeneration).

This *Indicator** may be addressed with a combination of documents, such as contracts, maps, *best management practices**, and pre-harvest checklists.

For *public lands**, plans should be made available to the public prior to commencement of significant operations. *The Organization** should address public comments as part of the process of revising the plans.

Indicator 10.11.2 *The Organization** optimizes the use of harvested *forest** products and explores product diversification where appropriate and consistent with *management objectives**.

Indicator 10.11.3 Management practices are employed to minimize the loss and/or waste of harvested *forest** products.

Guidance: "Waste" consists of damage or underutilization of harvested products, except where portions of harvested material need to be left on-site to maintain *woody debris**, nutrient cycling, or other ecological functions (see Criterion 6.6 and the other *Indicators** of this *Criterion**).

Indicator 10.11.4 Management activities*, including site preparation, harvest prescriptions, timing, and equipment, are selected and used to protect *soil**, water resources, residual trees, and other *forest** resources.. This includes:

- a. Logging and other activities that significantly increase the *risk** of landslides are excluded in areas where risk of landslides is high.
- b. Slash is concentrated only as much as necessary to achieve the goals of site preparation and the reduction of fuels to moderate or low levels of fire hazard.
- c. Disturbance of topsoil is limited to the minimum necessary to achieve successful regeneration of *species** native to the site.
- d. *Rutting** and compaction are minimized.
- e. *Soil* erosion** is not accelerated.
- f. Burning is only done when consistent with *natural disturbance regimes**.
- g. Natural ground cover disturbance is minimized to the extent necessary to achieve regeneration objectives.
- h. Residual trees are not significantly damaged to the extent that health, growth, or values are affected.
- i. Damage to non-timber forest products* is minimized.
- j. In plantations*, intensive practices, such as windrowing, bedding, and/or ripping, are used only when required to achieve successful regeneration and when negative ecological impacts of these intensive practices are described and mitigated.

Intent: This *Indicator** includes *soil** productivity, function, *habitat** (including the leaf litter layer and fine *woody debris**), and *non-timber forest products** in all stands, management systems, and harvest objectives.

Guidance: Attention to this *Indicator** is expected to increase with the amount and frequency of woody material removed from the site (e.g., biomass removals and whole-tree harvests).

Decisions are made based on objective data regarding *slope**, *erosion**-hazard rating, potential for *soil** compaction, *rutting**, and risk of landslides.

To *protect* soils** in areas having a high risk of landslides, logging plans should include tree *retention** critical for *slope** stability, and low-impact harvesting systems such as skyline cable or helicopter.

Clearcutting and other activities that significantly increase the *risk** of failure should not be conducted on unstable *slopes**.

All *soil**-disturbing activities, including road and trail construction, are conducted only during periods of weather when *soil** compaction, *rutting**, surface *erosion**, or sediment transport into streams and other *water bodies** can be adequately controlled. *Soils** should be dry enough or frozen to minimize disturbance and compaction.

In addition, the following guidance is region-specific:

Pacific Coast (PC):

- On *slopes** greater than 30%, ground-based yarding should be used only when it is possible to do so without exacerbating *soil* erosion**.
- On *slopes** greater than 50%, cable or helicopter logging should be used if it is technically feasible and will not result in adverse environmental effects due to the management operation.

Ozark-Ouachita Region (OO):

- Deepening and scouring of existing drainages due to *silvicultural** or logging operations should be absent.

C10.12 *The Organization shall dispose of *waste materials** in an environmentally appropriate manner. (C6.7 P&C V4)**

Indicator 10.12.1 Collection, clean-up, transportation, and disposal of all *waste materials** is done in an environmentally appropriate way that conserves environmental values identified per Indicator 6.1.1.

Guidance: *Waste materials** include: lubricants, anti-freeze, hydraulic fluids, containers, *pesticides**, paints, batteries, fuels and oils, trash, abandoned equipment, etc.

Indicator 10.12.2 In localities where *best management practices** or *local laws** and regulations do not fully address the provisions of this *Indicator**, hazardous materials and fuels are stored in leak-proof containers in designated storage areas, outside of *riparian management zones**, and away from other ecologically sensitive features, until they are used or transported to an approved off-site location for disposal. There is no evidence of persistent fluid leaks from equipment or of recent groundwater or surface water contamination.

Intent: “Off-site” refers to a designated disposal location formally recognized and/or designated by a *local** government authority.

Annex K: High Conservation Value Framework

NOTE: Only Section 11, “HCV Checklist for Family Forest Management Units” is in-scope for this public consultation. Section 11 begins on Page 133.

Preface

The Forest Stewardship Council® (FSC) Principles and Criteria for Forest Stewardship (P&C; FSC-STD-01-001) give special attention to biological, ecological, social, or cultural values of outstanding significance. These values, referred to as *High Conservation Values (HCV)**, and the areas needed for their existence and maintenance, are subject to the requirements of Principle 9 of the P&C.

Many of the resources that receive *HCV** designation, such as concentrations of rare *species**, are also addressed under Principle 6, *Environmental Values and Impacts*, of the P&C. The challenge for landowners seeking FSC certification is distinguishing between those resources that are adequately covered under Principle 6 (or other Principles) from those that rise to the level of needing to be considered under Principle 9.

As part of the FSC’s standards development process, FSC-US is required to periodically update the FSC US National Forest Stewardship Standard (NFSS). The High Conservation Value Framework must also be updated as part of the revision process, consistent with the current P&C, International Generic Indicators (FSC-STD-60-004), and FSC’s *Guidance for Standards Development Groups: Developing National High Conservation Value Frameworks* (FSC-GUI-60-009). The scope of this Framework is the conterminous United States (i.e., excluding Alaska, Hawaii and US Territories).

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1. Introduction

The Forest Stewardship Council® (FSC) Principles and Criteria for Forest Stewardship (P&C; FSC-STD-01-001) give special attention to biological, ecological, social, or cultural values of outstanding significance. These values, referred to as *High Conservation Values (HCV)**, and the areas needed for their existence and maintenance, are subject to the requirements of Principle 9 of the P&C. Many of the resources that receive *HCV** designation, such as concentrations of rare *species**, are also addressed under Principle 6 (Environmental Values and Impacts), or other *Principles** of the P&C. The challenge for landowners seeking FSC certification is distinguishing between values that are adequately covered under other *Principles** from values that rise to the level of needing to be considered under Principle 9. Due to the threshold of significance, importance, and/or rarity required for *HCV** status, not every *Management Unit** will have an *HCV**. The following guidance is intended to assist certified landowners and those seeking certification with identifying, managing, and monitoring *HCVs** and thereby achieving conformance with Principle 9.

1.a. High Conservation Values

*HCVs** demand a greater degree of *protection** to ensure their *long-term** maintenance or enhancement, particularly if they may be negatively affected by *management activities**. This involves greater efforts to identify them (per Criterion 9.1), greater attention to determining (per Criterion 9.2) and implementing (per Criterion 9.3) appropriate management measures, and through monitoring both implementation and effectiveness of these measures (per Criterion 9.4). FSC recognizes six types of *HCVs**:

- **HCV 1 – Species Diversity.** Concentrations of biological diversity, including *endemic species**, and *rare, threatened or endangered species**, that are *significant** at global, national, or regional levels.
- **HCV 2 – Landscape-Level Ecosystems and Mosaics.** *Intact Forest Landscapes** and large landscape-level *ecosystems** and *ecosystem** mosaics that are *significant** at global, national, or regional levels, and that contain viable populations of the great majority of the naturally occurring *species** in natural patterns of distribution and abundance.
- **HCV 3 – Ecosystems and Habitats.** Rare, threatened or endangered *ecosystems**, *habitats**, or *refugia**.
- **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.
- **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.
- **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**.

1.b. Normative Aspects of this HCV* Framework

Unless clearly indicated otherwise, this Framework is considered guidance and, by definition, informative and not normative. However, *The Organization** shall consider this *HCV** Framework as they identify, manage and monitor *HCVs** associated with the *Management Unit**, per Indicators 9.1.1., 9.2.1, and 9.4.1. When this Framework references normative requirements, the applicable *Criterion** or *Indicator** is noted.

Any FSC Policy, Standard or Procedure referenced or quoted in this guidance document retains its normative status.

2. Terminology

For consistency, it is important that *The Organization** and *Certification Bodies** are working with a common set of terminology when addressing *HCVs**. While not comprehensive, the following addresses some terms that have or may present particular difficulties. Note that Section 12 provides definitions for additional terms.

2.a. HCV vs. HCV Attribute vs. HCVA vs. HCVF

The first national *forest** management standard in the US (V1.1) was developed under P&C Version 4, and used the terms “HCV Forest” (HCVF) and “HCV attributes”. “Attributes” referred to the values to be maintained or enhanced, and HCVF to the *forests** in which the attributes occurred. For the US NFSS (V2.0) developed under P&C Version 5, values are now simply termed “HCV*” and the *forested** and non-*forested** areas that “possess and/or are needed for the existence and maintenance of identified *HCVs**” are termed *High Conservation Value Areas (HCVA)**. This expands the identification of *HCV** to non-*forested** areas.

2.b. Conservation Areas vs. HCVA

While all *HCVA** should be considered *conservation zones** or *protected areas** (and included in the *Conservation Areas Network**, per Criterion 6.5), not all *conservation** areas will be *HCVA**. Principle 9 addresses a fraction of the values addressed in other *Principles**, and also addresses a small number of important environmental and social values that are not addressed elsewhere in the US NFSS. Examples of values within *conservation** areas that would generally not rise to the level of *HCV** within *HCVA**, include riparian corridors where management is adapted to *restore**, maintain, or enhance the riparian habitat, *buffer zones** around nest sites of *rare, threatened and endangered bird species**, and *long-term* retention** areas that preserve viewscapes important to the economy of a *local community**. Examples of *HCVA** could include a regionally *significant** breeding area for a number of critically imperiled herptile *species** and the *buffer** around it, in which *management activities** are limited or modified to *protect** the breeding area, a rare *ecosystem** and the *stands** around it that are managed to help control and exclude *invasive species** from the rare *ecosystem**, or the last nesting area of a nearly extinct bird *species** that is highly sensitive to disturbance, and the area around it in which *management activities** are prohibited during the nesting season.

2.c. Landscape

The US NFSS definition of “*Landscape*” provides a specific *scale* for purposes associated with *Representative Sample Area (RSA)* establishment and assessment, but recognizes that different scales are appropriate for consideration of “*landscape*” in other contexts associated with the Standard. For *HCV* assessments and management, the “*landscape*” considered should be as defined in the second paragraph of the definition, i.e., the area within and around the *Management Unit* that could be affected by the *management activities* occurring within the *Management Unit*, and also where activities occurring external to the *Management Unit* could affect the ability of *The Organization* to maintain *significant* environmental and social values within the *Management Unit*. Typically, a smaller *management unit* will have a smaller *landscape*, and a larger *management unit* a larger *landscape*. However, this ‘rule’ will not apply in some situations, such as a smaller *management unit* that occurs at the headwaters of an important waterway where the *management activities* could have critical downstream impacts, or a larger *management unit* that occurs in isolation within a developed environment.

2.d. Management Unit vs. Contiguous Lands

The *Management Unit* consists of the defined lands that are managed together under “a set of explicit *long-term* *management objectives* which are expressed in a *management plan*”. These lands may occur as a single contiguous block of land, or may occur as detached and separate blocks of land that are managed in concert.

Some types of *HCV* require consideration of contiguous *forest* or lands of a certain size. Identification of this kind of value should be completed initially without consideration of the *Management Unit* boundaries—does such a value exist in the landscape within which any portion of the *Management Unit* occurs? If so, the *HCV* assessment should consider whether there are any portions of the *Management Unit* that should be considered *HCVA* due to their importance for maintaining the *HCV*.

2.e. FSC US Regions vs. Regionally Significant

FSC US has defined a set of regions that represent differences that are important for conformance with particular *Indicators* in Principle 6. For the purposes of assessing and identifying *HCV 1* and *HCV 2* (i.e., values that are significant at global, national, or regional levels), the “regional” context should be ecological only. Ecological Provinces defined by Cleland 2007 should be used for this purpose. If data for the region are limited, or in the cases of very small ecological provinces, a larger area may be justified. Where justified, using *Best Available Information*, a comparable classification system (e.g., TNC’s Ecoregion Map) may be used instead. Therefore, as used in this *HCV* Framework, regional considerations will always be at a sub-national scale.

2.f. Precautionary Principle/Approach

Per Criterion 9.3, when the available information indicates that *management activities* pose a threat of severe or irreversible damage to the environment or a threat to human welfare, *The Organization* is required to take explicit and effective measures to prevent the damage and avoid the *risks* to welfare, even when the scientific information is incomplete or inconclusive,

and/or when the vulnerability and sensitivity of environmental values are uncertain, i.e., in a manner consistent with the *precautionary approach*^{*}. Avoiding *risks*^{*} when scientific information is incomplete or inconclusive is appropriate for Principle 9, given the vulnerability and sensitivity of the values in question. When implementing the *precautionary approach*^{*}, *HCVs*^{*} are understood to be *critical*^{*}, fundamental, or *significant*^{*} and therefore any threat to a *HCV*^{*} is considered to be a threat of severe or irreversible damage.

2.g. Management

Management activities^{*} may range from zero or minimal interventions to a specified range of appropriate interventions and activities designed to maintain or enhance identified *HCV*^{*}. Maintenance or enhancement of *HCVs*^{*} does not necessarily prohibit other uses of, or activities within, an *HCVA*^{*}, including *silvicultural*^{*} uses, as long as (per Indicator 9.3.1) any *management activities*^{*} implemented in *HCVAs*^{*} maintain or enhance the *HCVs*^{*} and the extent of the *HCVA*^{*}.

3. Information and Data Sources

3.a. Overarching Best Available Information^{*}

The purpose of listing the below overarching *Best Available Information*^{*} is to avoid having to list it repetitively for each *HCV*^{*} in the following sections.

The Organization^{*} is required to use *Best Available Information*^{*} (per Indicator 9.1.1) and consult with *rights holders*^{*} and *stakeholders*^{*} (per Indicator 9.1.3) when completing their assessment and identification of *HCVs*^{*}, and are also required to consult with *rights holders*^{*}, *stakeholders*^{*} and *experts*^{*} when developing management strategies for *HCVs*^{*} (per Indicator 9.2.2) and as part of their monitoring program (per Indicator 9.4.2). Finally, per Indicator 9.1.1 (through the reference to the types of *HCV*^{*} defined in Criterion 9.1), *The Organization*^{*} is required to identify *HCV 5*^{*} and *HCV 6*^{*} through *engagement*^{*} with particular *stakeholders*^{*} - *local communities*^{*} and *Indigenous Peoples*^{*} (i.e., *Native American*^{*} groups). These four sources of information (i.e., *Best Available Information*^{*}, *rights holders*^{*}, *stakeholders*^{*} and *experts*^{*}) will be overlapping in many cases, and are presented all together in the following lists, as well as in other lists of information sources later in this document.

3.a.i. Best Available Information^{*} for Identifying and Assessing *HCVs*^{*}

- Data gathered to address rare or important ecological features associated with Criteria 6.1, 6.2, 6.3, and 6.4
- *High Conservation Value*^{*} surveys of the *Management Unit*^{*}
- Relevant databases and maps
- *Culturally appropriate*^{*} engagement with *Native American*^{*} groups, affected *rights holders*^{*}, affected *stakeholders*^{*} and interested *stakeholders*^{*}, per the FSC US Guidance on *Free Prior and Informed Consent*^{*} (US NFSS, Annex F)
- Existing assessments of environmental and social values undertaken by public agencies and/or other *conservation*^{*} groups, including State Wildlife Action Plans and NatureServe

- Existing assessments of environmental and social values undertaken on adjacent land ownerships
NOTE: If the *Management Unit** has not been surveyed for social or environmental values, but is adjacent to an area with known *significant** values, then consultation with an expert may be critical for determining if the values also occur on the *Management Unit** and should be considered *HCVs**.
- Initial consultation for *HCV 1**, *HCV 2** and *HCV 3** is generally with state Natural Heritage Programs, state wildlife agencies, the US Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS)
- On *large* Management Units**, for *HCV 1*, *HCV 2*, *HCV 3* and *HCV 4**, an *Management Unit**-specific assessment including on-site review may be appropriate if the *Management Unit** has not been assessed by an *expert** and evidence suggests that *HCVs** may be present
- For relevant elements of *HCV 5** and *HCV 6**, *engagement** with *local communities** and *Native Americans** (per Criterion 9.1)
- Common Guidance for the Identification of High Conservation Values: A Good Practice Guide for Identifying HCVs Across Different Ecosystems and Production Systems*. HCV Network. September 2017
- High Conservation Value Guidance for Forest Managers (FSC-GUI-30-009)*. Forest Stewardship Council. 2020. <https://fsc.org/en/document-centre/documents/resource/422>

3.a.ii. Best Available Information* for Developing Management Strategies for HCVs*

- Culturally appropriate* engagement** with *Native American** groups, affected *rights holders**, affected *stakeholders** and *interested stakeholders**, per the FSC US Guidance on *Culturally Appropriate Communication & Free Prior and Informed Consent* (US NFSS, Annex F)
- Consultation with *experts**
- Existing *conservation** planning undertaken by public agencies and/or other *conservation** groups, including State Wildlife Action Plans and NatureServe
- Common Guidance for the Management & Monitoring of High Conservation Values: A Good Practice Guide for Adaptive Management of HCVs*. HCV Network. April 2018
- High Conservation Value Guidance for Forest Managers (FSC-GUI-30-009)*

3.a.iii. Best Available Information* for Monitoring Methodologies

- Engagement** with *rights holders**, consistent with Criteria 3.5, 4.5 and 4.7
- Culturally appropriate* engagement** with *Native American** groups, affected *stakeholders** and *interested stakeholders**, per the FSC US Guidance on *Culturally Appropriate Communication & Free Prior and Informed Consent* (US NFSS, Annex F).
- Existing *conservation** planning undertaken by public agencies and/or other *conservation** groups, including State Wildlife Action Plans and NatureServe
- Monitoring conducted by the *Native American** groups and/or *local communities**
- Consultation with *experts**
- Common Guidance for the Management & Monitoring of High Conservation Values: A Good Practice Guide for Adaptive Management of HCVs*. HCV Network. April 2018
- High Conservation Value Guidance for Forest Managers (FSC-GUI-30-009)*

3.b. Documenting HCV* Assessments

Per Indicator 9.1.1, *The Organization** is required to document their HCV* assessment. This should be done in a transparent manner that can be reviewed by auditors and *interested stakeholders**. The documentation may be in the form of an HCV* assessment report, or (similar to the *management plan**) may be a collection of documents, reports, records, maps and other materials as applicable. However, if the second approach is taken, *The Organization** should prepare a summary that identifies the various materials within the collection, and summarizes the assessment process and its conclusions.

Documentation should include:

- Who conducted the assessment (e.g., name, qualifications, affiliation)
- *Rights holders**, *experts** and *stakeholders** consulted (e.g., name, affiliation, *rights** held)
- Records demonstrating when and how *culturally appropriate** consultations were implemented (e.g., records of phone calls, lists of meeting attendees, copies of email correspondence)
- What additional sources of *Best Available Information** were used
- HCV* identified and associated areas designated as HCVA*, including detailed maps of HCV* and HCVA* (digital or paper-based)
- Status of identified HCV* (e.g., short-term and *long-term** threats, overall viability)

*Engagement** with *experts** may include primary consultation (i.e., direct *engagement** with the *expert**) and/or secondary consultation. An example of *secondary consultation* is when a state empanels a committee of *expert** botanists to determine which plants are rare, threatened, or endangered within a state or region (i.e., the landowner can rely on the committee's work without engaging in independent consultation).

3.c. Culturally Appropriate Stakeholder Consultation

The primary source of *Best Available Information** for HCV 5* and HCV 6* is direct consultation with *local communities** and *Native American** groups that have a connection to the *Management Unit** or the *landscape** in which it occurs. The US NFSS Annex F, Guidance for *Culturally Appropriate Communication & Free, Prior and Informed Consent (FPIC)*, will assist *The Organization** in determining the best *engagement** approach and also with *FPIC**, if required per Criterion 3.2 and/or Criterion 4.2. For *engagement** with *local communities** that are not explicitly addressed in the US NFSS Annex F, a variety of consultation approaches may be considered depending on the context and situation. Some *local communities**, for example, may be approached through public notices and solicitations for information, whereas others may be better served through public meetings or face-to-face *engagement** with stakeholder representatives (e.g., Town Managers, Board of Supervisors, County Planners, Water District Managers, or other government officials).

In some cases resources are of such importance to a *Native American** group that *tribal** representatives are unwilling to share the location of these resources with outside parties. In some cases, the location of particularly important sites are known to only a few *tribal** members. In such situations, one potential approach is to periodically share maps of proposed *management activities** with *tribal** representatives and then leave it to their discretion as to

whether to share information regarding potential *HCVs** that might be affected by the *management activities**.

3.d. When New Information Becomes Available

Per Indicator 9.1.1, if *The Organization** learns of new applicable information, it needs to update the assessment to incorporate the information. New information may become available following research completed by *The Organization** or others, as a result of *HCV** monitoring *The Organization** conducts, through the observations of staff or *stakeholders** or through other means. If this information suggests that there may be an *HCV** that was not previously identified, or that there has been a change in the status of a known *HCV**, the assessment needs to be updated to reflect this information, and both management and monitoring adjusted as appropriate.

4. HCV Identification and Assessments

Per Indicator 9.1.1, it is primarily the responsibility of *The Organization**, or the landowner seeking certification, to conduct *HCV** assessments that are appropriate to the *Management Unit**, its *landscape** context, and the FSC US region in which it occurs, and that include identification of *HCV** and *HCVA**, status assessment of *HCVs**, and *engagement** with *stakeholders** and *rights holders**. Due to the unique context of each *Management Unit**, this will generally result in a unique set of *HCVs** and *HCVA** for each *Management Unit** that has *HCVs**. It is important to note that one possible assessment finding is that a *Management Unit** does not have any *HCVs** present.

The rigor of the assessment, including *engagement**, should increase in situations where, due to the context of the *Management Unit** and its *management activities**, there is a particularly high number of *HCVs** and/or the *risk** of negative impacts on the *HCVs** is particularly high. Specific expectations for identification and assessment of *HCV** within *Family Forests** are provided in Section 11 of this Framework document.

If initial evaluations determine that there is a high potential for one or more *HCVs**, *The Organization** may choose to designate an *HCVA** without further study (and then take appropriate steps to manage and monitor the area), instead of undertaking additional studies to determine if the area in question actually harbors the *HCV(s)**.

4.a. National HCV for All Organizations

If any portion of an *Intact Forest Landscape (IFL)** occurs within the *Management Unit**, it will always be *HCV 2** (per Indicator 9.1.2). The other National *HCV** described below are considered *HCV** except in very rare situations (for which *The Organization** has very well developed and documented rationale). *The Organization's** *HCV** assessment must consider these National *HCV** and also regionally and more *locally** *significant** environmental and social values—additional guidance on identifying these values follows.

4.a.i. Intact Forest Landscapes*. Per Principle 9, *Intact Forest Landscapes (IFL)** shall be considered *HCV** (*HCV 2**). Being the last remaining large unfragmented *forested** areas in the

world, *IFLs** are valued for their environmental, social, and intrinsic worth and are considered globally *significant**.

Identifying *IFLs**: Global Forest Watch (<http://www.intactforests.org>) and/or other data that are more recent, accurate and/or refined than those provided by Global Forest Watch, shall be used to identify *IFL** that existed within the *Management Unit** as of January 1, 2017. Areas identified by Global Forest Watch shall be considered *IFL** unless evidence-based assessments determine that the area does not meet the definition of *IFL** (i.e., the methodology used is more recent, accurate and/or refined than the Global Forest Watch methodology¹). Areas that have been or continue to be disturbed by commercial or *industrial activities**, developed areas, and areas with *infrastructure** associated with the aforementioned activities and development, should not be included in *IFLs**. Areas with evidence of old disturbances and low-intensity disturbances, such as selective logging for non-commercial purposes and hunting, should be included in *IFLs**.

Managing *IFLs**: Per Indicator 9.2.3, certificate holders for non-federal *Management Units** are required to designate and manage at least 80% of the total area of *IFL** identified within the *Management Unit** and not less than 123,500 acres (50,000 ha) as core area, while the entirety of *IFLs** on federal lands are to be designated and managed as *core areas** (per USFS Supplement to Indicator 9.2.3). *Core areas** are to include the most important cultural and ecological values and be managed to exclude *industrial activity**. *Core area** management strategies should 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**. Maintenance of *IFL* core areas** will require identifying and addressing potential threats.

Limited *industrial activity** within *IFL* core areas** is allowed only if all effects of *industrial activity**:

- Are restricted to a *very limited portion** of the *core area**, not to exceed 0.5% of the *core area** in any one year, nor to affect a total of more than 5% of the *core area**
- Do not reduce the *core area** below 50,000 ha
- Will produce clear, substantial, additional, *long-term* conservation** and social benefits consistent with Criterion 9.2

Portions of *IFLs** that are not designated as *core areas** are still *HCV 2** and therefore must be managed to maintain or enhance their *HCV 2** values. This includes maintaining the viability of their *biodiversity** concentrations, including plant and animal indicator *species**, keystone *species**, and/or guilds associated with large intact *natural forest* ecosystems**.

Monitoring *IFLs**: *The Organization** is expected to monitor trends, impacts of *management activities**, and threats. The baseline condition of any variable is key, as trends and effectiveness may change over time. Annual monitoring of extent and intactness of the *IFL** is recommended so that new threats may be quickly identified. Both *engagement** and ecological *protection** strategies are fundamental to a working monitoring program.

4.a.ii. Old Growth* Forest*. All *old growth* forest** (*Type 1** and *Type 2**) is *HCV** (*HCV 3**), and subject to the requirements of Principle 9. Additionally, per Indicator 6.8.2, *Type 1** and

¹ <https://data.globalforestwatch.org/datasets/intact-forest-landscapes-2016>

Type 2 old growth** are to be *protected**, including from timber *management activities**, except as needed to maintain the ecological values associated with the *stand**. Individual *old growth** trees or *stands** with *old growth** trees that don't meet the definition of *old growth** (*Type 1** or *Type 2**) are addressed as *legacy trees** (per Indicator 6.6.3). *Old growth* forest**, as defined, is always associated with pre-European remnant *forests**. *Type 1 Old Growth** may also represent *primary forest**.

4.a.iii. Primary Forest*. All *primary forest** is *HCV* (HCV 3*)*, subject to the requirements of Principle 9, due to the rarity of *forest* ecosystems** that have retained the principal characteristics and key elements of native *ecosystems** and have remained relatively undisturbed by human economic activity. Any evidence or documentation that *forest* management activities** have occurred in an area, even if it is not readily visible, would exclude the area from being *primary forest**. In fire- or other disturbance-dominated *ecosystems**, *primary forest** may not always be dominated by mature trees, or any trees at all, but instead may present as a mosaic of older and younger *stands**. Maintenance of this *HCV** will focus on *conserving** the principal characteristics and key elements of the native *forest**, and limiting human economic activities.

4.a.iv. Wilderness Areas. Wilderness areas enrolled in the National Wilderness Preservation System (<https://www.wilderness.net/>) or a similar state-level system, meet the definition for *HCV 6* and may also, in their entirety or within a portion of the area, meet the definition for *HCV 2*. Maintenance of this kind of *HCV* will preclude forest management activities and use of equipment that do not maintain or enhance the areas' wilderness characteristics, taking into consideration the attributes associated with the designation of the specific Wilderness Area. Designated wilderness areas are found throughout the United States but are more common in the western regions (i.e., Pacific Coast, Rocky Mountains, and Southwest).

4.a.v. Drinking Water Supply Management Zones. Some communities have designated areas that are *critical** for *protection** of the community's drinking water supplies. With rare exception, these meet the definition of *HCV 4** and are subject to the requirements of Principle 9. This includes public water drinking systems that are regulated by the US Environmental Protection Agency², but not smaller systems with more limited numbers of users. Maintenance of these areas does not necessarily preclude logging or other *forest* management activities** so long as they are compatible with laws and regulations (Principle 1) and maintain or enhance the *ecosystem service** (i.e., drinking water) provided to the community.

Additionally, any designated public drinking water surface supply (i.e., reservoir, lake, pond, or river), will meet the definition of *HCV 4**. Areas within 250 feet of those surface supplies that have *soils** rated as prone to *erosion**, slopes rated as high hazard for failure, and areas within the 100-year flood zone, should be included within the *HCVA** for these *HCV**.

4.a.vi. National Register of Historic Places. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and *protect**

² <https://www.epa.gov/compliance/safe-drinking-water-act-sdwa-compliance-monitoring>

A public water system provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year. A public water system may be publicly or privately owned.

America's historic and archeological resources. While occurrence of these registered historic places is likely rare within FSC certified lands, any that do occur are *HCV 6** and subject to the requirements of Principle 9. *Management activities** that maintain or enhance the *HCV** are acceptable.

4.a.vii. UNESCO World Heritage Sites. The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, *protection** and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. This is embodied in an international treaty called the 'Convention concerning the Protection of the World Cultural and Natural Heritage,' adopted by UNESCO in 1972. Any sites that are included in the World Heritage List automatically meet the definition of *HCV 6**. *Management activities** that maintain or enhance the *HCV** are acceptable.

4.b. National HCV for Federal Lands Only

Consistent with the expectation that *ecosystem services** and other public benefits are given priority on federal lands, when the following occur on federal lands, they are considered *HCV**.

4.b.i. Roadless Areas on Federal Lands. Large areas without any evidence of roads (including no evidence of skid trails) are extremely rare in the conterminous US and provide unique *habitat**, with a higher likelihood of intact natural functions and *ecosystem** processes. When they occur on federal lands, the following are considered *HCV 3**:

- Undeveloped areas that are at least 1,000 acres in size and that meet the minimum criteria for wilderness consideration under the Wilderness Act—in regions with very little undeveloped land, the size of the area that should be considered may be smaller
- Any area that meets the definition of 'roadless' as provided in the Roadless Rule

Typically, maintenance of this kind of *HCV** will preclude commercial *forest** management, unless they can be achieved without the construction of new roads and maintain or enhance the wilderness characteristics.

4.b.ii. High Carbon *Forests on Federal Lands.** Regulation of climate is a crucial *ecosystem service**, and in turn, climate change can affect other *ecosystem services** such as regulation of floods and drought. *Forest* stands** that store relatively high amounts of carbon in their trees, *soils**, and other components thus represent both an important value, and a potential threat if intensive harvests or other management significantly reduces their carbon stores. High carbon *forests** are most likely to be found in publicly owned *forests**, especially federally-administered *forests**, where they are normally to be considered *HCV 4**. While *old growth** and other *late successional* forests** are more likely to have higher carbon levels, stand age alone does not determine carbon levels. Definitions and information on the presence of such *forests** are evolving. In the Pacific Northwest, sites on *public lands** that have >200 Mg/ha of above-ground biomass, or are capable of easily reaching that threshold should generally be considered high carbon, pending new information.³ Comparable thresholds for other regions are being

³ In the PNW, 200 Mg/ha (metric tonnes) represents the lower range of biomass for old growth forests, per Krankina et al (2014), High biomass forests of the Pacific Northwest: who manages them and how much is protected? Environmental Management 54:112-121. Krankina et al (2014) used data from: NBCD

developed by the Woods Hole Institute & Geos Institute. Peatlands in *forested* landscapes** are also likely to have high carbon storage levels, and should also be assessed for their carbon storage function. Management strategies to maintain or enhance this *HCV** (per Indicator 9.2.1) should maintain high carbon stands' natural ability to store and sequester carbon. Harvests should be limited to operations that maintain that natural ability, and not reduce on-site carbon levels at any time, except in cases where necessary to *protect** lives and property (e.g., thinning of smaller trees in urban interface zones) or to *restore* stands** and *ecosystems** to *natural conditions** that are more resilient to fire or other disturbances (e.g., thinning of smaller trees in previously fire-suppressed areas).

4.c. *HCVs Identified in the FSC US Controlled Wood National Risk Assessment*

The US National Risk Assessment (US NRA) is the primary source of information used by FSC *Chain of Custody** certificate holders that have Controlled Wood within the scope of their certificate to determine whether they have a risk of receiving materials from *forests** in the conterminous US where certain undesirable activities are occurring. One category of risks assessed is the risk of receiving materials from *forests** where the *forest* management activities** threaten *HCVs**. However, the scale of the assessment completed for the NRA was much more coarse than the assessment that is needed by a FSC Forest Management certificate holder. The US NRA is based on the existing *Draft High Conservation Value Forest Assessment Framework* for the conterminous US. Future revisions of the US NRA will need to be aligned with this *HCV* Framework*.

4.d. *Additional Considerations for Identifying HCV**

Non-native ecosystems* will never be *HCV 1**, *HCV 2**, or *HCV 3**

Not all wetlands* are HCV*; not all riparian areas* are HCV*—only those that: 1) have *significant** concentrations of *biodiversity** (including *endemic** or *rare, threatened and endangered species**) compared to other *wetlands*/riparian areas** globally, nationally, or regionally; 2) are *landscape* scale** in nature, intact, and *significant** compared to other *wetlands** globally, nationally, or regionally (such as a particularly large, intact peatland); 3) are representative of a *rare ecosystem** or *habitat**, or serve as a *refugia**; 4) provide a *critical* ecosystem service**, such as water filtration or storage, the loss of which would directly cause suffering to recipients of the service; 5) provide a resource that is fundamental to satisfying a basic necessity of survival for a *local community**; or 6) have *significant** cultural, archaeological or historical value compared to other sites globally, nationally, or regionally, or are of *critical** importance for *Native American** groups.

Not all rare, threatened and endangered species* are HCV*; not all listed species are HCV*—the focus of *HCV 1** is that these *HCV** represent concentrations of *biodiversity**, typically areas that have a high number of *endemic species** or *rare, threatened and endangered species**, when compared to other areas globally, nationally, or regionally.

(2000) National Biomass and Carbon Dataset for the Year 2000, Woods Hole Research Center Map 2011, <http://www.whrc.org/mapping/nbcd/index.html>. The NBCD 2000 dataset/map is also at: <https://databasin.org/datasets/b8f0aab08198484a81f42cc0d98e62ad>. An updated version specific to the Northeast is at: <https://databasin.org/datasets/e41f3f04b51041acb37fadd2d73c8e3b>.

Typically, an *HCV 1** will not be identified for a single *species**, with the exception being in situations where the *species** is highly imperiled and is found in a population large enough to be considered a concentration or *significant**, or where survival of the *species** is critically dependent on the area in question (typically because there is so little *habitat** remaining), or where *Best Available Information** indicates that every surviving individual of the *species** is critical to the viability of the *species**, or where there is a particularly important genetic variant, subspecies, or variety.

No *HCV is defined only by the presence of big trees**—other characteristics indicative of a particular *HCV** type must also be present.

Not all fish-bearing streams are *HCV**—similar to the *wetlands** and *rare, threatened and endangered species** considerations above, there would need to be additional characteristics, beyond simply presence of fish, for the stream to be considered an *HCV**.

5. HCV 1 – Species Diversity

HCV 1 – *Species Diversity. Concentrations of biological diversity* including endemic species*, and rare, threatened or endangered species*, that are significant* at global, national, or regional levels.**

5.a. Assessment and Identification of HCV 1*

*Significant** concentrations of *biodiversity** include areas that contain concentrations of *rare, threatened, and endangered species**, *endemic species**, natural communities, or other *biodiversity** values that occur in numbers, frequency, quality, and/or density that are sufficiently outstanding to be considered unique or highly important in comparison with other areas within the ecoregion within which the *Management Unit** is located. Identification and assessment of *HCV 1** should begin with the national considerations provided in Sections 4.a and 4.b, and then follow the guidance below to determine if there are additional *HCV**.

Assessing concentrations of *biological diversity** that are *significant** at global, national, or regional levels requires differentiating between resources that are addressed primarily by the requirements of Principle 6 versus those that rise to the level of being considered under Principle 9. All *endemic species** and *rare, threatened and endangered species** must be considered under Principle 6, but not all such occurrences result in *HCV** designation and the requirements of Principle 9.

While *HCV 1** focuses primarily on concentrations of *biodiversity** with multiple *endemic species** and/or *rare, threatened and endangered species**, a concentration of a single *species** may also rise to the level of *HCV 1**. This is possible under two scenarios:

1. Important populations (e.g., particularly important genetic variants, subspecies or varieties), or a great abundance of an individual *endemic** or *rare, threatened and endangered species** representing a substantial proportion of the regional, national or global population, which are needed to maintain the *species** as a whole
2. Small populations of individual *endemic** or *rare, threatened and endangered species**, in cases where the regional, national, or global survival of that *species** is critically

dependent on the area in question (such *species** are likely to be restricted to a few remaining areas of *habitat**)—in these cases, there is often a consensus (among many *stakeholders**) that every surviving individual is globally *significant**

Concentrations of *biodiversity** that occur temporally may also be *HCV 1**. Examples could include regionally *significant** hibernacula for bats, stop-over sites for migratory birds, or breeding areas (i.e., where an *rare, threatened and endangered species** or *endemic species** is temporarily concentrated).

5.a.i. Resources & Guidance for *HCV 1**:

The below datasets are focused on areas likely to have concentrations of *biodiversity** that are *HCV 1**. Additional consultation with *stakeholders** and/or *experts** may be appropriate if the *Management Unit** is adjacent to an identified area with regionally *significant** concentrations of *biodiversity** values, or if the *Management Unit** contains *ecosystems** and site conditions that are similar to such areas.

- International Union for the Conservation of Nature (IUCN) Management Category ‘1a’ (when assigned to protected areas for inclusion in the United Nations Environment World Conservation Monitoring Center (WCMC) World Database for Protected Areas (WDPA) and the Commission for Environmental Cooperation (CEC) North American Terrestrial Protected Areas Database)
 - <https://www.unep-wcmc.org/resources-and-data/wdpa>
 - <http://www.cec.org/tools-and-resources/map-files/north-american-protected-areas-2017>
- NatureServe Maps of Biodiversity Hotspots & Biodiversity Importance
 - <https://www.natureserve.org/conservation-tools/natureserve-hotspots-map>
 - <https://www.natureserve.org/conservation-tools/projects/map-biodiversity-importance>
- Areas identified through The Nature Conservancy’s (TNC) Ecoregional Assessments as having *significant** concentrations of *biodiversity**
 - <https://www.conservationgateway.org/ConservationPlanning/SettingPriorities/EcoRegionalReports/Pages/EastData.aspx>

As not all areas with *significant** concentrations of *biodiversity** have been identified through the above datasets, the following considerations suggest contexts with a higher likelihood of *HCV 1** occurrence. If any of the following exist within or adjacent to the *Management Unit**, the *HCV** assessment should be more rigorous in its evaluation of whether concentrations of *biodiversity** that are *significant** at global, national or regional *scales** are, in fact, present within the *Management Unit**.

Concentrations with Multiple *Species**:

- UNESCO Biosphere Reserves
 - <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/>
 - <https://www.nature.nps.gov/biology/globalconservation/biosphere.cfm>
- Areas placed in the federal Protected Areas Database (PAD) as GAP Status 1 or GAP Status 2
 - <https://gapanalysis.usgs.gov/padus/data/download/>

- <https://gapanalysis.usgs.gov/padus/>
 - <https://gapanalysis.usgs.gov/padus/viewer/>
- Areas with a number of *species** that are included on the IUCN Red List and are classified by IUCN as Critically Endangered, Endangered, or Vulnerable
 - <https://www.iucnredlist.org/search/map>
- *Management Units** with federally-designated “critical habitat” for a number of *species** that are federally listed as threatened or endangered
 - <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>
 - <https://ecos.fws.gov/ipac/>
- A county or watershed identified by NatureServe as having a large number of *species** of *conservation** concern
 - <http://www.natureserve.org/conservation-tools/listed-and-imperiled-species-county-and-watershed/county-map>
 - <http://www.natureserve.org/watershed-map>
- Areas with a number of viable populations of *rare*, *threatened* and *endangered species** associated with the same *ecosystem** type or *ecosystem** mosaic. NOTE: Accessing data for this scale of assessment may be more difficult for some *Organizations**, but these kinds of places can be identified using the following resources
 - Consultation with state Natural Heritage Program or similar state agency
 - State and federal *threatened species** and *endangered species** assessments
 - US Fish and Wildlife Service Information for Planning and Consultation (IPaC) web tool (<https://ecos.fws.gov/ipac/>)
- Regionally *significant** migratory staging areas, seasonal breeding sites, migratory corridors, and other seasonal concentrations of *species**
 - <https://www.audubon.org/important-bird-areas>
 - Other data sources: State Natural Heritage Programs, Federal and state wildlife agencies, surveys and assessments of the *Management Unit**, local or regional *conservation** organizations
- *Management Units** with known occurrences of natural communities or *habitats** identified as critically imperiled or critically rare, or endemic *habitats** that are severely limited in distribution and/or occurrence
 - Data sources: State Natural Heritage Programs, State Wildlife Action Plans, surveys and assessments of the *Management Unit**, *local** or regional *conservation** organizations
- Roadless areas (i.e., areas without evidence of roads or skid trails) greater than 500 acres

Concentrations with a Single *Species**:

- *Management Units** with federally-designated “critical habitat” or known occurrences of a *species** listed as “critically endangered” by IUCN or “critically imperiled” by NatureServe, where only a very small population of the *species** remains extant and survival of the *species** is dependent on maintenance of the *habitat**/occurrence
 - Data sources: State Natural Heritage Programs, NatureServe, Federal and state wildlife agencies, surveys and assessments of the *Management Unit**
- Regionally *significant** occurrences of an *endemic species** that is listed as “vulnerable,” “endangered,” or “critically endangered” by IUCN or national or state lists, that represent

a substantial proportion of the regional, national or global population and where the occurrence is needed to maintain the *species** as a whole

- Data sources: State Natural Heritage Programs, NatureServe, Federal and state wildlife agencies, surveys and assessments of the *Management Unit**
- Regionally *significant** migratory staging areas, seasonal breeding sites, migratory corridors, or other seasonal concentrations of an *rare, threatened and endangered species** or *endemic species** where a substantial proportion of the regional, national or global population of the *species** is concentrated for a period of time and that are therefore critical for survival of the *species**
 - <https://www.audubon.org/important-bird-areas>
 - Other data sources: State Natural Heritage Programs, Federal and state wildlife agencies, surveys and assessments of the *Management Unit**, *local** or regional *conservation** organizations

A more rigorous assessment may entail additional efforts to acquire more detailed or finer-scale data regarding *species** occurrences and or presence of particular *ecosystems**, more extensive consultation with *experts** and/or regional *conservation** organizations, and/or conducting field surveys.

5.b. Strategies for Managing HCV 1

In addition to the *Best Available Information** identified in Section 3.a, the following resources may provide strategies for maintaining or enhancing *HCV 1** identified through the above assessment:

- US Fish and Wildlife Service *species** recovery plans
- Landscape Conservation Cooperative Network
- State Natural Heritage Program, or *conservation** organization, *species** assessments
- State fish and wildlife department, or similar state agency, *species** assessments and management plans
- State Wildlife Action Plans
- Regional or local *conservation** organization *landscape** *conservation** plans
- In addition, per C9.2 of the Standard, affected *rights holders**, *affected stakeholders** and *interested stakeholders**, and *experts** shall be engaged in the development of strategies for maintaining or enhancing *HCV 1**. Appropriate *experts** may include agency staff, academics, and qualified ecologists

Strategies to maintain *HCV 1** occurrences should consider: *Conservation zones**, *protected areas**, harvest prescriptions, and/or other strategies to *protect** threatened, endangered, *endemic species**, or other concentrations of *biological diversity** and the ecological communities and *habitats** upon which they depend, sufficient to prevent reductions in the extent, integrity, quality, and viability of the *habitats** and *species** occurrences. Where strategies are intended to enhance *HCV 1** occurrences, they should consider: measures to develop, expand, and/or *restore** *habitats** for such *species**.

5.c. Monitoring HCV 1*

In addition to the *Best Available Information** identified in Section 3.a, the following resources may provide strategies and/or data for monitoring *HCV 1** identified through the above assessment:

- Consultation with the agency, or agencies, with regulatory authority over the elements (e.g., *rare, threatened, or endangered species**; federally-designated “critical habitat”) that result in designation of the area as a concentration of *biological diversity** that is *significant** at global, national, or regional levels
- Review of *species** assessments, management plans, and recovery plans, where available
- Site-specific field surveys if warranted

Monitoring programs for *HCV 1** should have sufficient scope, detail and frequency to detect changes in the *HCVs**, relative to the initial assessment and status identified for each *HCV**.

6. HCV 2 – Landscape-Level Ecosystems and Mosaics

HCV 2 – *Landscape*-Level Ecosystems and Mosaics. *Intact Forest Landscapes** and large *landscape*-level ecosystems** and *ecosystem** mosaics that are *significant** at global, national, or regional levels, and that contain viable populations of the great majority of the naturally occurring *species** in natural patterns of distribution and abundance.**

6.a. Assessment and Identification of HCV 2

Identification and assessment of *HCV 2** should begin with the national considerations provided in Sections 4.a and 4.b, and then follow the guidance below to determine if there are additional *HCV**. Assessing *landscape*-level ecosystems** and mosaics requires identifying *IFLs** and other large *forested** and non-*forested** areas that are *significant** at global, national, or regional levels. Using much of the same *Best Available Information** from *HCV 1**, the assessment must distinguish between those ecological features that are addressed only as part of Principle 6 from those that rise to the level of *HCV** under Principle 9.

While *Intact Forest Landscapes (IFL)** are defined as being minimally influenced by human economic activity and globally *significant** (see Section 4.a.i), other *HCV 2** are not required to be as undisturbed or pristine, and assessment of *significance** at an ecoregion or coarser scale is needed.

The term “large” is challenging to define and can vary by region. A 1,000-acre *forest** in the Pacific Northwest, for example, might not be considered notably large, but a *forest** of the same size in the Midwest or Southeast might be relatively large. The focus of *HCV 2** is on *forests** of a such as size as to make them *significant** at a regional scale. Assessments for *HCV 2** features, therefore, must consider regional contexts. Generally, “large” should be related to the area needed to maintain viable populations, especially of large or wide-ranging *species**.

For the purposes of this Framework “...contain viable populations of the great majority of naturally occurring species in natural patterns of distribution and abundance” can be understood as the presence and relatively natural distribution of the majority of the *species** expected to occur in a specific *landscape** or *ecosystem** mosaic, with recognition that some *species** may be locally extirpated or missing. Therefore, an area will not qualify as *HCV 2** if it has lost many of the *species** typical of such *ecosystems** in their natural state, or been so heavily disturbed that the relative abundance, spatial distribution, and/or regeneration has been seriously and permanently altered. Man-made, converted, heavily degraded or *fragmented** *ecosystems** typically do not qualify, such as those with a dominance of *invasive species**, disrupted *size/age class** distributions of populations, and a loss of significant *ecosystem** processes (e.g. fruit masting, dispersal of key *species**).

6.a.i. Guidance & Resources for Non-IFL* HCV 2*:

In addition to the overarching information sources provided in Section 3.a and those identified for *HCV 1**, large *landscape** level *ecosystems** or mosaics may also be assessed and identified using the following resources:

- Aerial photography, LiDAR data, and/or satellite imagery
- Aerial surveys and/or ground visits if the weight-of-evidence suggests that potential for *forest* fragmentation** that might not be visible on remote-sensing imagery
- Reports and analyses from Natural Heritage Programs, NatureServe, IUCN Red List, USFWS, The Nature Conservancy, Global Forest Watch, WWF, and others
- Forests recognized as being *significant** at the region or coarser scale in formally recognized reports or peer-reviewed journals, due to the unusual *landscape*-scale biodiversity** values provided by size and condition of the *forest** relative to regional *forest** land cover and land use trends
- Consultation with topic area *experts**

Additionally, the following considerations suggest contexts with a higher likelihood of *HCV 2** occurrence. If any of the following contexts exist within or encompassing the *Management Unit**, the *HCV** assessment should evaluate more closely whether the *landscape*-scale forest** is *significant** at global, national or regional scales:

- *Natural forests** that have experienced lesser levels of past human disturbance (e.g., minimal timber harvesting) or other management (e.g. fire suppression), or areas within such *forests** (e.g., part or all of ownerships or *Management Units**)
- Managed native *forests** with *successional** stages, *forest** structures, and *species** composition that are similar in distribution and abundance to native *forests** that have experienced minimal human disturbance, excluding traditional Indigenous management regimes
- Native *forests** or *ecosystem** mosaics recognized as being *significant** to *biodiversity* conservation** because they contain *landscape*-scale biodiversity** values that are not present on other *forests** due to *landscape*-scale habitat** modifications on surrounding lands, (such as land use *conversion** or *forest* management* practices that have significantly altered *forest* biodiversity** values)
- Native *forests**, where if the characteristics of the *landscape*-scale forest** or *ecosystem** mosaic (e.g., *age class** structure or relative *species** abundance) were significantly altered, it would significantly affect regional *biodiversity**

- *Forests** that provide important *habitat* connectivity** between and/or buffering of larger *forest** areas and/or *refugia**; and wilderness areas, *forests** that are roadless, and/or have not been affected by *management activities**

6.b. Strategies for Managing Non-IFL HCV 2

In addition to the *Best Available Information** identified in Section 3.a, the following resources may provide strategies for maintaining or enhancing *HCV 2** identified through the above assessment:

- Reports and analyses from Natural Heritage Programs, NatureServe, IUCN Red List, USFWS, The Nature Conservancy, Global Forest Watch, WWF, and others
- Regional and *local* conservation** organization *landscape* conservation** plans
- If the *HCV 2** is the result of a particular management system, the continuation of that system will likely be the most effective management strategy
- Appropriate *experts** may include agency staff, academics, and qualified ecologists

Strategies to maintain *HCV 2** occurrences should consider: 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**. Examples include *conservation zones** and *protected areas**, with any commercial activity in areas that are not protected being limited to low-intensity operations that fully maintain *forest** structure, composition, regeneration, and disturbance patterns at all times. Where strategies are intended to enhance *HCV 2** occurrences, they should consider: measures to *restore** and reconnect *forest* ecosystems**, their intactness, and *habitats** that support natural *biological diversity**, and measures to *restore* species** and *ecosystem** function in areas where roads have been abandoned.

6.c. Monitoring Non-IFL HCV 2

In addition to the *Best Available Information** identified in Section 3.a, the following resources may provide strategies and data for monitoring *HCV 2** identified through the above assessment:

- Periodic evaluation of aerial photographs, LiDAR data, or satellite imagery to determine if *forest* fragmentation** is occurring within the *HCV 2**, if recent/current images are available
- Aerial surveys and/or ground visits if the weight-of-evidence suggests that potential for *forest* fragmentation** that might not be visible on remote-sensing imagery
- Monitoring of road usage and other access points to *HCV 2**

7. HCV 3 – Ecosystems and Habitats

HCV 3 – *Ecosystems and *Habitats**. Rare, threatened or endangered *ecosystems**, *habitats**, or *refugia**.**

7.a. Assessment and Identification of HCV 3

Identification and assessment of *HCV 3** should begin with the national *HCVs** in Section 4.a and 4.b, and then follow the guidance below to determine if there are additional *HCV 3**. In determining whether an *ecosystem** or *habitat** should be considered rare, consideration should be given to rarity at an ecoregion scale, the level of threat that it faces or its rare or unique *species** composition or other rare or unique characteristics, such as distinctiveness in terms of size, quality (particularly lack of human disturbance), or location within the *ecosystem's** geographic range (e.g., northern-most example of a particular *ecosystem**).

When assessing the potential for *HCV 3** specifically associated with *refugia**, there are two types which may have an *HCV** (in addition to seasonal refuges considered under *HCV 1**):

- Ecological *refugia**: Isolated areas which are sheltered from current changes (e.g. human threats or climatic events), and where plants and animals typical of a region may survive
- Evolutionary *refugia**: areas where certain types or suites of organisms persisted during a period when climatic events (e.g. glaciations) greatly reduced habitable areas elsewhere. Such *refugia** often support high overall *species** richness and significant numbers of *endemic species**

7.a.i. Guidance & Resources for HCV 3*:

In addition to the above overarching information sources identified in Section 3.a and those identified for *HCV 1**, rare *ecosystems**, *habitats** and *refugia** may also be assessed and identified using the following resources:

- Databases for rare, threatened, and endangered *ecosystems**
 - EnviroAtlas: <https://catalog.data.gov/dataset/enviroatlas-rare-ecosystems-in-the-conterminous-united-states>
 - NatureServe: <http://explorer.natureserve.org/> (*ecosystems** listed as “imperiled” or “critically imperiled” at global, national and/or state scales)
 - IUCN Red List of Ecosystems: <https://www.iucn.org/resources/conservation-tools/iucn-red-list-ecosystems>
- Landscape Conservation Cooperative Network
- State Wildlife Action Plans
- Regional or *local** *conservation** organization *landscape** *conservation** plans
- *Experts** and *stakeholders**
 - State and federal natural resource agencies, including Natural Heritage Programs, or similar state agencies
 - Academic *experts**
 - Appropriate *local**, state, and regional professional organizations
 - NGOs with knowledge regarding rare, threatened, or endangered *ecosystems** (e.g., The Nature Conservancy; World Wildlife Fund)

Additionally, the following considerations suggest contexts with a higher likelihood of *HCV 3** occurrence. If any of the following contexts exist within or adjacent to the *Management Unit**, the *HCV** assessment should be more rigorous in its evaluation of whether rare *ecosystems**, *habitats** or *refugia** are, in fact, present within the *Management Unit**:

- *Ecosystems** or *habitats** that depend on highly localized *soil** types, locations, hydrology or other climatic or physical features, such as some types of limestone karst *ecosystems**, alpine *ecosystems**, or riverine *forests** in arid zones
- Roadless areas that are non-linear in configuration, and >500 acres in size or with unique characteristics
- *Ecosystems** or *habitats** that have been greatly reduced by human activities compared to their historic extent

A more rigorous assessment may entail additional efforts to acquire more detailed or finer-scale* data regarding *ecosystem** occurrences and or presence of particular indicator *species**, more extensive consultation with *experts** and/or regional *conservation** organizations, and/or conducting field surveys (i.e., by state Natural Heritage programs or other plant community *experts**).

7.b. Managing and Monitoring HCV 3

In addition to the *Best Available Information** identified in Section 3.a, the best resources to provide strategies for maintaining or enhancing *HCV 3** identified through the above assessment will likely be those already identified for *HCV 1** and *HCV 2**. The best resources to provide strategies and data for monitoring *HCV 3** identified through the above assessment will likely be those already identified for *HCV 2**.

Strategies to maintain *HCV 3** occurrences should consider: Strategies that fully maintain the extent and integrity of rare or threatened *ecosystems**, *habitats**, or *refugia**. Where strategies are intended to enhance *HCV 3** occurrences, they should consider: Measures to *restore** and/or develop rare or threatened *ecosystems**, *habitats**, or *refugia**.

8. HCV 4 – Critical Ecosystem Services

HCV 4 – *Critical* Ecosystem Services. Basic *ecosystem services** in *critical** situations, including protection of water catchments, flood control and attenuation, and control of *erosion** of vulnerable *soils** and *slopes**.**

8.a. Assessment, Identification, Management, and Monitoring of HCV 4

Assessing areas for *HCV 4** requires distinguishing those areas where the *ecosystem services** rise above the level of Principle 6 and warrant additional consideration under Principle 9. For the purposes of this *HCV** Framework, *critical* ecosystem services** include, at a minimum, watersheds surrounding surface sources of public drinking water, floodplains, and steep *slopes** rated high hazard for *slope** failure. *HCV 4** is focused on basic services of nature for human needs but may also include basic services of nature that protect other *HCVs**.

An *ecosystem service** is critical where a disruption of that service poses a threat of severe, catastrophic or cumulative negative impacts on the welfare, health or survival of *local communities**, on the functioning of important infrastructure (roads, dams, reservoirs, hydroelectric schemes, irrigation systems, buildings, etc.), or on other *HCVs**. The focus of this *HCV** is on provision of a *critical** service to the entirety, or a substantial portion, of the *local community**, not to individuals within that community. For example, an area that is important to the irrigation system of a single or limited number of farmers or ranchers would not reach the

level of *HCV 4**, but if the system supplies irrigation for a substantial portion of a farming/ranching-dependent community, it would.

Identification and assessment of *HCV 4** should begin with the national considerations provided in Section 4.a and 4.b, and then follow the guidance below to determine if there are additional *HCV**.

8.a.i. Guidance & Resources for *HCV 4:**

In addition to the above overarching information sources provided in Section 3.a and those identified for *HCV 1**, *critical* ecosystem services** may also be assessed and identified, and management and monitoring strategies developed using the following resources.

Watersheds surrounding surface waters used for public drinking water

Identification & Assessment:

- Consultation with municipal, county, and regional water supply agencies or water districts
- Review of available maps and databases of public drinking water supplies. These are typically available from county or state government agencies
- Maps and databases related to *soil* erosion** potential or the potential for *slope** failure

Developing Management Strategies:

- Review of management plans prepared by municipal, county, regional, and state agencies, where available
- Adherence to *best management practices** for road construction and *forest** management to prevent *soil* erosion**

Monitoring:

- Monitoring for *soil* erosion** or *slope** failure through aerial surveys or ground visits
- Monitoring for *erosion** and sedimentation resulting in the discharge of sediment into public drinking water supplies

Slopes rated as high-hazard for slope* failure*

Identification & Assessment:

- Review of available maps and databases
- Consultation with appropriate municipal, county, regional, and state agencies

Developing Management Strategies:

- Review of management plans prepared by municipal, county, regional, and state agencies, where available
- Review of academic studies related to *forest** management on high-hazard *slopes**
- Adherence to *best management practices**, where available, for *forest** management and road construction on high-hazard *slopes**

Monitoring:

- Monitoring for culvert and road washouts
- Monitoring channel stability downstream of culvert installations
- Monitoring for minor *slope** failure that could cascade into major *slope** failure
- Monitoring for areas of exposed *soil** that are subject to *erosion**

Soils* vulnerable to erosion*

Identification & Assessment:

- County *soil** surveys (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>).
- Consultation with county and state *soil** scientists

Developing Management Strategies & Monitoring:

- Similar to high-hazard *slopes**

Other ecosystem services*, including flood control and attenuation

Identification & Assessment:

- Review of available maps and databases, including FEMA flood maps
- Consultation with appropriate municipal, county, regional, and state agencies
- Special attention to extensive floodplain or *wetland* ecosystems** that are *critical** to mediating flooding or in controlling stream flow regulation and *water quality**

Developing Management Strategies & Monitoring:

- All of the above

Strategies to maintain *HCV 4** occurrences should consider: Strategies to protect any water catchments of importance to *local communities** located within or downstream of the *Management Unit**, and areas within the unit that are particularly unstable or susceptible to *erosion**. Examples may include *conservation zones**, *protected areas**, harvest prescriptions, chemical use restrictions, and/or prescriptions for road construction and maintenance, to *protect** water catchments and upstream and upslope areas. Where strategies are intended to enhance *HCV 4**, they should consider: *Management strategies* to restore* water quality** and quantity, and to maintain or enhance carbon sequestration and storage.

9. HCV 5 – Community Needs

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.

9.a. Assessment, Identification, Management, and Monitoring of HCV 5

Identification of areas with *HCV 5** requires (per Criterion 9.1) engaging with *Native American** groups and *local communities** to determine if there are sites and/or resources fundamental for satisfying their basic necessities. This *HCV** Framework does not identify specific *HCV 5** at a national scale.

A site or resource is fundamental for satisfying basic necessities if the services it provides are irreplaceable (i.e. if alternatives are not readily accessible or affordable), and if its loss or damage would cause serious suffering or prejudice to *affected stakeholders**. Determinations of whether a resource is “fundamental” should be made through *engagement** with the communities or *Native Americans**. Basic necessities in the context of *HCV 5** may cover any or

all of the provisioning services of the environment, including tangible materials that can be consumed, exchanged or used directly in manufacture, and which form the basis of daily life. The presence of this *HCV** is assessed at the scale of a community, whether *local** or *Native American**, not at the scale of an individual (i.e., whether any portion of the *Management Unit** provides resources that are essential for significant portions of a community, not just for one or a few individuals within a community).

In the United States, it is less common for a *Management Unit** to be fundamental for satisfying the basic necessities of *local communities**. Regardless, managers must engage with *local communities** to consider the potential for such situations. It is more likely that a *Management Unit**, or portion of a *Management Unit**, would be fundamental for satisfying the basic necessities of *Native American** groups, such as livelihoods, health, nutrition, water and other medicines.

The information provided by *local communities** and/or *Native American** groups through *culturally appropriate** communication should be considered the *Best Available Information** for the *HCV** assessment and identification, as well as for developing management and monitoring approaches. This is particularly true for determining the ‘fundamentality’ of the resource. Where possible, management strategies should be developed collaboratively with representatives of the *local communities** and/or *Native American** groups. A *Free, Prior and Informed Consent** process is required (per Criterion 4.2) when *Traditional Peoples** or a *forest-dependent* local community** has *legal** rights associated with the *HCV**, or (per Criterion 3.2) when a *Native American** group has *legal** or *customary rights** associated with the *HCV**. See the FSC US Guidance on *Culturally Appropriate Communication and Free Prior and Informed Consent* (US NFSS, Annex F).

10. HCV 6 – Cultural Values

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**.

10.a. Assessment, Identification, Management, and Monitoring of HCV 6

Determining areas to be considered as having *HCV 6** attributes includes identifying: a) places of *significant** cultural, archaeological or historical importance; and b) sites of *critical** importance to *local communities** and/or *Native American** groups. Information about the first will most likely be available through existing databases and appropriate agencies. The second is required to be identified through consultation with appropriate parties (per Criterion 9.1). While *engagement** with *local communities** and *Native Americans** for the purposes of *HCV 6** (and also *HCV 5**) can be combined with *engagement** with communities and *Native Americans** for the purposes of Criterion 2.2, Principle 3, and Criterion 4, *HCV 6** values are not limited to situations where communities or *Native American** groups have *legal** or *customary rights**.

Identification and assessment of *HCV 6** should begin with the national *HCVs** identified in Section 4.a and 4.b, and then follow the guidance below to determine if there are additional *HCV**.

The *Best Available Information** for assessment and identification of *HCV 6** for places that are globally or nationally *significant** cultural, archaeological or historical importance will likely be held in federal, state, and regional databases. Consultation with the State Historic Preservation Office, or similar agency, is also a valuable source of information, for assessment and identification, and also for developing strategies for management and monitoring. Additionally, many *Native American** groups have *Tribal** Historic Preservation Officers, and when available, these individuals should also be consulted.

The information provided by *local communities** and/or *Native American** groups through *culturally appropriate** communication is the *Best Available Information** for the *HCV** assessment and identification of sites of *critical** importance to these communities, as well as for developing management and monitoring approaches. This is particularly true for determining the “*criticality**” of the value. The assessment should consider:

- If the *Management Unit** includes sites that are critical to the cultural identity of a *local community** or *Native American** group, and/or that include cultural features created intentionally by humans, and/or
- If the *Management Unit** includes or occurs within an outstanding natural *landscape** that has evolved as a result of social, economic, administrative, and/or religious imperative

Where possible, management strategies should be developed collaboratively with representatives of the *local communities** and/or *Native American** groups.

A *Free, Prior and Informed Consent** process is required (per Criterion 4.2) when *Traditional Peoples** or a *forest-dependent* local community** have *legal** rights of access or *use rights** associated with the *HCV**, or (per Criterion 3.2) when a *Native American** group has *legal** or *customary rights** associated with the *HCV**. See the FSC US Guidance on *Culturally Appropriate Communication and Free Prior and Informed Consent* (US NFSS, Annex F).

11. HCV Checklist for Family Forest Management Units

11.a Background

This checklist provides *family forests** with guidance regarding *HCV** assessments. It includes resources that are appropriate for assessing national and local-scale *HCVs** on *family forest* Management Units**. By definition, *family forests** are managed at a smaller scale and/or intensity than other FSC-certified *Management Units** and, thus, may present less risk of negative impact to *HCVs**. In the case of some *HCVs**, the likelihood of occurrence on *family forests** may also be lower. The checklist approach accounts for these *Management Unit** characteristics by helping *family forests** focus their assessment on the most relevant resources for assessing the presence of *HCVs** that are most likely to occur.

11.b Directions for Family Forests

*Family forests** may choose to use this checklist as their preliminary *HCV** assessment. If *HCV** are not found using this assessment, no additional assessment is needed. If an *HCV** or a potential *HCV** is identified using this assessment, *family forests** are expected to:

- access the additional guidance in the main HCV Framework, particularly as it relates to management and monitoring of *HCVs**
- comply with the relevant requirements of Principle 9 for management and monitoring of *HCVs**

Use of this checklist entails:

1. Referencing the main HCV Framework to guide general understanding of what constitutes *HCVs*
2. Evaluating each information source provided below for the *family forest* Management Unit**
 - National *HCV** checklist resources indicate that there is an *HCV**
 - Local-scale *HCV** checklist resources indicate a potential *HCV**
3. Placing a checkmark in the box next to the information resource to indicate that the resource has been evaluated and used for *HCV ** assessment
4. If a potential *HCV** is identified as a result of addressing this checklist, use the resources and guidance in the main HCV Framework to further assess whether this potential does actually represent an *HCV**.

NOTE: The 'Local-scale *HCV** checklist resources' included below are typically not of a resolution, scale and/or comprehensiveness adequate to conclusively demonstrate the presence of an *HCV**. If no potential *HCVs** are identified using these resources, then no further assessment is necessary (per Item 4 above). If a potential *HCV** is identified, further assessment may conclude that there is an *HCV** within the Management Unit*, but it may also conclude that there is not an associated *HCV** within the Management Unit*.

11.c HCV 1 – Species Diversity

HCV 1 – Species Diversity. Concentrations of biological diversity including *endemic species**, and *rare, threatened or endangered species**, that are *significant** at global, national, or regional levels.

Local-scale *HCV** Checklist Resources

1. NatureServe Maps of Biodiversity Hotspots & Biodiversity Importance. *Family forests** should access both resources
 - ☐ <https://www.natureserve.org/conservation-tools/natureserve-hotspots-map>
 - ☐ <https://www.natureserve.org/conservation-tools/projects/map-biodiversity-importance>

2. *Management units** with federally-designated critical habitat for multiple *species** that are federally listed as threatened or endangered. *Family forests** should access both resources
 - ☐ <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>
 - ☐ <https://ecos.fws.gov/ipac/>
3. A county or watershed identified by NatureServe as having a globally, nationally, or regionally-significant concentration of species of conservation concern. *Family forests** should access both resources
 - ☐ <http://www.natureserve.org/conservation-tools/listed-and-imperiled-species-county-and-watershed/county-map>
 - ☐ <http://www.natureserve.org/watershed-map>
4. Areas identified through The Nature Conservancy's (TNC) Ecoregional Assessments as having significant concentrations of biodiversity. *Family forests** should access this resource if additional information is needed (i.e., beyond the above resources) to identify if further assessment and/or *HCV** designation is warranted.
 - ☐ <https://www.conservationgateway.org/ConservationPlanning/SettingPriorities/Eco regionalReports/Pages/EastData.aspx>
5. Areas with concentrations of *endemic species** or *rare, threatened and endangered species**, or a single critically imperiled species, that were identified through:
 - ☐ the assessment of environmental values per Criterion 6.1

If the Management Unit intersects or is proximate to any areas identified through the above local-scale resources, then the potential HCV* should be further assessed as HCV* using the guidance and resources in the main HCV* Framework.*

11.d HCV 2 – Landscape-Level Ecosystems and Mosaics

HCV 2 – Landscape-Level Ecosystems and Mosaics. *Intact Forest Landscapes** and large landscape-level *ecosystems** and *ecosystem** mosaics that are *significant** at global, national, or regional levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

When reviewing the below resources, proximity of the Management Unit to potential HCV 2 should also be considered. Management Units* that are proximate to HCV 2 may be considered High Conservation Value Areas*, based on their contribution to buffering or otherwise protecting the HCV*.*

National *HCV** Checklist Resources

1. Intact Forest Landscapes (4.a.i): Per Principle 9, *Intact Forest Landscapes** (IFL) shall be considered *HCV** (HCV 2).

- ☐ Global Forest Watch (www.globalforestwatch.org) and/or other data that are more recent, accurate and/or refined than those provided by Global Forest Watch, shall be used to identify *IFL**.
- 2. Wilderness Areas (4.a.iv): Wilderness areas enrolled in the National Wilderness Preservation System, or a similar state-level system, may meet the definition for HCV 2.
 - ☐ National Wilderness Preservation System (www.wilderness.net).

Local-scale HCV* Checklist Resources

1. Access at least one of the following entities to identify landscape-level ecosystems or ecosystem mosaics of conservation importance:
 - ☐ State and federal natural resource agencies. For example, the Washington Department of Fish and Wildlife (<https://wdfw.wa.gov/species-habitats>)
 - ☐ Heritage Programs. For example, the Michigan Natural Features Inventory (<https://mnfi.anr.msu.edu>)
 - ☐ Regional conservation organizations. For example, Landscape Conservation Cooperatives (<https://lccnetwork.org>)

If the Management Unit intersects or is proximate to any areas identified through the above local-scale resources, then the potential HCV* should be further assessed as HCV* using the guidance and resources in the main HCV* Framework.*

11.e HCV 3 – Ecosystems and Habitats

HCV 3 – Ecosystems and Habitats. Rare, threatened or endangered *ecosystems**, *habitats** or *refugia**.

National HCV* Checklist Resources

1. Old Growth Forest (4.a.ii): All *old growth** forest (Type 1 and Type 2) is HCV* (HCV 3), and subject to the requirements of Principle 9.
 - ☐ Use the *old growth** definition (*Type 1** and *Type 2**), Indicator 6.8.2, and your knowledge of the *Management Unit** to determine if there is *old growth** present on the *Management Unit**.
2. Primary Forest (4.a.iii): All *primary forest** is HCV* (HCV 3), subject to the requirements of Principle 9.
 - ☐ Use the definition of *primary forest** and your knowledge of the *Management Unit** to determine if *primary forest** is present on the *Management Unit**.

Local-scale HCV* Checklist Resources

1. These resources and considerations for HCV 3 are the same for *family forests** as for other *Organizations**

- ☐ Use the main *HCV** Framework, Section 7, to determine if there are other HCV 3 present on the *Management Unit**

11.f HCV 4 – Critical Ecosystem Services

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.

Local-scale *HCV** Checklist Resources

1. Access at least one of the following *experts** and *stakeholders** to identify watersheds surrounding surface waters used for public drinking water
 - ☐ State and federal natural resource agencies. For example, the Vermont Department of Environmental Conservation (<https://dec.vermont.gov/water/drinking-water>)
 - ☐ State and local municipal water management departments. For example, the Marathon County Conservation, Planning, and Zoning Department in (<https://www.co.marathon.wi.us/Departments/ConservationPlanningZoning/PlanningServices/StormwaterManagement.aspx>)
2. Access county soil surveys to assess soils vulnerable to erosion, including slopes rated as high hazard for slope failure
 - ☐ NRCS Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>)
3. Assess other *ecosystem services**, including flood control and attenuation
 - ☐ U.S. Army Corps of Engineers (<https://lrp.maps.arcgis.com/apps/webappviewer/index.html?id=c7f79152b1d746c181f50ea6eca6e69e>)

If the Management Unit intersects or is proximate to any areas identified through the above local-scale resources, then the potential HCV* should be further assessed as HCV* using the guidance and resources in the main HCV* Framework.*

11.g HCV 5 – Community Needs

HCV 5 – Community Needs. Sites and resources fundamental for satisfying the basic necessities of *local communities** or *Indigenous People*s* (for livelihoods, health, nutrition, water, etc.), identified through *engagement** with these communities or *Indigenous Peoples**.

Local-scale *HCV** Checklist Resources

1. If *Native American** groups are identified in Indicator 3.1.1, *engagement** is required to determine if related cultural interests need to be considered for *HCV** designation. However, this *engagement** may be informal.

- ☐ Consider *rights**, resources, *lands and territories**, and/or sites identified per Criteria 3.1, 3.2 and 3.5, plus any other critical areas identified through the engagement.
- 2. If Local Communities are identified per Indicator 4.1.1, *engagement** is required to determine if related social interests need to be considered for *HCV** designation. However, this *engagement** may be informal. In the US context, the potential for these sites and resources to exist, and especially within a *family forest* Management Unit**, is extremely low.
 - ☐ Consider critical areas identified through *engagement** per Principle 4

If the Management Unit intersects or is proximate to any areas identified through the above local-scale resources, then the potential HCV* should be further assessed as HCV* using the guidance and resources in the main HCV* Framework.*

11.h HCV 6 – Cultural Values

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**.

National HCV* Checklist Resources

1. Wilderness Areas (4.a.iv): Wilderness areas enrolled in the National Wilderness Preservation System, or a similar state-level system, meet the HCV 6 definition.
 - ☐ National Wilderness Preservation System (www.wilderness.net).
2. National Register of Historic Places (4.a.vi):
 - ☐ National Park Service's National Register of Historic Places web-based map search (<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>). This tool shows Public, non-restricted data depicting National Register spatial data processed by the Cultural Resources GIS facility.
3. UNESCO World Heritage Sites (4.a.vii):
 - ☐ United States of America World Heritage List (<https://whc.unesco.org/en/statesparties/us>)

Local-scale HCV* Checklist Resources

1. State-level resources
 - ☐ State Historic Preservation Office

2. If *Native American** groups are identified in Indicator 3.1.1, *engagement** is required to determine if related cultural interests need to be considered for *HCV** designation. However, the *engagement** may be informal
 - Consider *rights**, resources, *lands and territories**, or sites per Criterion 3.1 and 3.5, plus any other significant sites identified through the *engagement**

3. If *Local Communities** are identified in Indicator 4.1.1, *engagement** is required to determine if related cultural interests need to be considered for *HCV** designation. However, this *engagement** may be informal. In the US context, the potential for these sites and resources to exist, and especially within a *family forest** *Management Unit**, is extremely low.
 - Consider critical areas identified through *engagement** per Principle 4

If the Management Unit intersects or is proximate to any areas identified through the above local-scale resources, then the potential HCV* should be further assessed as HCV* using the guidance and resources in the main HCV* Framework.*

12. Pertinent Definitions

Critical	The concept of criticality or fundamentality in Principal 9 and <i>HCVs</i> * relates to irreplaceability and to cases where loss or major damage to this <i>HCV</i> * would cause serious prejudice or suffering to <i>affected stakeholders</i> *. An <i>ecosystem</i> * service is considered to be critical (<i>HCV 4</i> *) where a disruption of that service is likely to cause, or poses a threat of, severe negative impacts on the welfare, health or survival of <i>local communities</i> *, on the environment, on <i>HCVs</i> *, or on the functioning of significant infrastructure (roads, dams, buildings etc.). The notion of criticality here refers to the importance and <i>risk</i> * for natural resources and environmental and socio-economic values. [Source: FSC-STD-01-001 V5-2]
High Conservation Value (HCV)	Any of the following values: <ul style="list-style-type: none"> • HCV 1: Species diversity. Concentrations of <i>biological diversity</i>* including <i>endemic species</i>*, and <i>rare, threatened or endangered species</i>*, that are <i>significant</i>* at global, regional or national levels. • HCV 2: <i>Landscape</i>*-level <i>ecosystems</i>* and mosaics. <i>Intact Forest Landscapes</i>*, large <i>landscape</i>*-level <i>ecosystems</i>* and <i>ecosystem</i>* mosaics that are <i>significant</i>* at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring <i>species</i>* in natural patterns of distribution and abundance. • HCV 3: <i>Ecosystems</i>* and <i>habitats</i>*. Rare, threatened, or endangered <i>ecosystems</i>*, <i>habitats</i>* or <i>refugia</i>*. • HCV 4: <i>Critical</i>* <i>ecosystem services</i>*. Basic <i>ecosystem services</i>* in <i>critical</i>* situations, including protection of water catchments and control of <i>erosion</i>* of vulnerable <i>soils</i>* and slopes.

	<ul style="list-style-type: none"> • HCV 5: Community needs. Sites and resources fundamental for satisfying the basic necessities of <i>local communities*</i> or <i>Indigenous Peoples*</i> (for example for livelihoods, health, nutrition, water), identified through <i>engagement*</i> with these communities or <i>Indigenous Peoples*</i>. • HCV 6: Cultural values. Sites, resources, <i>habitats*</i> and <i>landscapes*</i> of global or national cultural, archaeological or historical <i>significance*</i>, and/or of <i>critical*</i> cultural, ecological, economic or religious/sacred importance for the traditional cultures of <i>local communities*</i> or <i>Indigenous Peoples*</i>, identified through <i>engagement*</i> with these <i>local communities*</i> or <i>Indigenous Peoples*</i>. <p>[Source: Based on FSC-STD-01-001 V5-2]</p>
High Conservation Value Areas (HCVA)	Zones and physical spaces which possess and/or are needed for the existence and maintenance of identified <i>High Conservation Values*</i> . [Source: FSC-STD-60-004 V2-0]
Landscape	<p>For the purposes of this Standard, the term “landscape” refers to a delineation of land area that captures similar environmental and ecological conditions including climate, geology, soils, water, and biology. USFS- defined Ecological Sections (Cleland 2005, update of Bailey/USFS) or smaller units are recommended for use to define <i>landscape*</i> for purposes of <i>RSA*</i> establishment and assessment. For many other purposes, “landscapes” will often occur at smaller <i>scales*</i> than ecological sections. In some contexts, “landscape” as used in this Standard simply refers to consideration of the area surrounding a particular site.</p> <p>In developing the description of “landscape” <i>The Organization*</i> considers the <i>Management Unit’s*</i> ability to influence and impact the surrounding area, as well as the potential for other owners to influence and impact the area that the <i>Management Unit*</i> falls within. Some larger <i>Management Units*</i> may represent the full <i>landscape*</i> that needs to be considered, while other typically smaller <i>Management Units*</i> may occur within a broader <i>landscape*</i> that should be considered.</p>
Precautionary principle/ approach	An approach requiring that when the available information indicates that <i>management activities*</i> pose a threat of severe or irreversible damage to the environment or a threat to human welfare, <i>The Organization*</i> will take explicit and effective measures to prevent the damage and avoid the <i>risks*</i> to welfare, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of environmental values are uncertain. [Source: Based on Principle 15 of Rio Declaration on Environment and Development, 1992, and Wingspread Statement on the Precautionary Principle of the Wingspread Conference, 23–25 January 1998]

Significant	<p>For the purposes of Principle 9, <i>HCVs 1, 2 and 6*</i> there are three main forms of recognizing <i>significance*</i>.</p> <ul style="list-style-type: none"> • A designation, classification or recognized <i>conservation*</i> status, assigned by an international agency such as IUCN or Birdlife International; • A designation by national or regional authorities, or by a responsible national <i>conservation*</i> organization, on the basis of its concentration of <i>biodiversity*</i>; • A voluntary recognition by the manager, owner or <i>Organization*</i>, on the basis of available information, or of the known or suspected presence of a <i>significant* biodiversity*</i> concentration, even when not officially designated by other agencies. <p>Any one of these forms will justify designation as <i>HCVs 1, 2 and 6*</i>. Many regions of the world have received recognition for their <i>biodiversity*</i> importance, measured in many different ways. Existing maps and classifications of priority areas for <i>biodiversity* conservation*</i> play an essential role in identifying the potential presence of <i>HCVs 1, 2* and 6*</i>. [Source: FSC-STD-01-001 V5-2]</p>
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13. Literature Cited

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