

FSC US National Forest Stewardship Standard (Version 2)
DRAFT 1 CONSULTATION REPORT

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Introduction

In April 2017, the FSC US Board of Directors agreed to take on the role of Standard Development Group for the revision of the FSC US forest management standard. FSC US staff began to organize and plan for the process before deciding to delay the effort for one year so they could focus on the FSC US Controlled Wood National Risk Assessment development process. In mid-2018, a Working Group of technical advisors appointed by the Standard Development Group began development of recommendations, in a series of phases, for the Standard Development Group. The Working Group successfully completed this process in late-2020.

The Working Group’s recommendations were then carefully reviewed by the Standard Development Group and led to the Draft 1 revised National Forest Stewardship Standard (NFSS) materials which were shared with stakeholders during two phases of public consultation. The Phase 1 consultation included the base indicators, which will be used by most certificate holders, and occurred in late-2020. The Phase 2 consultation included the Family Forest Indicators, Plantation Indicators, and Federal Land Supplementary Requirements and occurred in mid-2021.

With the assistance of FSC US staff and with further targeted outreach, the Standard Development Group worked through all of the comments received during both phases of the Draft 1 public consultation, and made adjustments to the language of the standard. During this process, they continued to focus on clarity of intent, feasibility of implementation for certified forest management organizations, and ensuring that core values of FSC are respected (i.e., that conformance with the indicators of the standard will result in conformance with FSC’s Principles and Criteria). The results of the Standard Development Group’s work is now shared with members, certificate holders and other stakeholders as Draft 2 of the revised NFSS.

Next Steps & Looking Forward

Following the Draft 2 public consultation, the Standard Development Group will again consider all comments received, and develop a final draft (Draft 3), which will be submitted to FSC International for approval later this year. The approval process is expected to take approximately a year, but could be shorter or longer. The final decision on the standard will be made by the International FSC Policy and Standards Committee, which has delegated authority from the International FSC Board of Directors for decisions on National Forest Stewardship Standards. If the Committee identifies any conditions for approval, these will need to be resolved before the standard is fully approved and published.

Following approval, there is typically a 3-month delay before the revised standard becomes effective, and this is followed by a 12-month transition period. All certificate holders must be audited to the revised standard during the transition period.

- Draft 3 approved and submitted by the Standard Development Group to FSC International – by November 2022
- FSC International staff review, and International FSC Policy & Standards Committee review and approval – ESTIMATED by end of year 2023
- Standard becomes effective – ESTIMATED by end of Quarter 1, 2024
- Transition period ends, and all certificate holders transferred to the revised standard – ESTIMATED by end of Quarter 1, 2025

Analysis of Stakeholder Groups Who Submitted Comments on Draft 1

Phase 1 – Base Indicators

- 54 unique sets of comments representing 61 individuals or organizations
- 41 of the individuals/organizations were affiliated with the Economic Chamber, including 27 representing FM certificate holders, 27 representing members, 5 representing CBs/auditors, and 1 representing a Native American tribe (also a certificate holder)
- 11 of the individuals/organizations were affiliated with the Environmental Chamber, including 6 members, and 1 auditor
- 4 of the individuals/organizations were affiliated with the Social Chamber, including 3 members, and 1 certificate holder
- the chamber affiliation for 5 of individuals/organizations is unknown, including 3 certificate holders

Phase 2 – Family Forest Indicators

- 13 unique sets of comments representing 14 individuals or organizations
- 9 of the individuals/organizations were affiliated with the Economic Chamber, including 6 members, and 2 CB/Auditors
- 3 of the individuals/organizations were affiliated with the Environmental Chamber, including 2 members, and 1 certificate holder
- 2 of the individuals/organizations were affiliated with the Social Chamber, including 1 member.

Phase 2 – Plantation Indicators

- 9 unique sets of comments representing 31 individuals or organizations
- 7 of the individuals/organizations were affiliated with the Economic Chamber, including 5 members, 2 certificate holders, and 2 CB/auditors
- 23 of the individuals/organizations were affiliated with the Environmental Chamber, including 4 members
- 1 of the individuals/organizations was affiliated with the Social Chamber, and is a member

Phase 2 – Federal Land Supplementary Requirements

- 9 unique sets of comments representing 31 individuals or organizations
- 6 of the individuals/organizations were affiliated with the Economic Chamber, including 3 members, and 1 CB/auditor
- 24 of the individuals/organizations were affiliated with the Environmental Chamber, including 4 members
- 1 of the individuals/organizations was affiliated with the Social Chamber, and is a member

General SDG Response to the Draft 1 Comments

High level summary of comments

- Across chambers and type of stakeholders, the comments represented a mixture of accolades for perceived improvements (over the existing standard) and concerns (generally with new and/or significantly changed elements).
- At a high-level, comments from respondents aligned with the Economic Chamber focused on a need for greater streamlining, reduction in the level of prescriptiveness, recognition for the extent of the standard that is already addressed through US law, and concerns regarding the size of the burden that would be placed on certificate holders and the possibility for loss of existing and future certificate holders as a result.
- At a high-level, comments from respondents aligned with the Social Chamber applauded efforts to improve the standard for Family Forest owners and forest workers, while recognizing the need for further improvements. Social Chamber comments supported changes resulting in better reflection of the lower risk of and increased access for Family Forests, but noted that it will still be challenging for Family Forests to become and stay FSC-certified. They also recognized the changes in Principle 2 intended to improve the well-being of forest workers, but questioned whether conformance would be feasible for certificate holders of any size or management intensity.
- At a high-level, comments from respondents aligned with the Environmental Chamber did not share many over-arching themes, but did generally share support for the High Conservation Value Framework, changes in expectations for Representative Sample Areas, and efforts toward increased clarity for these and other elements. There were concerns expressed about reductions in some protections and need for further rigor in some areas.
- Numerous comments were received, regarding intent, applicability and guidance language in the body of the standard, which suggested that much of the language was duplicative, unnecessary, overly prescriptive and unclear. Other comments suggested additional guidance needs.
- The new annexes were generally received well and found to be useful, but comments indicated the need to clarify their status as guidance (i.e., not normative/required).

Standard Development Group (SDG) General Response

- The SDG greatly appreciates the effort and time associated with preparation of the comments received on Draft 1, and the many opportunities identified to improve Draft 2.
- For Draft 2, the SDG continued to try and balance feasibility for current and potential certificate holders, with maintaining the high level of credibility represented by our US standard.
- During development of Draft 2, the SDG considered the full set of comments provided in response to each consultation question and those provided for each element of the standard, which often represented very different and frequently conflicting perspectives. The SDG worked to find consensus on whether and how to address comments, and how to address other issues identified by SDG members and the FSC US staff supporting the process.
- The SDG also continued to look for opportunities to streamline the standard and associated processes. One focus for streamlining during development of Draft 2 was the intent, applicability and guidance language in the body of the standard, to ensure that it provides value for helping certificate holders and Certification Bodies understand the expectations of the indicators. This

resulted in removal of some language that duplicated indicator or glossary language, removal of some language that provided general silviculture or forestry content (i.e., not specific to conformance with the standard), and working to convey relevant content more simply.

- While the SDG worked to acknowledge and consider all comments, not all comments on Draft 1 resulted in a change to the standard for Draft 2.

Most Significant Changes Between Draft 1 and Draft 2

- **Climate Change** – condensing the key elements for consideration of climate change and actions to help adapt to climate change into a smaller number of locations in the standard; providing an extended timeline for existing certificate holders to achieve conformance with the new climate change expectations in Indicator 7.2.4; simplifying the content of Annex L (Climate Change Toolbox); ensuring that carbon sequestration and storage, as ecosystem services, are also addressed in the standard and in Annex L; considering if additional flexibility is needed for addressing the impacts of catastrophic disturbance events
- **Family Forests** – Increasing the family forest-focused elements associated with Principles 6 and 10, and thereby increasing family forest access to FSC certification
- **Applicability of Federal Land Supplementary Requirements to Different Land-Administering Federal Agencies** – clarifying that it is the SDG's intent to provide a set of Federal Land Supplementary Requirements in the standard that address all of the pertinent issues for all Federal Agencies, aligned with the FSC US Federal Lands Policy; and requesting additional input regarding specific issues identified during the Draft 1 public consultation that will be considered during development of Draft 3, along with input from a consultant, and additional inputs from targeted consultation with the Consultative Forum between Draft 2 and Draft 3.
- **Plantations** – clarifying the intent of the SDG regarding certification of plantations (i.e., no intent to move these over time to semi-natural forest) and aligning the applicable indicators with this intent
- **Non-Timber Forest Products (NTFP)** – working to expand the scope of the standard to include NTFP and reduce the need for secondary, Certification Body-developed, NTFP standards
- **Criteria 1.1, 1.2 and 1.3 & Establishing the Legal Context for Certification** – improving the alignment of the indicators to the Criterion language, reducing duplication between indicators and increasing clarity of expectations
- **Principle 2 & Forest Workers** – finding a way to make it possible for certificate holders to conform with the overall intent of the Principle which encompasses all forest workers (employees, contractors, contractor employees), but without crossing legal boundaries
- **Principle 3 & Identification of Native American Indigenous Peoples** – finding a way to streamline the process of determining which Native American communities would like to engage with which management units (including a role for FSC US to play moving forward)
- **Criterion 4.5 & Impacts on Local Communities** – shift focus to engagement with local communities, identification of potential community-level impacts that are of concern to the community, and identification of strategies to address those concerns.
- **Criterion 5.3 & Externalities** – finding a feasible way to address the intent of the Criterion, as the membership did not pass the motion proposing to eliminate it from the Principles & Criteria during the virtual General Assembly last October

- **Criterion 6.5 & Representative Sample Areas** – working to ensure that while maintaining alignment with the International Generic Indicators, the expectations for representative sample areas are feasible for certificate holders and do not become a barrier to certification
- **Indicator 6.6.6 & Exceptions to the Regional Requirements** – providing additional flexibility for justifying larger harvest openings for restoration purposes than permitted by the regional requirements; collecting information that will inform future considerations and decisions by the Standard Development Group regarding regional requirements
- **Criterion 6.8 & Rewarding Decisions that Result in a Greater Extent of Old Growth** – providing a small amount of very narrowly defined flexibility for limited harvest within northern white cedar or black spruce in upper Midwest states when the old growth successional stage of these forest types is widely represented, and as long as several conditions are met, including ensuring that old growth of these forest types does not again become underrepresented within the landscape.
- **Criterion 9.1 & High Conservation Value Assessments** - providing an extended timeline for existing certificate holders to achieve conformance with the changed approach to High Conservation Values (i.e., High Conservation Values and High Conservation Value Areas, instead of High Conservation Value Forests and their attributes), and the associated assessment expectations in Criterion 9.1
- **Criterion 10.2 & Use of Non-natives for Regeneration** – addressing concerns that Draft 1 was far more restrictive regarding use of non-native species than the existing standard, and clarifying that the use of non-natives for climate change adaptation is restricted to only those of North American origin
- **Criterion 10.7 & the FSC Pesticide Policy** – reducing duplication between the standard and the Policy to help streamline the indicators in the Criterion
- **Annex B & Determining Regional Boundaries** – clarifying that the boundaries on the map provide a high-level guide, but that final decisions on the applicable FSC US Region(s) should be based on ecological descriptions (now included in the annex)

Significant Issues Raised & How Associated Comments were Taken into Account

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PRIORITY ISSUE: Principle 2 & Forest Workers

Responses were mixed between chambers, but relatively consistent within chambers, although difficulty of auditing (i.e., demonstration of conformance) was a common threat throughout the comments. Economic Chamber respondents generally indicated that the Draft 1 revision defies conventional advice, at best, and at worst conflicts with US law (specifically that they violate the contractor-employee relationship). Social Chamber commenters were supportive of the effort, but reticent to think that it was achievable (citing pushback from the Economic Chamber, expense of conformance, how the different requirements will be monitored and verified, and a big need for support from FSC US). Specific concern was expressed regarding guest and other vulnerable workers, and creation of conditions which deny opportunities for local companies and workers. No overarching Environmental comments were received.

Opportunities for improvement identified by the Economic Chamber included: focusing on compliance with US law instead of unratified ILO conventions or specific outcomes for workers; focusing more on processes and implementation of processes instead of outcomes; recognizing that there may be competing social standards and values; clarifying how vendors or purchasers should be addressed; limiting government entity requirements for conformance to compliance with applicable laws; and focusing on requiring compliance with applicable laws in contract language (to address contractors).

SDG Actions Taken:

- Clarify in the definition of “workers” that these are individuals who are implementing management activities under the scope of the standard.
- Include separate indicators to address employees of the organization vs contractors/contractor employees in Criteria 2.3, 2.4, and 2.6.
- Provide definitions for “employee,” “independent contractor,” and “contractor employee”
- Include guidance that other certification schemes (e.g., master logger) may inform demonstration of conformance (as a source of information), but they are not a complete replacement for demonstration of conformance.
- Include the concept of living wages, and include this term in the glossary, but request input on how provision of a living wage could be audited (see associated consultation question).
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: Principle 3, Indigenous Peoples’ Rights & FPIC

Economic Chamber respondents were mixed, but many note a significant increase in effort/burden, with potentially very little benefit, particularly given their previous experiences with lack of response from tribes that have been contacted. There were also significant concerns expressed regarding violation of private property rights, and also the impact of these indicators on state-level public agencies. Numerous commenters indicated concern that the expectations of Principle 3, combined with Annex F and Free, Prior & Informed Consent (FPIC) could push certificate holders to dropping FSC.

Social Chamber commenters were supportive but expressed concern regarding the capacity of both certificate holders and tribes to engage as suggested in the indicators, with a particular emphasis on the difficulty of the expectations in Principle 3 and Annex F for Family Forests. One commenter looked to FSC US to support and facilitate engagement between certificate holders and tribes.

The limited Environmental Chamber respondents were generally supportive with a small number of more specific recommendations.

Many opportunities for improvements were identified by respondents from all chambers.

SDG Actions Taken:

- Revise Indicator 3.1.1 to build on the premise that FSC US will provide support/resources to identify which lands are of interest for particular tribes – to reduce influx of requests to tribes from multiple certificate holders, and to remove the need for tribes to self-identify where there are specific areas of importance (i.e., for determining whether there are potential impacts from management activities) and instead just ask tribes to identify certified lands where there are interests. Demonstration of consultation with FSC US is intended to be adequate for demonstration of conformance with Indicator 3.1.1. Availability of digital management unit boundaries (per Motion 61 of 2021) will assist this process.
- To implement the above, FSC US will work with tribes to develop a culturally appropriate process to answer the following questions: Do you wish to be consulted and provide input regarding management activities? For which FSC-certified management units? Who is the best contact? Expectation is that FSC US will have completed the outreach/engagement process with the necessary tribes prior to the effective date of the revised standard.
- Clarify/emphasize in Principle 3 and Annex F that FPIC is for legal and customary/established rights not a vehicle for establishing new rights.
- Clarify what happens if a rightsholder does not wish to engage in, or withdraws from, an FPIC process.
- Change terminology from “Native American groups” to “Native American Indigenous Peoples”
- Note that many of the clarifications and guidance requested by commenters are already available in Annex F, and do not need to be duplicated in the body of the standard.
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: Regional Requirements & Deviations from These Requirements

The SDG asked a consultation question regarding whether the regional requirements were appropriately addressed in Draft 1 (i.e., Indicators 6.6.5, 6.6.6, 6.7.5, and 6.7.6). Responses were mixed among the Economic and Environmental chambers. The Economic chamber perceived that, with just several exceptions, there was now less flexibility and that the requirements had not been improved, just moved around in the Standard. Conversely, the Environmental chamber perceived that the new flexibility would be well received by the Economic Chamber but poorly received by the Environmental Chamber. Opportunities for improvement cited by the Economic Chamber include prioritizing a literature review of regional requirements [after the revision is completed] and, as part of this, considering eliminating regional requirements, focusing on timber types, making a GIS map available for download, and making the process for deviations from the regional requirements easier. Numerous Economic chamber comments suggest that the regional requirements do not reflect natural disturbance regimes (the focus of base Indicator 6.6.5), which makes it difficult to consider and plan harvests, retention and impacts at a landscape scale.

The SDG also asked consultation specifically about regional requirements for the Ozark-Ouachita Region and the Pacific Northwest dry zone.

- Few responses for the Ozark-Ouachita region question were received across all chambers. In the Economic Chamber (including CBs), the preference was to Merge the northern portion with the Appalachian Region and the southern portion with the Southeast Region (following Cleland et al. 2007). Just two responses from the Environmental Chamber and one response from the

Social Chamber were received – all three of these indicated that the region should remain as it is with two subregions that have different requirements.

- Overall, it appears that adapting the standards for the Pacific Coast dry zone forests would have broad support across chambers. There were only two environmental chamber respondents – one indicated support for recognizing the dry zone and the other suggested that there was some flexibility already, but it could be increased (just not through expanding Indicator 6.6.6). Several suggestions were proposed as to how to move forward, including a detailed proposal for a pilot test.

Additional comments were received regarding Indicator 6.6.6. Economic recommendations to not limit the indicator to only restoration purposes, as elements required for deviations are rigorous, and to not require consultation with “interested stakeholders.” Environmental comments suggest that proposed amendments to this indicator weaken the standard, with specific concern expressed regarding item (d) where the amendment makes the comparison of “equal or greater benefit...” to the base indicator instead of to any applicable regional requirement, and the potential difficulty auditing this due to the subjectivity and variation in outcomes that would be involved. An Environmental comment submitted during the Phase 2 consultation indicates that the above concerns are of particular importance in the context of public lands.

Additional comments were also received regarding Indicator 6.7.6. Environmental comments suggest that proposed amendments to this indicator weaken the standard, with specific concern expressed regarding the amendment that makes the comparison of “equivalent or greater environmental protection...” to the base indicator instead of to any applicable regional requirements. Explicitly, the concern is that riparian buffers far smaller than those allowed by the regional requirements will be justified, as there are no objective metrics for alternate buffer widths, particularly in states where BMPs for water quality are not sufficient for the protection and restoration of water quality, fish and other aquatic resources. An Environmental comment submitted during the Phase 2 consultation indicates that the above concerns are of particular importance in the context of plantations and federal lands.

SDG Actions Taken:

- Commit to completing, within 2 years from the approval of the revised standard, a comprehensive assessment of the most recent research regarding topics addressed through regional supplementary requirements to confirm the need for, and adjust as appropriate, the regional supplementary requirements.
- Assessed the regional supplementary requirements associated with Indicator 6.7.5 to identify further opportunities to reduce duplication with other indicators.
- Maintain the general Draft 1 approach for regional supplementary requirements, including for both the Ozark-Ouachita and Pacific Coast (including dry forests) regions
- Add a second option for justifying larger harvest openings through revisions to Indicator 6.6.6, while also collecting information that will inform future SDG considerations and decisions.
- Maintain the Draft 1 benchmark for “greater or equal benefits” (i.e., maintain the comparison to the base indicator, not the regional supplementary requirements) in the existing option for Indicator 6.6.6, and in Indicator 6.7.6.
- Make Indicators 6.6.6 and 6.7.6 not applicable for plantations.
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: Representative Sample Areas (RSA)

The SDG asked a consultation question regarding whether Representative Sample Areas were appropriately addressed in Draft 1. Responses were extensive and mixed among chambers. Most economic chamber respondents felt that moving from a landscape-focus to an management unit-focus was an undue and unrealistic burden on certificate holders that would manifest in a deterrent for current and prospective FSC certificate holders—one Social chamber member felt similarly, noting that RSA are a preservation-oriented concept and shouldn't be required. Environmental chamber responses were mixed, but generally supportive of the concept and the overall approach—two suggestions were that allowing for evaluation of RSA outside the management unit was insufficient for evaluating local species' needs and smaller level ecosystem connections and that achievement of RSA requirements is better aligned with designating a proportion of the management unit, not through an arbitrary number of RSA. A Social chamber member commented that RSAs are a distraction from our focus on ensuring the primary area of management is achieving stewardship.

Several relevant opportunities for clarification cited by the Economic chamber include identifying in Annex G that the expected percentage increase for large-management unit RSA designation, removing Figure 1, as the rest of Annex G is sufficient for identifying when “enough” has been designated, and clarifying the historic limitations surrounding lands that were previously scoped out of the management for conservation. Other concerns identified by the Economic chamber include: the cost and technical difficulty of creating RSA for ecosystems that do not currently occur on the management unit; few certificate holders have the technical capacity for the assessment outlined in Annex G, and particularly difficult for family forests who will have to hire consultants; the impact of taking lands out of production, particularly for family forests; FSC needs to recognize the variations between management units regarding what remains in more natural conditions and allow flexibility for the types of conservation that are implemented depending on the unique conditions of the management unit.

There was also support from the Economic chamber for the Draft 1 introduction of language recognizing that there may be a need to actively manage RSA and high conservation value areas. Additionally, there was a comment that the scale of “ecosystem” is inappropriate, that natural community or forest type would be better, but as ecosystem is used in the language of the Criterion, this consideration is out of scope for the standard. A couple of comments suggested that Indicator 6.5.3 is not necessary and should either be eliminated or moved to guidance for Indicator 6.5.2.

The SDG asked a consultation question regarding whether RSAs and conformance were Criterion 6.5 been addressed appropriately for Family Forest Management Units in Draft 1. Many comments from across chambers reflected that the requirements are overly complex considering the resources available to the majority of family forest owners, that the RSA concept is quite technical, that it is likely most family forest owners will be challenged to navigate and implement requirements without specialized professional assistance, that the cost of conformance will be a barrier to certification, and generally that the requirements for designation on family forest management units is not feasible and will be a barrier to certification. A number of comments recommended creating a new RSA annex specifically for family forest that would simplify the intent and process of designating RSAs for forests that meet the family forest designation requirements. A Social chamber comment notes that the guidance for family forest to focus on a small number of the steps in Annex G is helpful, but requested clarity if they would be acceptable in audits since the indicator references the annex. For the indicators, an Economic comment recommended focusing on those NPCs that are identified as at-risk in the FSC NRAs (or other publicly available data sources such as State Forest Action Plans which are required in all states so as to set an even playing field for family forest in the USA) and that currently occur within the management unit.

A Social commenter suggested that because of the small scale and low intensity of most family forests, they are being managed as native ecosystems by definition, and that as the biggest threats to natural

conditions (exotic invasive plants, insects, and diseases) are in many, many cases beyond management in any meaningful way. An Economic commenter also suggested that family forests should be exempt from the requirement to establish RSAs in light of the small scale and low intensity of operations typical of family forest operations, and in consideration of the marginal ecological viability of exceedingly small areas. A number of commenters suggested establishing a de minimis rule be included for exemption of FMUs under a certain size.

One Environmental commenter indicated that this treatment of RSAs will be feasible for the members of their group certificate. Another ENV comment suggested clarifying that restoration is desirable but should be considered optional for family forest management units.

SDG Actions Taken:

- Maintain an expectation of conformance with Criterion 6.5 for all management units (considering both RSA and the Conservation Areas Network), with exceptions only for management units less than 50 hectares (124 acres) being able to recognize RSA outside of the management unit (if certain criteria are met), and family forest management units within groups where the Conservation Areas Network 10% designation may be covered by other group members.
- Expect that if a viable RSA exists, then it needs to be identified and protected, then it needs to be identified and protected, unless there are multiple potential RSA for the same ecosystem, and the Organization can achieve greater conservation value by focusing on other ecosystems.
- Do not explicitly require that an RSA be designated for each potential ecosystem that could possibly occur with the management unit.
- Replace Draft 1 Indicators 6.5.1-6.5.3 with adapted versions of IGIs 6.5.1-6.5.4.
- Remove Figure 1 from Annex G and revise the remainder of the annex to align with the revised indicators.
- Maintain the allowance for RSA to be designated outside of the management unit, with the exception of federal management units and management units with plantations, but clarify that they need to be within the same ecological section and need to be permanently protected.
- As part of its implementation strategy, FSC US will be developing additional resources to help simplify and streamline the process of identifying RSA.
- Specifically for family forest management units:
 - Maintain the RSA requirement for family forests, as making a change is outside of the scope of the standard revision process. But maintain the simpler indicators, including making Indicators 6.5.3 and 6.5.4 not applicable.
 - Develop a simpler RSA set of guidance for family forest management units
 - For Draft 3, Link the best available information at the end of Annex G with the specific steps
 - For Draft 3, evaluate the destinations of links in the standard and annexes (not just Annex G) for the validity and usefulness of the destination and consider if there is a way to provide a clear indication of the resource/information source, without including a specific link (which may change).
 - Support development of “communities of practice” to support family forest certification and CH (i.e., opportunities to learn from each other and share resources and share tools, etc.) - to be initiated as part of FSC US's implementation strategy

- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: Conservation Areas Network

The SDG asked a consultation question regarding whether Conservation Areas Networks (CAN) were appropriately addressed in the Draft 1 revised standard. Responses indicated that the concept of the CAN was generally not well received, particularly by the Economic Chamber. However, a number of respondents, including from the Economic chamber indicated that the concept and guidance are appropriate, clear and feasible. Members from both the Economic and Social chamber (just one member) indicated that the CAN was a zero-sum concept; that designating 10% of the MU would be untenable; and that FSC had failed to recognize that active, responsible forest management is compatible with conservation. Numerous Economic chamber members commented on the additional workload and expense that would be required to identify, consult, document and monitor these areas, particularly for family forests. An Environmental chamber member suggested that the Annex needs to explicitly limit CAN inclusions to be on the MU (with exception of RSA designated outside of the management unit), as it currently does not. One commenter asked for greater clarification on whether conservation easements could be considered as part of the CAN. An Environmental commenter indicated that a strict 10% “set aside” could severely limit FSC in the Appalachian region.

Opportunities for improvement, all of which were cited by the Economic Chamber, generally include more effort from FSC to clarify how the CAN will be assessed (audited), how to prioritize inclusion of lands in the CAN, additional guidance on the level of timber harvest allowed within CAN areas, and provision of rationale for the 10% threshold. One comment suggested that FSC US could assist with the CAN analysis across wood baskets, and then provide a national interpretation that for particular spatial areas the requirement had been met, and that certified landowners within these areas do not need to do anything further.

The SDG asked a consultation question regarding whether the guidance in Annex H is sufficient for understanding and conforming with the associated CAN requirements. Generally, ECON comments indicated that while the guidance is sufficient, the CAN concept is infeasible. Other comments were very similar to those received regarding the CAN generally. One ECON comment indicates that many of the potential CAN components identified in Annex H are not applicable to the US Southeast. Another ECON comment suggests that the guidance suggests a focus on Intact Forest Core Areas which is possible when these already exist, but it is not a viable concept to suggest that all management units must have Intact Forest Core Areas.

Commenters asked for a number of additions to Annex H, including greater clarity regarding the overall purpose for the CAN, potential to include recreation areas, management expectations and allowances, more examples, guidance on verification of areas, provision of a standardized methodology, and a definition for “cultural.”

SDG Actions Taken:

- Maintain an expectation of conformance with Criterion 6.5 for all management units (considering both RSA and the Conservation Areas Network), with exceptions only for management units less than 50 hectares (124 acres) being able to recognize RSA outside of the management unit (if certain criteria are met), family forest management units within groups where conformance with C6.5 may be achieved across the group, and the limited scenarios where the certificate holder was responsible for protection of areas outside of the management.
- Maintain the allowance for the CAN to include areas outside of the management unit, with the exception of federal management units and management units with plantations.

- For Annex H: Add additional examples; add clarity that areas where the intent is to provide for or support culturally-oriented recreational activities may be included in the CAN, but this does not mean that all recreational areas may be included; add a definition for "cultural" to the glossary; add a brief description of the purpose and origin; add the graphic from the Representative Sample Areas-Conservation Areas Network-High Conservation Values topic overview; add clarity that non-forested areas and non-commercial forested areas may be included in the CAN; add management guidance; add clarity that the list included is not exhaustive, it is simply a list of potential examples; update to align with the revised Forest Management Group Standard regarding conformance with Criterion 6.5 across the group.
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: High Conservation Values

The SDG asked a consultation question regarding whether High Conservation Values (HCV) were appropriately addressed in the Draft 1 revised standard. Critiques of the revisions to the approach for addressing high conservation values were mixed, both within and among chambers, but overall were more positive than negative with appreciation for the efforts to clarify HCV identification and expectations of certificate holders. The Economic chamber appreciated that HCV areas are not necessarily set asides but also indicated that the new focus on HCV instead of high conservation value forests would increase administrative burden and monitoring. Concerns from the Economic chamber were largely regional. For instance, Pacific Coast respondents indicated that RMZs should count as HCV areas and that FSC should plan to support certificate holders as they defend anticipated reductions in HCV to stakeholders; respondents from Minnesota indicated that designating natural origin lowland conifer as old growth would be very problematic for many of the state's certificate holders.

A number of certificate holders expressed frustration with the change from a focus on HCVA to HCV. Comments suggested that this will make the HCVA assessment per Criterion 9.1 much more intensive than in the existing Standard and will result in added costs and man hours. Other changes also were associated with added costs, including periodic updates, monitoring and keeping abreast of new research, in addition to engagement and continued consultation with affected and interested stakeholders. One comment expressed concern regarding "keeping abreast of new research," (See Annex K 3.d. The remainder of these concerns are related to requirements in the Principles & Criteria, which we cannot change.

Environmental chamber responses indicated a need for stricter provisions for halting management immediately when adverse effects occur, several content specific edits to the Standard, and a need for high concentrations of lentic/wetland systems should be explicitly identified as HCV. No responses were received from the Social chamber.

A majority of responses suggest that providing some examples of HCV would be a valuable addition to Annex K.

Certificate holders generally supported the change from Cleland's Sections to Cleland's Provinces, although one indicates that State is a better scale, and one suggests that if Province is used, then FSC needs to provide clear guidance on how an assessment at this scale of landscape is performed and who would be involved. Environ Chamber comments focused on Provinces being too large a unit for use pertaining to HCVs and significance at a regional scale, suggesting that there is a need for greater protection of potential HCVs than would be afforded, and that since many Provinces are immense, they extend far beyond the range at which some HCVs will ever exist. The Chamber recommends using Cleland's Sections instead. One comment indicated that the use of Provinces in this manner is

especially inappropriate in the context of federal lands, which are more likely to contain HCVs, and need to play a leadership role in forest ecosystem conservation and restoration.

The SDG asked a consultation question regarding whether HCVs and conformance with Principle 9 for Family Forest Management Units was appropriately addressed in the Draft 1 revised standard. A mixture of perspectives across chambers received in responses - some indicating that generally scale, intensity and risk have been appropriately addressed (particularly with the Family Forest checklist in Annex K), while others suggest that the combination of indicators and Annex K are simply too much for family forest management units (complexity and overall burden) and if not greatly simplified will require extensive investment in outside help. Specific SOCIAL recommendation to reduce the documentation requirements (which are increased from the existing standard) for FF. Additionally, monitoring of HCVs is considered low risk for family forests in the current standard yet is required in the draft revision - adding burden. ENV suggestion to not make the checklist the only lower-burden option available to FF, but also allow other alternative approaches. ECON suggestion to use the NRA as a reference and if the FSC NRAs concludes low risk for HCVs, that this principle be deemed NA or at least low-risk for FF FMUs given scope/scale/intensity.

SDG Actions Taken:

- FSC US will be providing additional resources to assist all certificate holders in implementation of changes, including provision of HCV examples
- Do not provide additional content specifically for family forests at this time, but provide additional support during implementation
- For existing certificate holders, do not explicitly require a new assessment, just require conformance (which may be possible without a full new assessment), and provide additional time to update the HCV assessment if needed (3 years for family forests, 2 years for larger)
- Maintain Cleland's Provinces as the scale for considering significance at a regional scale
- Annex K does not prohibit designation of RMZ as HCVA, nor require family forests to use the check list
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: High-grading & Exploitative Practices

The SDG also asked consultation specifically about whether high grading and other exploitative practices were appropriately addressed in Draft 1, and whether the associated indicators are feasible for certified organizations. Most respondents indicated that, "yes" given the indicators identified in the issue overview and the standard as a whole, these kinds of practices would not be possible within forests that conform with the standard and "yes" that the associated indicators are feasible. However, many comments from the Economic and Social chambers also expressed confusion and frustration over the terminology used in the issue overview and associated guidance language in the standard, as the types of silvicultural practices mentioned are also used for positive and responsible management. Members of all chambers were confused that "selective harvests" or "select cuts" were categorized as exploitative harvests. A Certification Body was one of the few respondents suggesting that it is not adequately addressed, and that it should be considered more explicitly (and at minimum, the guidance in Indicator 7.2.14 be added to the other indicators mentioned in the issue overview).

In comments for Indicator 7.2.14, multiple Economic chamber commenters recommended removing the guidance about "exploitative practices" as it is unnecessary (i.e. the standard requires managing for environmental and social values and therefore exploitative practices are impossible), and because it

may be used to meet social objectives. However, numerous other commenters from multiple chambers indicate that the guidance is helpful. Another commenter recommends adapting the guidance so that practices which could be used for environmental or social benefits are removed and only those practices that have no possible benefits and are truly exploitative remain.

A peer reviewer contracted by FSC US commented that, “None of the draft indicators under Criterion 10.11 explicitly addresses the associated instruction for standard developers which requires that ‘Standard Developers shall* develop indicators to prevent high grading.’”

SDG Actions Taken:

- Do not add an indicator specific to high-grading
- Simplify the guidance language regarding high-grading that was associated with Indicator 7.2.14 in Draft 1, and include it with all of the indicators that are referenced (5.2.3, 6.6.2, 7.2.14, 10.5.1, 10.11.4).

PRIORITY ISSUE: Climate Change

The SDG asked a consultation question regarding whether climate change had been appropriately addressed in Draft 1. The majority of responses were positive regarding the incorporation of climate change and the general approach to how it has been done. A number of certificate holders emphasized the additional cost and time associated with implementing the Indicators, particularly 6.1.1, and particularly for smallholders. A small number indicated that the assessment requirement in 6.1.1 is too vague, and a small number indicated that overall the draft standard goes too far, while other comments indicate that it does not go far enough. One Economic commenter suggested making the climate change requirements voluntary, and/or allowing more flexibility for balancing climate change expectations with landowner goals and objectives (e.g., ecosystem services, wildlife habitat, recreation, timber production, and mill species requirements). Another commenter noted that field testing these new requirements should be a priority.

A number of respondents noted that climate change assessments should be conducted at broader scales (i.e., at a landscape scale). Other respondents indicated that there should be guidance regarding the timescales (e.g., short, medium, long) and climate scenarios (e.g., +1.5o C, +2.0o C) to be considered in assessments. Another suggested that the current management plan may be the best adaptation strategy and already in place (i.e., an actively and responsibly managed forest).

A number of respondents expressed concern about mandating actions now that could be monetized in the future – i.e., requiring certificate holders to initiate efforts to increase carbon storage or sequestration rates, as it could interfere with potential and actual carbon markets (if a forest landowner takes climate mitigation actions before signing up for a carbon credit program it jeopardizes their ability to sell credits on those activities at a later date). One commenter noted that state agencies may decide to wait if their state is considering setting up a carbon offset market.

One Economic commenter expressed concerns that: the climate change requirements might force managers to diversify forests that are not naturally diverse, and therefore it is important to consider forest diversity at the site and landscape levels; studies of the impacts of climate change over the past 40 years do not support assisted migration as an adaptation strategy; and potential consequences if certificate holders are expected to increase rotation length to increase carbon sequestration in unsuitable forest types.

SDG Actions Taken:

- Remove the requirement for a threats assessment from Indicator 6.1.1, and instead combine it with the Indicator 7.2.4 assessment (to streamline climate change considerations).
- Provide certificate holders with some additional time to come into full conformance with the climate change requirements in Indicator 7.2.4 – family forests are to have 5 years from the new standard’s effective date, larger organizations will have 3 years.
- Clarify that the allowance for using non-native species for regeneration in Indicator 10.2.2 is limited to only North American species, and allow hybrids of native/non-native only if neither “parent” is GMO and there is long-term research to indicate they are not a threat to other native species.
- Add carbon storage and sequestration in Indicator 7.2.6 (i.e., The management plan includes a description of the carbon resources and outlines activities to conserve them)
- Add a new section to Annex L (Climate Change Toolkit) on carbon sequestration – primarily pointing to resources to assist with considerations about how to evaluate and conserve carbon resources, but also indicating that FSC US will provide additional guidance as part of implementation support
- Implement additional edits in Annex L to make it more usable.
- Do not add examples to Annex L, but point to NIACS and others who provide examples, as possible
- No changes specifically to address climate change-associated considerations for stocking densities or using forest management to reduce the risk of catastrophic wildfires, as Criterion 5.2 is believed to adequately provide the flexibility needed
- Add new guidance language to the “Guidance for all regions” box associated with Indicator 6.6.5, to address live tree and dead tree retention following catastrophic events.
- Additional edits also implemented in response to more specific comments

PRIORITY ISSUE: Federal Lands

General Economic chamber comments suggesting that federal lands largely don't require the additional indicators - that can be addressed by scale, intensity and risk considerations, and that they are some of the most analyzed and monitored lands in the nation. Additional Economic comment that the supplementary requirements are often too prescriptive, not outcome oriented, and do not add substantively to the base indicators.

Multiple Environmental chamber comments that the supplementary requirements as proposed have significant problems and do not rise to the level needed given the importance of federal lands to maintain and restore biodiversity, carbon stores, and other natural forest values and ecosystem services, while also providing important recreational opportunities and other social values. Three core problems are identified: (1) the draft expands the scope of federal lands, which raise additional land management issues; (2) the draft weakens or eliminates important provisions of the existing Standard’s supplemental indicators; and also (3) fails to correct important problems with existing supplemental indicators for federal lands.

Environmental comment that the Supplementary Requirements fail to take management beyond minimal legal requirements when needed, they fail to incentivize management beyond that in which commercial logging is a significant factor, they fail to require management informed by historical native

ecosystem distributions, they fail to require assessments and adequate actions taken to increase forest carbon storage. Additional Environmental comment that significant improvements in management of Federal forests will be needed for FSC certification to be constructive and appropriate, and that it must require performance above and beyond regulatory minimums, or it risks being irrelevant, ineffective, and in some cases, greenwash.

Environmental comment suggesting consideration of additional indicators for federal lands pertaining to climate change planning in the form of carbon storage and sequestration, forest resilience, and mitigation/adaptation strategies, since federal lands are in a good position from the funding and long-term planning positions to consider and implement such strategies.

The SDG asked a consultation question regarding whether the supplementary requirements meet condition #2 in the Federal Lands Policy for all federal land-managing agencies, that is do they address the need for, “national-level indicators that address the special resource management, legal, technical, procedural, and governance issues associated with federal ownership.” Economic responses were all positive to this question. One Environmental comment (representing a large number of Environmental stakeholders) was clearly negative, and the other indicated, “technically, yes, depending on perspective” but clarified that the current supplementary requirements are not adequate for FSC certification. An Environmental comment provided in response to a different question specified that the Standard and its indicators are not designed to address lands managed with recreation, scientific research, cultural preservation, and public education as principal goals.

The negative comment noted above clarified that the issues relevant to and important for Bureau of Land Management (BLM) and National Park Service (NPS) lands had not been considered as part of the process and that there are some serious and important additional management expectations, challenges, and controversies within the administrative units. For the BLM, these include: mineral and oil exploration; water storage and distribution facilities; grazing; wildlife management; management of woodlands, mixed forest/desert ecosystems and habitats, and high desert ecosystems; and management of archaeological, paleontological, and historical sites. For NPS, these include: recreation, scientific research, cultural preservation, and public education as principal objectives. This environmental comment continued that at minimum if the scope of the supplementary requirements continued to include these other lands, the definition of “management unit” at Page 5 should clearly indicate the minimum scale in a way commensurate with the scale of individual National Forests – i.e., individual “Field Offices” for the BLM (which are administrative units, not literal “offices”), and individual National Parks for the National Park Service.

Concerns were also expressed in Environmental comments regarding: the robustness of BLM management plans; the inadequacy of the supplementary requirements for lands where commercial timber harvest and other commercial resource extraction would be absolutely inappropriate and controversial; and the lack of prohibitions on significant commercial logging, mineral extraction, or other extractive/industrial activity in National Parks; the lack of constraints on other commercial uses of National Park; the lack of expectations for a “lighter touch” in National Parks for timber harvest, chemical applications, road construction, salvage logging, and other management activities.

The SDG asked a consultation question regarding whether there are any specific Family Forest indicators for which small federal management units should be eligible. Mixed responses from Economic chamber - some support making all Family Forest indicators eligible for federal management units, some support to keeping the approach in as in Draft 1 with no eligibility for federal management units, some support for aligning with the non-federal public lands eligibility (i.e., eligible if small, but not if low impact), and one suggested that Marsh-Billings-Rockefeller Historic National Park should be allowed to continue to use them. Environmental chamber comment supporting continuing the current approach (i.e., no federal lands eligible for the Family Forest Indicators) to maintain credibility of FSC certification and reduce confusion for the public, but noting that an exception might be made for Marsh-Billings-Rockefeller Historic National Park due to its unique history and mandate. Social chamber

comment recognizes that while Marsh-Billing-Rockefeller’s risk profile aligns with family forests due to its history of family management and conservation, it has access to resources that most family forests don't and has additional risks (due to additional stakeholder interests and concerns), and therefore should not be treated the same as other family forest management units. Several comments from multiple chambers suggested that small federal management units should at least have exceptions for landscape level requirements in the standard. There was no support from any chamber for differentiating expectations for small federal management units between agencies or type of management unit.

NOTE: An additional topic regarding “Old Growth & Federal Lands” is addressed further below.

SDG Actions Taken:

- Given the comments and concerns received regarding whether the federal land supplementary requirements address the unique conditions of lands managed by Federal agencies beyond the US Forest Service, Department of Defense, and Department of Energy, the SDG is requesting additional input regarding specific issues identified during the Draft 1 public consultation that will be considered during development of Draft 3, along with input from a consultant, and additional inputs from targeted consultation with the Consultative Forum between Draft 2 and Draft 3.

See Table 1 (below) for potential locations of additional supplementary requirements or guidance to address the identified issues.

- Clarify that even if the federal land supplementary requirements address the unique conditions of other agencies beyond US Forest Services, Department of Defense and Department of Energy, the other agencies will remain ineligible for FSC certification until Condition #1 of the FSC US Federal Lands Policy is met (i.e., the agency demonstrates, with a commitment at the national level, that it is a willing landowner to participate in the certification process).
- Confirm the scale of certification, as suggested in comments.
- Maintain the current status of ineligibility of federal lands for family forest indicators, but clarify that Indicator 6.8.1 (providing a mosaic of species and underrepresented successional stages across the management unit) is not applicable for small federal management units.
- Additional edits also implemented in response to more specific comments

Table 1. Potential locations of additional supplementary requirements or guidance to address identified issues

Issue Identified	Potential Location of Additional Supplementary Requirements or Guidance
mineral and oil exploration	Criterion 1.2 (defining existing use rights) Indicator 1.3.2 (conflicts between conformance with the standard and compliance with laws or regulations) Criterion 6.2 (impacts of management activities on environmental values) Criterion 6.3 (preventing negative impacts) – particularly Indicator 6.3.2 (mitigating negative impacts when they occur) Criterion 6.9 (forest conversion)
water storage and distribution facilities	Criterion 6.2 (identify impacts of management activities on environmental values) Criterion 6.3 (preventing negative impacts) – particularly Indicator 6.3.2 (mitigating negative impacts when they occur) Criterion 6.7 (protection of water resources and their connectivity) Criterion 6.9 (forest conversion)

grazing	Indicator 1.2.1 (defining existing use rights) Indicator 1.3.2 (conflicts between conformance with the standard and compliance with laws or regulations) Criterion 6.2 (impacts of management activities on environmental values) Criterion 6.3 (preventing negative impacts) – particularly Indicator 6.3.2 (mitigating negative impacts when they occur) Criterion 6.6 (maintaining native species and biodiversity) Criterion 6.7 (protection of water resources and their connectivity) – particularly Indicators 6.7.7 (mitigating negative impacts) and 6.7.9 (grazing)
wildlife management	Criterion 6.2 (impacts of management activities on environmental values) Indicator 6.3.2 (mitigating negative impacts when they occur) Criterion 6.6 (maintaining native species and biodiversity) – particularly Indicator 6.6.8 (strategies to manage hunting, fishing, trapping and collection of native species)
management of woodlands, mixed forest/desert ecosystems and habitats, and high desert ecosystems	Criteria 6.1 (identifying environmental values that may be affected by management activities) Criterion 6.6 (maintaining native species and biodiversity) Criterion 9.1/Annex K (identifying high conservation values)
management of archaeological, paleontological, and historical sites	Criterion 3.5 (protecting sites of special significance for Indigenous Peoples) Criterion 4.5 (protecting values important to local communities) Criterion 9.1/Annex K (identifying high conservation values)
robustness of management plans	Criterion 7.2 (development and implementation of management plans)
recreation	Criterion 6.1 (identifying environmental values that may be affected by management activities, including recreation as an ecosystem service) Criterion 4.5 (protecting values important to local communities)
scientific research	Principle 8 (monitoring and assessment) – particularly Criterion 8.2, which includes monitoring and evaluating changes in environmental conditions
cultural preservation	Criterion 3.5 (protecting sites of special significance for Indigenous Peoples) Criterion 4.5 (protecting values important to local communities) Criterion 9.1/Annex K (identifying high conservation values)
public education	Criterion 1.8 (demonstrating and communicating a long-term commitment to the FSC Principles and Criteria) Criterion 4.3 (providing opportunities for employment, training and other services)
inadequacy of the supplementary requirements for lands where commercial timber harvest and other commercial resource extraction would be absolutely inappropriate and controversial	Criterion 5.1 (production of benefits and/or products, including ecosystem services) Criterion 5.2 (sustainable production of products and services) Principle 10 (implementation of management activities)
lack of constraints on other commercial uses when inappropriate and controversial	Criterion 1.2 (defining existing use rights) Criterion 1.4 (preventing illegal and unauthorized activities) Criterion 1.8 (demonstrating and communicating a long-term commitment to the FSC Principles and Criteria) Criterion 5.1 (production of benefits and/or products, including ecosystem services) Criterion 5.2 (sustainable production of products and services)
lack of expectations for a “lighter touch” for timber harvest, chemical applications, road construction, salvage logging, and other management activities when inappropriate and controversial	Principle 10 (implementation of management activities)

Plantations

General Economic chamber comments in support of the plantation indicators and changes proposed in Draft 1. Social chamber comment in support of the plantation indicators and proposed changes, but with concern expressed that they do not reflect the needs of plantations on family forest management units, and suggest further relaxing some of the more rigorous expectations for plantation management (and specifically for family forests). The Social comment further indicates that this will benefit natural forests as displaced demand resulting from reduced productivity of existing plantations (do to more rigorous certification expectations) will necessarily be directed toward natural forests, thereby increasing pressure on those forests. Social suggestion that some criteria could use additional plantation considerations, or at least include guidance (e.g., C6.5, and C10.1, particularly Indicator 10.1.2).

Environmental chamber comments that the proposed plantation indicators do not fully address what is needed given the impact of plantations. They recognize some improvements, but indicate that other changes seriously weaken or eliminate crucial provisions of the existing Standard's requirements, including changes that: reduce to trivial levels the percentage of plantations that must be restored to natural and semi-natural forest conditions; often completely exempt plantations from having any percentage restored to natural and semi-natural conditions, including in regions like the Southeast that have been most impacted by plantation conversion; and allow the vast majority of plantation areas to be managed more intensively than under the existing Standard, moving them further away from natural forest conditions. The comments suggest that the result will be a failure to meaningfully reverse the harm caused by existing plantations and the gaping hole they often represent in forest ecosystems, habitats, biodiversity, and carbon stocks. The also suggest that as proposed, the base indicators create a loophole that would allow semi-natural and natural forests to be converted to plantation – this appears to be associated with Indicator 10.2.2 (non-native species regeneration for climate change adaptation)..

The Environmental comments note that many existing plantations in the US were established at the expense of natural forests, and that there is little evidence that their establishment or certification somehow removes pressure from remaining natural forests in the US. They indicate that therefore the only path to credible and meaningful certification of these existing plantations is for significant portions of them to be restored to more natural conditions—conditions that can also be highly productive for forest products. And indicate that instead at least some of the proposed indicators are now closer to certifying business-as-usual forestry.

The SDG asked a consultation question to request suggestions for a different way to bring more US plantations into the FSC system and thereby increase the associated benefits. Responses to this question span from suggestions that FSC certification will always be too demanding and complex for plantation certification (particularly given increasing RSA, conservation areas network, and pesticide requirements), to confirmation that the current changes will likely bring more plantations into the system, to highly concerned comments regarding the changes to the Plantation indicators in C6.6 that were proposed in Draft 1 (that they will not result in meaningful portions of existing plantations being restored to more natural conditions, that they will allow plantations to be more intensively managed than under the existing standard, that they will not result in significant environmental benefits for plantations that are certified) and the potential that they will lead to greenwashing. There were Economic and Social suggestions for additional changes to reduce rigor and bring in more existing plantations into the US FSC system. There was also an Environmental suggestion for an alternative approach that focused on driving market demand for FSC products.

SDG Actions Taken:

- Provide a clear and transparent statement in the introduction regarding the SDG's intent to encourage existing plantations in the US to become FSC certified (except on public lands), as a way to increase the environmental and social benefits associated with these managed lands.
- Maintain the Draft 1 expectation for 15% of the management unit maintained in or restored to a natural or semi-natural state requirement for management units of all sizes that have plantations (per PL Indicator 6.6.1.2), with the exception of family forest management units that are less than 124 acres (50 hectares) and meet all of the other conditions of FSC Interpretation FSC-INT-01-001_9 (see Annex G). Also provide these very small management units with a similar exception to the 6.8.1 plantation indicator.
- Confirm that family forest management units with plantations may use the family forest indicators, unless there is an associated plantation indicator, in which case the plantation indicator applies.
- Maintain RSA and CAN expectations for management units with plantations
- The SDG commits to continuing the plantation conversation past the approval of the standard to explore how to really achieve the high level intent for plantations in the US as described in the introduction, and how to incorporate outputs from this conversation into the next revision of the standard.
- Additional edits also implemented in response to more specific comments

Non-Timber Forest Products (NTFP)

Recently, FSC International staff communicated to FSC US staff that they are trying to move away from specific standards for non-timber forest products (NTFP). Instead, they are encouraging SDG to incorporate certain International Generic Indicators (IGI) into their NFSS which would allow the NFSS to specify NTFP that are in scope for certification under the standard. An assessment by FSC US of the list of IGI provided by FSC International staff indicates that only one additional indicator would be necessary to incorporate NTFP formally into the FSC US standard.

FSC US reached out to Certification Bodies in the US with a request for information regarding currently certified NTFP in the US, and also NTFP where interest has been expressed, but are not currently certified. All respondents were supportive of including NTFP in the NFSS and believed there would be interest in certification of these materials.

There are no NTFP currently FSC certified in the US. The following have either been previously certified (#), or have had interest previously expressed.

- Balsam boughs #
- Spruce tops (for Christmas trees) #
- Maple syrup #
- Birch or yellow poplar bark
- Willows
- Witch hazel ointment
- Black ash (for baskets)
- Sap-based foods (e.g., hickory syrups, derivatives of both maple and hickory syrups);
- Resins and oils;
- Chaga
- Mushrooms and other Fungi

- Ginseng and other teas/herbals/medicinals (e.g., cohoshes, yaupon holly, etc.).
- Fruits (e.g. juniper and salal berries) and nuts (e.g. chestnuts, walnuts)
- Branches, boughs
- Pine straw (needles)
- Holiday trees and other ornamental plants

SDG Actions Taken:

- Include NTFP within the scope of the standard, but first gather additional information during the Draft 2 public consultation, and through experts, to determine which NTFP should be formally included in scope.
- Ask a set of consultation questions during the Draft 2 public consultation:
 - What are the priority NTFP products for which FSC certification is desired?
 - Are there any indicators that need to be further adapted to ensure the NTFP are produced in responsibly managed forests?
 - For any of the NTFP listed above, is there insufficient information available to determine sustainable harvest levels (per Criterion 5.2)?
 - Are any of the NTFP listed above, or other NTFP, threatened by typical forest management activities?

Best Available Information & Traditional Knowledge

Consultation with Native American Indigenous Peoples conducted by FSC US since the Draft 1 consultation suggests that portions of the standard with a singular focus on “science” or science-related literature or information as sources of information for decision-making or justifications represent a concern for some Native American Indigenous Peoples. It is perceived by some as disrespectful of the extensive knowledge and understanding that these Indigenous Peoples hold regarding forest ecology and management.

While the definition of “Best Available Information” implicitly includes traditional knowledge, due to the reference to “experts”, it is not an explicit component.

SDG Actions Taken:

- Revise the definition of best available information to explicitly recognize traditional knowledge.
- Also adapt the definition to recognize that peer-reviewed scientific literature, traditional knowledge and experts should be the primary sources of information, with other sources filling in if these are not available.
- Remove “credible scientific analysis” from the glossary.
- Revise indicators that include explicit references to science, research and scientific literature to instead focus on best available information.

Criteria 1.1, 1.2 & 1.3 Indicator Alignment

While there were limited comments received regarding the indicators in these three Criteria, those that were received indicated some confusion about the intent of the indicators, potential duplication between the indicators, and some additional minor edits.

Review of the Criteria and indicators in question found that the Draft 1 efforts to adapt existing indicators for use with the new Criteria might not have been particularly successful. These three criteria are linked, but each has a very specific purposes which were confused by the Draft 1 indicators.

- C1.1 focuses on establishing the legal registration of the organization.
- C1.2 focuses on establishing the legal status of the management unit, including boundaries and clarifying where rights associated with those lands are held by others.
- C1.3 focuses on establishing the organization's legal right to implement management activities within the management unit.

SDG Actions Taken:

- Align indicators with the above core intents of the three Criteria. This was implemented through edits to some Draft 1 indicators, addition of a new indicator in Criterion 1.3, and new and adapted guidance statements.
- Additional edits also implemented in response to more specific comments

Criterion 1.6 & Dispute Resolution

Comments received regarding Criterion 1.6 were almost entirely from the Economic chamber. A number of them express general concern regarding the burden Criterion 1.6 would place on a certificate holder (particularly small and medium-sized), how it could be accomplished by a group manager, the possibility for any complaint to evolve in to disputes, potential abuse by those submitting complaints, the over prescriptive nature of the indicators in this criterion and Annex D, and the lack of record-keeping regarding complaints. This concern regarding burden is expressed particularly along with comments that indicate that the US has a well-established legal system to handle disputes. Additional concern is expressed in Economic comments regarding the potential impact of the dispute resolution framework on private land rights, and the potential to give authority to claimants to impact management and collect damages. Other Economic comments indicate that this Criterion is not needed as public complaints are already effectively addressed, without ever being elevated to anywhere close to requiring court action, and that State agencies have their own prescribed dispute resolution process managed with Attorney General's offices.

A peer reviewer contracted by FSC US noted that if Criterion 1.6 is intended to address the issue of disputes with workers from Criterion 2.6, then it also needs to include development of dispute resolution mechanisms through engagement with workers as required by Criterion 2.6.

The Draft 1 consultation included a question requesting examples for types of property destruction that should/should not lead to classification as a 'dispute of substantial magnitude'. Responses included considerations of repetition (one-time vs. multiple), permanency (can it be remedied/mitigated?), intentionality (mistake or accident vs. purposeful destruction), tangibility (physical vs. other property), defensibility (does it represent best practice or current science or not?).

The Draft 1 consultation included a question asking how many interests would need to be involved for a "dispute" to become a 'dispute of substantial magnitude'. Most respondents found this question difficult or distasteful, and some suggested completely removing the phrase, "significant number of interests." A number noted that a dispute of substantial magnitude could involve just one or two interests, depending on the issue. Another suggested focusing on the number of types of stakeholders (i.e., more than one). 3 interests was proposed by another. Further Economic comments reflected that not all interest are equal (legal rights holder vs. opinion), that the decision should be based on the merits of the dispute,

and that a stakeholder could stir up a lot of interests around something that should never be considered "a dispute of substantial magnitude"

The Draft 1 consultation included a question requesting examples for types of impacts to forest resources/values that should/should not lead to classification as a 'dispute of substantial magnitude'. Comments were similar to many above and included considerations of temporality (short-term vs long-term impacts), reversibility, violations of the standard (negative effects on high conservation values, major non-conformances), defensibility (supported by best management practices or accepted silvicultural practices), repetition, spatial extent, rarity of value affected, irreversibility, extent of impact (i.e., broad public resources affected, community health and safety), and/or monetary impact. One comment indicated that the magnitude of the impact should not be tied to the "kind" of impact.

SDG Actions Taken:

- Maintain indicators with expectations that certificate holders will address disputes and try to keep them out of the court system. Criteria 2.6 and 4.6 include language regarding dispute resolution, therefore it needs to be addressed in indicators. Also maintain the distinction between complaints and disputes.
- Maintain Criterion 1.6 as a common set of indicators to address dispute resolution expectations throughout the standard. However, limit the scope of the Criterion to disputes that are brought to the Organization, and add an indicator to Criterion 2.6 with the expectation that the Organization will contract with businesses that have their own dispute resolution process for disputes raised by the contractor's employees.
- Align Criterion 1.6 with the reference to Criterion 1.6 that occurs in Criterion 3.2, which is focused on resolving disputes related to violations of rights held by Native American Indigenous Peoples. But do not introduce further limits on the kinds of disputes that need to be addressed through the indicators of Criterion 1.6, beyond the limits already established in Indicator 1.6.1.
- Clarify that when "good faith" is exhausted, "The Organization's dispute resolution responsibility ends."
- Align with Criteria 2.6 and 4.6 by specifying that if the dispute has been raised by employees or local communities, then the system needs to be adapted through engagement with those bringing the dispute.
- Maintain the existing approach for family forest management units.
- For the uses of "significant" related to the types of property destruction and the types of impacts to forest resources/values that would lead to a dispute of substantial magnitude, provide additional guidance in Annex D that focuses on the kinds of attributes that a auditor should consider when evaluating whether a dispute rises to this level.
- For the use of "significant related to the number of interests that would lead to a dispute of substantial magnitude, provide guidance in Annex D that this is about the number of different types of stakeholders, and there would need to be a breadth of stakeholder types raising a dispute, such as stakeholders representing all three of FSC's chambers (i.e., economic, environmental, social).
- Additional edits also implemented in response to more specific comments

Criterion 4.5 & Community and Social Impacts

Numerous Economic chamber comments expressed concern regarding the scope and anticipated difficulty/effort required for conformance (i.e., onerous, burdensome and operationally infeasible) with the indicators of Criterion 4.5, and the importance of better clarifying the threshold for "significant" negative impacts. One comment notes that engagement prior to operations can cause delays in necessary and time-sensitive activities - if these operations are not protected, economic harm may result in non-conformance with other components of the standard. Others question how much authority individuals outside of the management unit should be given over activities on the management unit. Another that state and local controls already exist for this and additional should not be required. A final comment notes that a comprehensive assessment of social and environmental impacts to all local communities is not feasible and that typical legal activities needed to conform with the standard should not require mitigation or avoidance.

Economic suggestion that avoidance or mitigation not be required for forest management actions resulting from and implemented in compliance with management plans that were developed through a formal consultation processes with stakeholders and tribes - should not require avoidance at all, and only require mitigation if unexpected impact occurs and then only within the scope of forest practices rules and collaboration with other state agencies (e.g., Dept. of Ecology). Another Economic comment that the indicators are generally confusing, with recommendation to clarify expected steps (i.e., 1. identify impacts on (bulleted list of items) 2. develop and implement measure to avoid and mitigate (bulleted list of items)).

Specifically for Indicator 4.5.2, there was an additional concern that some of the potential impacts are beyond the control of the certificate holder, and a suggestion to remove the specific items (1 and 2) and just leave it measures are implemented to avoid significant economic impact.

The SDG asked a consultation question requesting examples for the kinds of negative social and environmental impacts of management activities that should and should not require avoidance and mitigation measures. One comment noted that most CH are already subject to legal requirements under federal and state laws and regulations to avoid, minimize, and mitigate negative social and environmental impacts, and therefore this indicator should only apply to consideration of impacts beyond these legal thresholds. Others suggested considering NEPA regulations to help determine a level of significance with associated guidance, or using "demonstratable" instead of "significant". A number of comments that responded directly to the questions regarding activities that should/should not require mitigation or avoidance focused on the scale of impact, considering spatial impact, percentage of the community's population affected and the temporal scales (i.e., temporary/short-lived vs. permanent/long-lasting/irreversible). A similar question was asked regarding economic impacts and the general responses were very similar to those for the questions related to Indicator 4.5.1.

SDG Actions Taken:

- Revise the indicators in Criterion 4.5 to focus on engagement with local communities, identification of potential community-level impacts that are of concern to the community, and then identifying strategies to address those concerns.
- Provide guidance to help with considerations regarding what would be a "significant" negative impact on the community.

Criterion 5.2, Criterion 7.4 & Sustained Yield Harvest Levels

The SDG asked two consultation question regarding the timeframe for sustained yield harvest levels (Criterion 5.2) and the timeframe for management plan revisions (Criterion 7.4). The Criterion 5.2

consultation question asked for examples for when averaging annual harvest levels over rolling periods that are longer than the generally-expected 10-year timeframe would make sense. The Criterion 7.4 consultation question asked for rationale that would justify, for ecological reasons, longer planning periods. Note that in Draft 1, Criterion 7.4 provides an exception to the management plan revision timeframe for up to 15 years if statutorily required, and this would also apply to sustained yield harvest levels as these two timeframes are linked in Criterion 5.2.

Almost all Economic chamber comments supported providing greater flexibility for Criterion 5.2, but there were a small number of economic and one environmental responses indicating that the current 10 year period is good. One additional environmental comment supported longer time periods, but primarily for family forests. Some examples for longer sustained yield harvest level rolling periods focused on restoration of particular forest types, others were based on size of the management unit, others considered response to disturbances and climate change considerations

While the majority of responses to the Criterion 7.4 question were, "No," there were a number of Economic chamber comments supportive of longer plan revision cycles. The limited examples for when longer cycles might be appropriate were in similar categories as the Criterion 5.2 examples.

SDG Actions Taken:

- No change. The examples provided for the Criterion 5.2 would generally not be fully addressed through increasing the timeframe by several years. However, they likely can be addressed through the flexibility provided in Indicator 5.2.4.

Criterion 5.3 & Externalities

Economic chamber comments indicate significant concern regarding this indicator, that it will be costly or impossible to implement, that it is burdensome without adding any value, that it will be extremely difficult for group managers to implement, that it needs to be more specific or include significantly more guidance (including for timescale of considerations), that the appropriate scale for consideration of externalities is at the macro-level (i.e., high-level management planning), that it seems redundant of the social, economic and environmental impacts considered throughout the standard, etc. An Environmental chamber comment also noted significant overlap with Criterion 4.5.

The virtual 2021 General Assembly included consideration of a Motion to remove Criterion 5.3 from the Principles and Criteria as many countries have struggled to adapt it for their NFSS. However, the motion was voted down, and therefore the US NFSS will need to have indicators that address the intent of the Criterion.

Comments regarding Indicator 7.2.19 again noted the difficulty of dealing with externalities, as well as the overlap with Indicator 7.2.12 (incorporation of social value considerations in the management plan).

SDG Actions Taken:

- Adapt the Criterion 5.3 indicators to focus on the core intent expressed in the International Generic Indicators – being aware of and prepared for the financial risks related to externalities. This concept is closely linked with the Criterion 5.5 indicators (i.e., the Organization needs to understand their potential financial risks and have strategies in place to address these risks so that they have the capacity to implement their management plan/conform with the standard). This approach also reduces duplication with expectations around identification and mitigation of social and environmental impacts elsewhere in the standard.

Principle 6 & Family Forests

Social chamber comment that even with the existing family forest indicators, Principle 6 will be too complex, scientific and daunting for most family forest owners....this includes associated annexes. Overall it is viewed as considerably more challenging than Principle 6 in the existing standard, and likely prohibitive for most family forest. One Economic chamber respondent agrees in that it is overly complex and labor intensive given the low intensity management of family forests and the technical resources accessible to them, but two other Economic respondents are generally supportive of the family forest indicators in Principle 6. Numerous Economic comments at the Principle-level suggest both that the Principle overall is too complex and also that changes made for Draft 1 represent a big improvement.

One Economic comment specifically recommends additional streamlining and scoping to reflect private landowner rights within the U.S. and scope/scale of family forest lands, noting that FSC could base family forest decision on risk identified within a particular region (per the FSC US Controlled Wood National Risk Assessment) - with additional base and supplemental indicators low-risk to mirror the conclusions of the National Risk Assessment (when indicating low risk).

Additional Economic comments that as with tribal information, there are variable levels of information and accessibility of information from agencies in different states, and this should be considered when evaluating FFs, as it makes the task of conformance very different by state- through no fault of the certificate holder.

SDG Actions Taken:

- Revise base Indicator 6.3.1 (mitigating negative impacts of management activities) for all management units.
- Add a Family Forest Indicator for base Indicator 6.6.4 (invasive species strategy).
- For Criterion 6.5, designate Indicators 6.7.3, 6.7.4, and 6.7.8 as not applicable, add guidance for 6.5.6 and add family forest-specific guidance in Annex G (Representative Sample Areas) and Annex H (Conservation Areas Network).
- Do not use the National Risk Assessment as an indicator of risk at this time. Currently, the normative framework only allows considerations of risk related to scale and intensity of management for National Forest Stewardship Standards. However, FSC US is beginning to prepare for implementation of the revised Risk-Based Approaches procedure and risk-related elements in the Forest Management Evaluations standard revision (which will hopefully allow consideration of other aspects of risk).

Indicator 6.3.2, Criterion 10.11 & Whole Tree Removal

Draft 1 included an indicator specific to whole tree removals. However, the SDG was not completely sure it was needed, And, therefore, asked two consultation questions. The first regarding whether the indicator added value to the standard, or is duplicative of other indicators, and the second regarding whether there were edits that would increase clarity of the indicator.

The majority of Economic chamber responses indicated that the proposed indicator did not add value. Rationale for this perspective was wide ranging, including that it would limit normal silvicultural practices, add costs, and would add little value given the rest of the expectations in the standard. Positive Economic responses were not as detailed, but indicate that the indicator is not duplicative, adds clarity, and while there is some overlap with other indicators, the overlap is not complete. Some also indicate need for additional detail, including what kind of ecological objectives are justified and how

to handle situations where whole tree removal is required for restoration efforts. Economic chamber responses provided an extensive set of suggested improvements to the indicator.

Environmental comments support inclusion of the indicator (yes it adds value), but additionally focus on concern regarding the inclusion of the clause, "unless it is being used to achieve ecological management objectives" which is perceived to potentially be abused and be rationalized to mean almost anything. These comments suggest that any whole tree harvest that is genuinely driven by forest ecosystem restoration or conservation objectives will already be feasible within the Indicator's constraints. Additional Environmental comments indicate that this issue is of particular concern in the context of plantations. A final Environmental comment focuses on the exception described in the Draft 1 indicator, item (c) ("is not planned to occur again in the subsequent rotation") - that it is not actionable or discernible within the time-frame of certification decisions. Environmental chamber responses suggested some edits for clarity, and also a suggestion to replace the indicator with the clause in the existing standard that is focused on whole tree harvesting.

SDG Actions Taken:

- Do not include an indicator specific to whole tree removals in Principle 6. Instead, add the concept to Indicator 10.11.4 as a list item (similar to the approach in the existing standard).
- Add a definition for the term to the glossary, based on the applicability language from the Draft 1 indicator.

Criterion 6.5, Major Disturbance Planning & Post-Event Management Response

The SDG asked a consultation question regarding whether climate change had been appropriately addressed in Draft 1. Among many other comments, responses suggested additional indicators and/or considerations for: additional flexibility for changing stocking densities; climate change impacts on dry forests; using forest management to reduce the risk of catastrophic wildfires; and post-catastrophic disturbance considerations.

The SDG also asked a consultation question focused on whether Draft 1 provided adequate flexibility and safeguards for major disturbance planning and post-event management response. Many respondents indicated that yes, the standard is sufficient for this issue. One indicated that the concept was too complex, and another suggested that this issue is critical and should be re-visited and reviewed in the standard more frequently than the standard review cycle. Several respondents (including one environmental chamber member), suggested that the standard is sufficient on this issue, with the exception of fire risk mitigation and addressing fuel load issues.

A number of respondents indicated that the standard is specifically not adequate to address salvage harvesting after disturbances – some indicated a need for more flexibility for salvage harvesting, while others just generally would like the standard to be more explicit about what is expected for planning in preparation for major disturbances and what is allowed for response after they happen. Conversely, at least one environmental chamber respondent requested additional limitations on salvage harvesting.

A number of respondents linked the increasing prevalence of major disturbances to climate change, and one Environmental comment emphasized the need to separate the standard's approach to historic disturbance from its approach to disturbance as a result of climate change, as they are fundamentally different.

SDG Actions Taken:

- Do not differentiate between historic and climate change-related disturbances. The science is still coming into focus regarding the ability to attribute disturbances in part or completely to

climate change. For the most part, there is still overlap between historical and anthropogenic-influenced disturbance, and trying to separate them would be difficult.

- No changes specifically to address climate change-associated considerations for stocking densities or using forest management to reduce the risk of catastrophic wildfires, as Criterion 5.2 is believed to adequately provide the flexibility needed
- Add new guidance language to the “Guidance for all regions” box associated with Indicator 6.6.5, to address live tree and dead tree retention following catastrophic events.
- No additional changes specifically for family forests or plantations (to reflect risk), or for Federal lands

Indicator 6.6.5, Harvest Openings & Retention

The Indicator 6.6.5 base indicator and regional requirements (for even-aged management) use a number of undefined terms, such as “harvest opening,” “opening,” “logging unit” and “timber producing area” as well as the defined term, “harvest unit” and this has caused some confusion. Comments received during the Draft 1 consultation indicate confusion regarding the relationship between harvest opening and harvest unit – are they the same, or does one occur within the other. Of specific concern is the last sentence of the guidance for Supplement 1 to Indicator 6.6.5 and the reference to “individual harvest openings with no retention.” The term “opening” is only used in a very small number of other locations in the standard.

SDG Actions Taken:

- Maintain the current definitions for “harvest unit” and “management unit” and to add a definition for “harvest opening.” In the glossary, clarify that these are hierarchical terms, i.e., harvest openings occur within harvest units, and harvest units occur within management units.
- Use these defined terms in place of other terms that are used in the standard to convey a similar concept (Opening, Block, Logging Unit, Patch), as appropriate.

Old Growth – Indicator 6.8.2, Definition & Annex K

The SDG asked a consultation question which requested examples of situations where certified forests have matured into late seral stage forest that could potentially be defined as old growth, and could result in difficulty continuing certification considering conformance with indicator 6.8.2. Responses with examples were limited to the situation with lowland conifers in Minnesota. An Environmental Chamber response indicates a desire to not see the overall concept of Old Growth weakened, but instead to have any allowed exceptions very carefully and narrowly described. However, this comment also suggested that any decisions on this front should not consider whether the status of a forest as old growth or not is a “barrier” to certification.

SDG exploration of the example in Minnesota evolved into a consideration of how to handle situations where the management decisions of a certificate holder have resulted in old growth of a particular forest type no longer being under-represented in the landscape of the management unit, and a desire to find a way to reward certificate holders in this kind of situation.

During discussions of the above, the SDG noticed that while the first clause of the “old growth” definition was well representative of the way the SDG was using the concept (i.e., “(1) The oldest seral stage in which a plant community is capable of existing on a site, given the frequency of natural

disturbance events”), the second clause was not (i.e., “or (2) a very old example of a stand dominated by long-lived early or mid-seral species”).

Finally, numerous comments from the Draft 1 consultation indicate that the old growth definition and a reference to pre-European remnants in Annex K (Section 4.a.ii) are inconsistent in how they represent old growth.

SDG Actions Taken:

- Add a new indicator immediately following Indicator 6.8.2, which provides a very limited opportunity for harvest within the area identified in the Draft 1 consultation, where the old growth is now widely represented in the landscape. The new indicator is limited in applicability to northern white cedar and black spruce forests in upper-Midwest states. Annex K was also edited to reflect this change.
- Implement minor edits in the definitions of Type 1 and Type 2 Old growth and in Annex K to resolve the perceived inconsistency.
- Remove the second clause of the old growth definition.
- The SDG commits to continuing the conversation around late-successional forest, old forest, old growth forest, primary forest, etc., even after the revised standard is completed.

Old Growth & Federal Lands

The SDG asked a consultation question regarding whether 20 acres is a scale that is feasible for identifying and protecting Type 2 Old Growth. Economic chamber comments were mixed on the question of what scale is feasible. One indicated that 20 acres is feasible but that smaller areas would not have the structures and processes to be defined as old growth. Another indicated that 20 acres is not feasible, and the final Economic response suggested aligning mapping to the scale normally used on the property (which may be a finer scale), but that the need to protect should not be based on an arbitrary mapping standard. Environmental chamber comments consistently indicate that 20 acres is feasible in commenters' areas of experience, and most indicate that finer would also be feasible and important due to the small patches of old growth that remain and that might be missed at the 20 acre resolution. One Environmental comment indicates, however, that a finer scale may be difficult on large federal holdings, particularly in the western US.

One Economic comment noted that smaller areas will lack the fundamental structures and processes necessary to function as Type 2 old growth (due to increasing edge-effects). Another suggested refocusing on larger ecosystem objectives - with an assumption that most Type 2 old growth that exists is likely already protected, - and questions the purpose for maintaining small areas and whether they actually provide the functions desired, and by doing so are resources taken away from other ecosystem priorities. A final response indicated a preference for a 50 acre threshold.

An Environmental comment recommends shifting the minimum threshold for identification of Type 2 old growth on federal lands to 3 acres. This comment also requests an additional supplementary requirement to require that "Any individual trees that remain from stands that would have been Type 1 or Type 2 old growth, but do not meet the acreage threshold are considered legacy trees and are managed per Indicator 6.6.3." The rationale for this secondary suggestion is that federal lands have a demonstrated track record of failing to identify and protect old growth and 6.8.2 as it stands would not protect those areas that occur which are smaller than 20 or 3 acres, respectively for Type 1 or Type 2 old growth.

Additional comments were received regarding old growth and Federal Land Supplement to Indicator 6.8.2. The only Economic chamber comment suggests that this supplementary requirement does not add substantial value to base indicators 6.8.1 and 6.8.2. An Environmental chamber comment (representing many stakeholders) indicates that the supplementary requirement and guidance are unacceptable. This comment suggests that as written, the expectation would be to only protect old growth if it is identified as being likely to occur, not everywhere it occurs (i.e., in conflict with the base indicator). It indicates that the language introduces too much subjectivity and chance, particularly given poor track records of old growth protection on federal lands and dependency on forest inventories and other data sets that are incomplete and insufficient for this purpose. Instead this comment proposes deleting the guidance and replacing the supplementary requirement with alternative text.

NOTE: An additional topic regarding “Federal Lands” generally is addressed with the Priority Issues above.

SDG Actions Taken:

- Maintain the same minimum threshold for Type 2 old growth for all management units – do not provide a different threshold for federal lands.
- Do not add a requirement for protection of “any individual trees that remain...” If it is difficult to identify Type 2 old growth that is less than 20 acres, it would be virtually impossible to determine at the scale proposed, and would likely create confusion and fuzzy expectations.
- The SDG believes that old growth would be protected by base Indicator 6.8.2 anywhere it occurs, and that the Draft 1 supplementary requirement would be an additional expectation on top of the base indicator. However, the SDG decided to replace this supplement with an adapted version of the Environmental commenter’s alternative text.

Criterion 6.9 (Conversion), Criterion 6.10 (Certification of plantations), Criterion 10.1 (Regeneration following harvest), Degraded Forests, Restoration Plantations & Non-Forest

A comment received in regards to Indicator 10.1.2 led to a review of the Criterion 6.9, Criterion 6.10 and Criterion 10.1 indicators and guidance as they pertain to conversion, plantations, degraded forests, restoration plantations and non-forest. The comment noted that Indicator 10.1.2 requires that degraded semi-natural stands must be regenerated to “more natural conditions” and that this requirement appears to conflict with guidance under C6.9 which states that, per Indicator 6.9.1, “restoration plantations” established on degraded, semi-natural forests are not considered conversion, and therefore presumably allowable. The comment continued to question whether some severely degraded forests could be classified as “non-forest” and therefore allow establishment of plantations on these areas.

The review concluded that while (a) Criterion 6.9 prohibits (with limited exceptions) the conversion of natural and semi-natural forest to plantation or to non-forest on certified lands, in addition to prohibiting conversion of plantation to non-forest if the plantation was created in a way that it directly replaced natural or semi-natural forest, and (b) Criterion 6.10 prohibits the certification of plantations that were established after 1994 if they directly replaced natural or semi-natural forest, neither (a) nor (b) directly address the potential for severely degraded ecosystems that do not meet the definitions of natural forest, semi-natural forest or plantation, but do meet the definition of forest.

This review also assessed the extensive guidance included with Criteria 6.9 and 6.10, which was carried over from the existing standard with few edits, and whether the concepts presented could be communicated more simply. Included in this guidance is the concept of “restoration plantations” which

are not considered plantations as defined by FSC, but are intermediary steps in a longer-term restoration process.

SDG Actions Taken:

- Replace the existing definition of conversion in the glossary with a recognition that FSC prohibits conversion of forests except in very limited circumstances and point to Criterion 6.9 for the specific aspects of what is prohibited and allowed.
- Remove language regarding restoration plantations from both C6.9 and C6.10, but adapt Indicator 10.1.2 to clarify that it is acceptable to have short-term shifts away from more natural conditions, as long as the intent is to move in the longer-term to more natural conditions.
- Do not define “non-forest” and remove the examples of “non-forest” from the guidance, but clarify that it represents anything that does not meet the definition of “forest”. However, retain recognition that for the purposes of the standard, areas that are legally zoned in a way that will likely result in loss of forest conditions are to be considered “non-forest.”
- Add guidance to Criterion 6.9 that if a forest that does not meet the definition of natural forest or semi-natural forest is converted to plantation or to non-forest the Criterion does not apply.
- Add guidance to Criterion 6.10 to clarify where plantations may be established and certified and not be in conflict with the Criterion (i.e., in forests that do not meet the definition of natural forest or semi-natural forest or in non-forest areas, as long as the non-forest condition is not the result of a direct conversion from natural forest or semi-natural forest after 1994).
- Additional edits also implemented in response to more specific comments

Principle 10 Family Forest Indicators

In Draft 1, Principle 10 (Implementing Management Activities) did not include any “low risk,” “not applicable” or other alternative family forest indicators. The only family forest-specific content is Family Forest Guidance for Indicator 10.7.5.

Comments indicate that conformance with Principle 10 will be difficult for family forest management units and recognize a general need for more family forest-specific indicators in this principle, with specific focus on genetically-modified organism use in Criterion 10.4, fertilizer use in Criterion 10.6 & biological control agent use in Criterion 10.8), and recommendations for alternate family forest indicators that address the intent of the base indicator and/or Criterion, but omit requirements for written documentation (including silvicultural prescriptions, etc.).

SDG Actions Taken:

- Add an alternate family forest indicator for Indicator 10.2.1 (species chosen for regeneration).
- Add family forest-specific guidance for: Indicator 10.3.3 (controlling adverse impacts from use of non-native species); Indicator 10.7.1 (integrated pest management); Indicator 10.7.2 (Environmental and Social Risk Assessments); Indicator 10.7.4 (documenting pesticide use) and Indicator 10.11.1 (implementation plans for significant management activities).
- Designate as “not applicable”: Indicator 10.2.2 (non-native species for regeneration as part of climate change adaptation); Indicator 10.9.2 (increasing resilience of ecosystems to catastrophic natural disturbances); and Indicator 10.11.2 (forest product optimization and diversification).

- Designate as “low risk”: Indicator 10.6.1 (fertilizer use); Indicator 10.8.1 (use of biological control agents); Indicator 10.8.2 (following international protocols when using biological control agents); and Indicator 10.9.1 (mitigating impacts of natural hazards).

Criterion 10.2, Criterion 10.3 & Non-native Species for Regeneration

Economic chamber comments express concern regarding the limitations in Draft 1 on the use of non-native species to only climate change or pest vulnerability concerns, thereby making the draft more restrictive than the current standard. Additional comments indicate that the difference between Criterion 10.2 and Criterion 10.3 is not clear, that the two Criteria may be contradictory, and it is not clear when the indicators of each Criterion would apply.

The current standard indicates that native species are "normally" used, but allows for regeneration using non-native species if justified. Non-natives are not explicitly excluded from the scope of Criterion 10.2 (regeneration). However, the Draft 1 combination of 10.2.1 (species chosen for regeneration are native species) and 10.2.2 (an exception to allow non-native species for climate change adaptation) would likely prohibit the use of non-natives for restoration (i.e., when used as a short-term cover while allowing other species to establish) or as part of other ecological objectives that will ultimately result in more natural conditions.

There were a number of Environmental chamber comments requesting that Indicator 10.2.2 clarify that the use of non-native species for regeneration associated with climate change adaptation be restricted to only North American species and that use of this indicator be “limited”, but also one comment indicated concern about what this indicator and the North American restriction means for Norway spruce. Environmental comments indicate concern regarding the scale of potential impact resulting from use of this indicator and the potential for entire Management Units to be converted to non-native species as a result.

A peer review contracted by FSC US indicated that an element of Criterion 10.2 was not addressed in the indicators (i.e., the use of species that are well-adapted to the management objectives).

SDG Actions Taken:

- Expand 10.2.1 to include more common and acceptable uses of non-natives, address the missing element identified by the peer reviewer, and also adapt to address the potential conflict with Indicator 10.2.2.
- Ask for input regarding whether there are other situations that should be included as exceptions in 10.2.1 or 10.2.2 (see associated consultation question)
- Clarify that the scope of Indicator 10.2.2 is limited to species of North American origin.
- Clarify in guidance at the Criterion level that Criterion 10.3 applies if non-natives are used per Indicator 10.2.1 or Indicator 10.2.2.
- Recognize that it would not be possible for an entire management unit to convert to non-native species and remain in conformance with all indicators of the standard, and therefore that additional guidance or indicator language is not needed to address this.
- Additional edits also implemented in response to more specific comments

Criterion 10.6 & Fertilizer Use

Economic chamber comments request additional consideration for use of fertilizers in various situations, including: a) the use of fertilizer within management units for improvement of erosion and sedimentation control issues and on food plots where prolific plant growth is needed to stabilize soils or provide nutrient benefits (i.e., lime); and b) the use of fertilizers for reclamation of roads and landing sites (needed due to the compaction of soils and exposure of mineral soils that have less fertile qualities). One Economic comment suggests that (b) amounts to a categorical prohibition on the use of fertilizers and it extends beyond the scope of the Criterion (i.e., "equally beneficial" is the bar that must be cleared).

Environmental chamber comments request that use of fertilizer be limited to situations where it can be demonstrated that the fertilizer will be MORE beneficial than other non-chemical management, not just equally beneficial. Additional Environmental recommendation to return to existing standard's language in place of items (b) and (c) - i.e., "Data and/or scientific literature suggest that the response to fertilization is economically and ecologically justified." This is because comparing to silvicultural systems that do not require fertilizers could include systems with poor silvicultural practices.

SDG Actions Taken:

- Expand the scope of item (a) to include other situations when fertilizers are used for ecologically beneficial outcomes
- In items (b) and (c), edit to replace "silvicultural systems" with "management strategies", a defined term, specify that the comparison for items (b) and (c) are for strategies with similar outcomes (so that the comparison is not with systems that include poor silvicultural practices), and align with the Criterion so that the comparison is for equal or greater benefits.
- Revise guidance to reflect that fertilizers are expected to be minimized or avoided in non-plantations, and add guidance to emphasize the use of best available information (which itself emphasizes research and scientific literature) for any justifications.
- Additional edits also implemented for clarity

Criterion 10.7 & Pesticide Use

While there are few comments regarding C10.7 from the Phase 1 consultation, there are concerns regarding the overall construct with a state expectation for eventual phase-out of chemical pesticide use, detail of some indicators, and the general burden on certificate holders, particularly family forest management units. There is confusion about the use of both "pesticide" and "chemical pesticide" and whether these are intentionally differentiated. An Economic chamber comment recommends to not require both Environmental and Social Risk Assessments (ESRA) and site-specific plans. Another Economic comment suggests lowering the ESRA expectations specifically for non-HHP chemical pesticides. Economic and Social chamber comments suggest that Criterion 10.7 as a whole is likely too difficult/complex for family forests, and propose including additional family forest indicators, guidance or other considerations to simply and streamline the requirements for family forests.

A peer review contracted by FSC US noted additional inconsistencies with the FSC Pesticides Policy and International Generic Indicators.

Additionally, the SDG considered whether there was value to be gained by working to better align the Criterion 10.7 indicators with the most recent draft version of the International Generic Indicators for Highly Hazardous Pesticides which also include some revisions for the primary International Generic Indicators in Criterion 10.7. Regardless of what is done in this revision process, the US NFSS Criterion

10.7 indicators will need to be revised during the next US NFSS revision cycle (in approximately 5 years, unless an earlier revision is required by the FSC International Board of Directors) to align with the new International Generic Indicators for Criterion 10.7 that are expected to be approved later this year.

SDG Actions Taken:

- Focus on alignment with the currently approved Criterion 10.7 International Generic Indicators.
- Reduce duplication between the indicators and the Pesticides Policy by focusing on conformance with the Pesticides Policy instead of bringing details from the policy into the standard.
- Reduce duplication between Criterion 10.7 indicators.
- Eliminate duplication with Criterion 10.11, which also includes an expectation for development of prescriptions/implementation plans for significant site-disturbing management activities, including application of pesticides.
- Add additional guidance for family forest management units.
- As part of its implementation strategy FSC US will work to collect and share Environmental and Social Risk Assessments that have been developed by certificate holders and successfully audited, so that they may be adapted by other certificate holders.
- Additional edits also implemented in response to more specific comments