

**FSC US Controlled Wood Regional Meeting Report
PACIFIC COAST & ROCKY MOUNTAIN REGIONS:
Portland, OR – August 14, 2018**

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Executive Summary

In Summer 2018, FSC US invited diverse stakeholders to participate in a new and innovative process to collaboratively identify practical actions that companies can take to effectively reduce the risk of procuring wood from forests where important ecological values are threatened. This process included participation through webinars, an online discussion forum and in-person Controlled Wood Regional Meetings. Organizations and individuals who engaged in this process collaboratively developed mitigation options through informed consultation that will be used by FSC certificate holders that wish to mix FSC certified materials and non-certified materials from areas of specified risk (identified in the

FSC US Controlled Wood National Risk Assessment) and then make an FSC claim on the resulting products. This document provides further details about: 1) the process, 2) about outputs from the process that are specific to the FSC US Pacific Coast and Rocky Mountain Regions, including from the associated Controlled Wood Regional Meeting held in Portland, Oregon on August 14, 2018, and 3) about how to use these outputs (including mitigation options) to implement the Control Measures in the FSC US Controlled Wood National Risk Assessment. The mitigation options provided herein were endorsed by the FSC US Board of Directors on November 29, 2018.

Background

Function of the Controlled Wood Regional Meetings

When a company wishes to mix FSC certified and non-certified materials and be able to make an FSC claim about the resulting product, they must 'control' the non-certified materials to reduce the risk of sourcing from places with objectionable forestry practices (such as illegal practices, harvesting that violates workers' or indigenous peoples' rights, or harvesting that threatens high conservation values), from places where the harvest results in the conversion of forests to non-forest uses, or from places where genetically modified trees occur. FSC Chain of Custody certificate holders that have 'Controlled Wood' within the scope of their certificate do this by conforming with the FSC Controlled Wood Standard (FSC-STD-40-005).

The Controlled Wood Standard (V3-1) requires that a certificate holder implement actions to avoid or mitigate risk, prior to using materials from any area with an identified risk level that is greater than 'low.' The FSC US Controlled Wood National Risk Assessment (NRA) will be the primary source of information on risk for certificate holders sourcing non-certified materials from the conterminous US (i.e., 'Lower 48' states; not including Hawaii, Alaska or US territories) and provides specified risk designations for areas where the risk has been identified as being greater than 'low.' The US NRA identifies specified risk areas that are associated with places where harvesting threatens high conservation values (HCVs) and places where materials could come from harvests that result in forest conversion. The actions a certificate holder implements to avoid or mitigate these identified risks are termed Control Measures. The NRA defines the Control Measures that are mandatory when sourcing Controlled Wood from areas of specified risk in the conterminous US.

Generally, the NRA provides one choice for a Control Measure that address risk associated with HCVs – it requires implementation of one or more mitigation options (commensurate with the scale and intensity of the Organization's potential impact on the forests in the region). The NRA provides two choices for Control Measures that address risk associated with Forest conversion, one of which is similar to that for HCVs, but a second one is added by which a certified manufacturer acknowledges the use of materials from limited and legal forest conversions AND implements one or more mitigation options.

During development of the NRA, the FSC US Board of Directors recognized that in the context of the United States, most certificate holders do not have information about the specific sites of origin for all of the non-certified materials that they are using, nor complete details about the supply chains from which they source the materials. This is due to typical procurement practices, extremely complex supply chains, and concerns regarding Antitrust issues, which together make this knowledge almost impossible to acquire for most certificate holders in the US. Therefore, the Board directed the NRA working group to develop an alternative approach for control measures and mitigation in the US. The resulting approach explores options for how a certificate holder can reduce the risk of sourcing from objectionable places by implementing mitigation actions within the landscape of the specified risk area that will either, as needed: a) reduce threats to HCVs from forest management activities; and/or b)

reduce the rates of forest conversion across the landscape – thereby reducing the risk of sourcing from places where these objectionable activities are occurring.

However, the Board also recognized that it would be necessary to bring as many perspectives as possible into the development of these mitigation actions to help ensure that they would be as practical and as effective as possible. To address this need, the Board developed the concept of Controlled Wood Regional Meetings that would periodically bring together diverse stakeholders to collaboratively develop a set of mitigation options for each of the specified risk issues identified in the NRA, and then adapt them as needed over time.

Mitigation Option Development Process

During Summer 2018, the Forest Stewardship Council (FSC) US hosted two webinars, three regional meetings and an online discussion forum as part of an informed consultative process to help identify the mitigation options that companies need to implement the Control Measures detailed in the FSC US National Risk Assessment. Participants included companies that are FSC certified and source Controlled Wood, their suppliers, Certification Bodies (auditors) and other stakeholders actively working to advance responsible forest management and enhance local economic development.

The three in-person regional meetings – held in Asheville, North Carolina; Atlanta, Georgia; and Portland, Oregon – focused on regionally specific sets of specified risk topics, and were professionally facilitated to ensure efficiency, fairness, and clarity of stakeholder input.

At the regional meetings and through an online discussion forum, participants provided input on: a) proposed mitigation options for each of the risk topics; and b) shared criteria to be used as a lens for evaluating the mitigation options. With each regional meeting, the attendee input was used to further refine the shared criteria, and the criteria were finalized following the third and final meeting. The input provided on mitigation options was comprehensive enough to allow the development of a final draft set of mitigation options that were shared with the Controlled Wood consultative forum for an additional two-week consultation in October 2018. The resulting mitigation options were endorsed by the FSC US Board of Directors on November 29, 2018. Those mitigation options associated with specified risk in the FSC US Pacific Coast and Rocky Mountain Regions are detailed below and are now available for use by certificate holders.

Regional Meeting & Final Consultation Outputs

Mitigation Option Shared Criteria

Regional meeting participants together developed the following criteria as a shared lens for building alignment on mitigation options. The criteria were refined across the course of the three Controlled Wood Regional Meetings and were finalized following the third and final meeting. They were used by the participants as they provided input during the regional meetings and through the online discussion forum, by FSC US staff as they developed the final draft mitigation options, and by the FSC US Board of Directors as they reviewed and endorsed the final set of mitigation options. These criteria are NOT intended to be used to evaluate the implementation of mitigation options.

Moving forward, these criteria may also be used by certification bodies to help them assess the adequacy of control measures in situations (as allowed by the Controlled Wood Standard) where a company finds that the control measures in the NRA are not adequate to mitigate the identified risk and propose an alternative.

(No priority intended by numbers, just for reference)

1. For each mitigation option, at least one of the following applies:
 - a. Results in decreased negative impact(s) and/or increased positive impacts from forest management activities within the specified risk area
 - b. Improves knowledge about how, and places where, the conservation value is being threatened within the specified risk area so that those places are avoided or mitigated; limited to situations where there is an explicit need for this specific information to improve conservation of and mitigation associated with the value
 - c. Promotes, expands or improves an ongoing initiative/program that is already producing verifiable positive outcomes within the specified risk area
 - d. Implements a new/innovative initiative/program that will fill a gap or address a weakness in the existing network of initiatives/programs associated with forest management impacts on the value in within the specified risk area.
 - e. Promotes, expands or improves implementation of actions within the specified risk area identified through diverse-stakeholder planning processes (e.g., State Wildlife Action Plans, regional conservation plans, Federal recovery plans)
2. For each mitigation option, all of the following apply:
 - a. Proven or a reasonable expectation of effectiveness in maintaining or enhancing the conservation value within the specified risk area
 - b. Passes through topline filters of efficacy, clarity, efficiency, practicality, measurability and auditability
 - c. Doesn't require companies to make extensive investments to infrastructure/resources, but will require engagement across chambers
3. For the set of mitigation options, all of the following apply:
 - a. Provides a workable option for all enterprises, regardless of size or location in the supply chain
 - b. Doesn't require certificate holders to have knowledge of specific sites from which their forest materials originate, in situations where the procurement processes and/or antitrust concerns make this information inaccessible.
 - c. Differentiates requirements between companies that buy directly from the forest, and those that don't

Mitigation Options

As FSC US staff worked through the large amount of feedback that was provided on mitigation options through the Controlled Wood Regional Meetings and online discussion forum, they found that comments and support were typically focused on a relatively small number of themes for each specified risk topic. Additionally, they found that many of these themes were repeated for a number of different specified risk topics. Therefore, with recognition that some certificate holders might wish to create efficiencies by applying the same mitigation option for different specified risk topics and to help maintain consistency throughout the system, FSC US used a standard template for each Central Theme, which was then customized for the specified risk topic at hand, based upon the feedback received from stakeholders. The following table details which Central Themes were identified for each Specified Risk Topic. The resulting mitigation options are detailed in a later section of this document.

Table 1. Central Themes for mitigation options as identified by stakeholders for each specified risk topic.

CW REGIONAL MEETING	SPECIFIED RISK TOPIC	CENTRAL THEME	Education & Outreach	Procurement Policy	Research & Mapping	Conservation Initiatives	Planning	Implement Mgmt Activities	Staff/Forester Training	Landowner Incentives	Direct Influence	BMP Monitoring	Cape Fear Arch Cons. Collab.
Asheville	Central Appalachian CBA		X		X	X					X	X	
	Cheoah Bald Salamander		X	X	X	X	X				X		
	Mesophytic Cove Sites		X		X				X				
Atlanta	Cape Fear Arch CBA		X	X		X							X
	Central Florida CBA		X	X		X		X					
	Conversion (Atlanta & Portland)		X	X	X	X	X						
	Dusky Gopher Frog		X	X	X			X					
	Florida Panhandle CBA		X		X	X							
	Houston Toad		X	X	X			X					
	Late-Successional Bot. Hardwoods		X	X	X			X		X			
	Native Longleaf Pine Systems		X	X	X		X	X		X			
	Patch-Nosed Salamander		X	X	X	X	X						
Southern Appalachian CBA		X		X	X					X			
Portland	Central California CBA		X	X	X		X		X				
	Klamath-Siskiyou CBA		X	X	X		X	X					
	Lesser Slender Salamander		X	X	X			X					
	Old Growth Forests		X	X	X		X		X	X			
	Conversion (Atlanta & Portland)		X	X	X	X	X						

Mitigation Option Final Consultation Topline Feedback

During October 2018, FSC US invited Controlled Wood Regional Meeting participants and other stakeholders to provide feedback during a final two-week consultation on the final draft mitigation options for each of the specified risk topics. Commenters focused primarily on over-arching concerns, particularly related to auditability and consistency in auditing. A summary of the comments provided is captured below.

Support for the Mitigation Options

- A number of commenters indicated that they believe that the mitigation options take the Controlled Wood system in the US in the right direction
- One expressed the opinion that “overall the mitigation options looked effective and implementable”
- There was a distinct lack of over-arching concern expressed about the mitigation options as a whole – i.e., FSC US did not receive a flurry of comments from aggravated stakeholders.

Limited Concern Regarding the Mitigation Options

- One commenter expressed significant concern, describing the mitigation options as “...very similar, vague, and not at all what I was expecting. I expected this process to result in a simple list of actionable choices that a certificate holder could choose between.” This sentiment was not duplicated by any other commenter – in fact, much more feedback received during this process has focused on the need for some flexibility to allow certificate holders to adapt to their unique contexts, while still providing a structure and consistency for mitigation implemented.
- One commenter expressed concern related to the development timeline (too fast) and lack of testing or piloting of the mitigation options.
- A small number of commenters expressed concerns regarding FSC US’s ability to develop metrics by which to reliably monitor the effectiveness of the mitigation implemented.
- One commenter noted concern about certificate holder accountability as part of this approach

General Controlled Wood Concerns

- Potential workload and resource commitment is daunting, particularly for companies that source from many states or regions
- Certificate holders are already fatigued by the continuous change and requirements related to controlled wood over the last few years. Any continuation in the FSC Controlled Wood program will need to require the same or less effort and resources from certificate holders, or these companies will leave the FSC ecosystem altogether.
- Concern regarding increased complexity of audits and therefore cost.

Auditability and Calibration

- Feedback included many concerns about auditability of mitigation option implementation by certification bodies. The effectiveness of this approach will require coordination between FSC and CBs and clear communication with Certificate holders regarding the expectations for being considered in conformance with the overall goal of mitigating risk.
- Comments clearly indicated the need for both additional guidance on how to determine the level of mitigation necessary, and the need for intent statements associated with each mitigation option. The intent statements are now completed, and the guidance is in development (the chamber-balanced NRA Working Group is assisting with this process).
- One commenter indicated that FSC US should not proceed until more detail on auditable criteria are available.

Collaborative Implementation

- A number of commenters indicated that the ability to work as a group, or link up with organizations is essential and needs to be an option for certificate holders going forward.
- And that FSC US should coordinate these efforts

Next Steps

Guidance for Certificate Holders & Certification Bodies

FSC US staff are working with the NRA Working Group and Certification Bodies to develop guidance for a baseline of what would be considered adequate when a low level of mitigation is required. Certificate holders that need to implement a higher level of mitigation will be expected to scale up from that baseline. This guidance will be available to certificate holders and other stakeholders before the end of April 2019.

Metrics for Effectiveness Verification

FSC US has taken on the responsibility for completing effectiveness verification, recognizing that since the mitigation will be implemented at a landscape scale, the effectiveness needs to be assessed at a similar scale, not at the scale of individual sourcing areas (i.e., certificate holder by certificate holder). FSC US will be looking for opportunities to build on research, monitoring and evaluation being completed by partners, government agencies and other entities (there are numerous active programs and projects already ongoing related to most of the specified risk topics). We will be requesting information from certificate holders about the actions being implemented. And we will be working to develop methodologies for assessing stakeholder perceptions associated with reduction of threats to HCVs from forest management activities, and rates of forest conversion in specified risk areas. During the coming year, we will be developing a more formal framework for the effectiveness verification – developing metrics to assess some or all of the following: changes in the threats to HCVs from forest management activities; changes in the rates of forest conversion in areas of specified risk; changes in the kinds of on-the-ground forest management activities implemented and the frequency at which the more desirable practices are implemented; over all status of HCVs; and any other metrics identified that could be used to assess the risk of sourcing from places where HCVs are threatened by forest management activities and/or forest is being converted to non-forest.

Calibration & Communications with Certification Bodies

FSC US has already initiated and is committing to continuing to maintain open communications with certification bodies, working together to ensure consistency in auditing, between certificate holders and between certification bodies, with a focus on the effectiveness of mitigation, not just whether a process has been implemented. We will be working to closely monitor potential impacts to the FSC system as certificate holders begin to update their due diligence systems to incorporate the NRA and mitigation options. We are asking certification bodies to alert FSC US quickly in situations where there is a very negative outcome from an audit that is considering mitigation options.

Adaptive Management

The FSC US Board has also committed to closely monitoring the impact of this new and innovative approach. The Board is looking at implementation within an adaptive management framework, where the mitigation options, guidance and even NRA, if needed, will be revised to ensure the effectiveness of

the system in the US. However, the Board has also explicitly recognized the need for stability in the system, particularly given the numerous changes over the last several years. The Board will be working with FSC US staff on system-wide monitoring of both certificate holder loss and effectiveness of mitigation, and development of a plan that includes both thresholds for action, and definition of actions if those thresholds are breached.

Implementing Control Measures & Mitigation Options

Decision Tree for Considering Risk Associated with the Origin of Material

1. The certificate holder gathers information about the geographic area(s) from which they source non-certified forest materials ('supply area') and information about risk. The NRA will likely be the primary source for information about risk within the supply area (i.e. overlap with specified risk areas). Maps (PDFs) and a spatial data layer of the specified risk areas are available on the FSC US website (<https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra>). The certificate holder must document the rationale and information used to for the following decision and provide it to their auditor during their audit(s).

DECISION 1: Does the information gathered indicate that the certificate holder is sourcing from an area of specified risk? If yes, continue to #2. If no (and none of the following notes apply), no further action is needed.

NOTE: If the information gathered by the certificate holder identifies risk in a place that is not defined as a specified risk area in the NRA, they still must implement a control measure to mitigate that risk. They may use one of those in the NRA if appropriate, but they may also develop their own.

NOTE: The certificate holder must also consider the risk of unexpected materials getting mixed in to the materials received within their supply chains. If this assessment identifies a risk greater than 'low' the certificate holder is responsible for implementing control measures to mitigate that risk. They may use one of those in the NRA if appropriate, but they may also develop their own.

2. The certificate holder must identify a control measure for each area of specified risk from which they are sourcing.

DECISION 2: Which Control Measure will the certificate holder implement? If CM 4.1, go to #3. If CM 3.1 or CM 4.2, go to #4.

NOTE: The certificate holder must go through the remainder of this decision tree for EACH specified risk area from which they source non-certified forest materials.

NOTE: The certificate holder may replace the control measures provided in the NRA with more effective control measures, as long as all of the conditions laid out in Clause 4.13 of the Controlled Wood Standard (FSC-STD-40-005 V3-1) apply. In which case, the remainder of this decision tree does not apply.

3. CM 4.1 may be applied when the certificate holder has information about the forest conversion(s) occurring within the specified risk area. If the certificate holder does not have this kind of information, CM 4.1 may not be used and CM 4.2 should be used instead. The certificate holder must document their rationale and evidence for why the forest conversion in question meets the criteria of and follows the guidance provided for this control measure. They will need to provide this documentation to their auditor during their audit(s) as part of their compliance verification.

DECISION 3: Does the forest conversion in question meet the criteria of and follow the guidance for CM 4.1? If yes, continue to #4. If no, the materials must be avoided. If there is not enough information to make a decision, CM 4.1 is not applicable.

4. The certificate holder must use the Mitigation Matrix in Table 2 (below) to determine what level of mitigation is required. To do this, the certificate holder must first estimate from what proportion of the specified risk area they are sourcing (the columns of the matrix) – Only a very small part of it? (<25%) A little less than half of the specified risk area? (25-50%) All or almost all of the specified risk area? (>75%). This estimate could be made using GIS or by considering a static map of the specified risk area and asking approximately how much of it is overlapped by the supply area. Then, considering their FSC Annual Administration Fee (AAF), and finding where that row intersects the column identified, the certificate holder can determine their level of mitigation required for that specified risk area. The certificate holder must document their rationale and information used to make this determination as part of their compliance verification.

DECISION 4: What level of mitigation is required? Continue to #5.

NOTE: If the sourcing in question is being completed by a Chain of Custody group member, the level of mitigation required will always be the 'low' category, due to the limit on the size of companies that are allowed to participate in CoC groups.

NOTE: If the certificate holder is able to calculate actual volumes being sourced from the specified risk area this may be used instead of AAF Class for the Mitigation Matrix below. The certificate holder will need to document their calculation and rationale for the level of mitigation required as part of their compliance verification.

5. Finally, the certificate holder must decide which mitigation option(s) they will implement, and how they will implement that option to achieve the level of mitigation required. The considerations following this decision tree should help with this decision, as will the guidance on baseline expectations being developed by FSC US. The certificate holder must document their rationale and any information that supports their decision as part of their compliance verification.

DECISION 5: Which mitigation option will the certificate holder implement and (if applicable) how will they scale it to the desired level of mitigation? Continue to #6.

6. Implement the mitigation option in the manner determined in #5. The certificate holder must document implementation for their compliance verification. ***If the certificate holder must consider another specified risk area, return to #2. If not, no further action is needed.***

Considerations for Selecting a Mitigation Option

- FSC US will provide guidance on what the 'baseline' is for implementation of any of these mitigation options. That is, what is the minimum level of effort (effectiveness) that would be considered adequate for that mitigation option at a low level of mitigation required.
- Some mitigation options are listed as 'scalable for any level of mitigation' – this means it could be used by a certificate holder that falls into any level of mitigation required. A certificate holder with a low level of mitigation required could implement at the baseline level (to be provided in the forthcoming guidance), but others would need to scale up to reach a medium or high level of mitigation, as needed.
- Some mitigation options specify that they are appropriate for situations where a high level of mitigation is required. In these situations, the baseline will be for the high level of mitigation. A certificate holder in any of the categories of mitigation required could implement one of these options, but they would need to achieve at least the baseline. The intention of recognizing

these options in this way is to recognize that they will likely require greater investment and result in greater mitigation than the baseline of implementation for other mitigation options.

- For certificate holders that are in the low category of mitigation required, they should be able to select one option and implement it at the baseline level or greater.
- For certificate holders that are in the medium or high categories, they will have to decide whether they are going to use a scalable option, but do more than the baseline to achieve greater mitigation, or if they are going to implement one of the options identified for ‘high’ levels of mitigation, or if they are going to implement more than one mitigation option, but stick to the baseline level for each, or some combination of these.
- Some mitigation options are listed as being for situations where the certificate holder purchases materials directly from the source forest. Certificate holders in these situations are not required to use these options, but the options are provided in the hopes that they might be easier, but still effective, in these situations. Certificate holders that are not purchasing materials directly from the source forest may use these options, if their circumstances allow.

Mitigation Matrix

The following matrix provides a framework for assisting Certificate Holders and Certification Bodies with determining what level of mitigation is required and then also for assessing the adequacy of mitigation implemented. This is intended to help address the phrase, “commensurate with the scale and intensity of the Organization’s potential impact on the forests in the region” that is used in the Control Measures. It also helps to address the Mitigation Option Shared Criteria requiring options for all companies, regardless of size. It is based upon the general idea that the greater the proportion of a specified risk area from which a company sources (i.e. ‘scale’), and the more material that they source (i.e. ‘intensity’), the higher their risk of receiving materials from places where unacceptable materials are being sourced, and therefore the higher the level of mitigation that should be expected of them. Because volume itself is material and product specific, AAF Class is used as a proxy for volume sourced. However, companies are given the option of calculating their actual volume instead of using their AAF Class, if they wish (see the note under #4 in the decision tree above).

Table 2. Framework for determining level of mitigation required

AAF Class	% of Specified Risk Area from Which Materials are Sourced			
	<25%	25-50%	50-75%	>75%
Class 1	LOW LEVEL OF MITIGATION			
Class 2				
Class 3				
Class 4	MEDIUM LEVEL OF MITIGATION			
Class 5				
Class 6				
Class 7	HIGH LEVEL OF MITIGATION			
Class 8				
Class 9				
Class 10				
Class 10+				

Regional Meeting Outcomes: Specified Risk Topics & Final Mitigation Options

This section presents a summary of feedback received at the 2018 Controlled Wood Regional Meeting for the Pacific Coast and Rocky Mountain Regions and feedback received during consultation opportunities that followed the meeting, as well as the outcomes from that feedback (for both proposed mitigation options that were included in the final set, and those that were not). Annex 2 provides the final set of mitigation options, without the feedback and excluding initially proposed options that were not included in the final set.

NOTE 1: Almost any of the mitigation options may be done individually or in collaboration with other certificate holders, or other entities that have similar desired outcomes. Collaboration is encouraged to scale up potential mitigation impact, and FSC US will seek to assist with that collaboration when feasible.

NOTE 2: Active engagement will be evaluated to be two-way engagement such as providing support through participation in meetings.

HCV 1: Central California Critical Biodiversity Area

- The California Floristic Province is recognized as a globally significant center of biodiversity. This CBA includes two general ecological regions that both support high levels of biodiversity – the higher elevation Sierra Nevada mountains and the lower elevation California coastal region. The focus of the mitigation effort is the Sierra Nevada, as threats from forest management are unlikely in non-forested areas.
- The Sierra Nevada hosts a wide variety of biodiversity including hundreds of vertebrates, rare species, and endemic plants. Biodiversity in the forested areas of this part of the California Floristic Province is dependent on a diversity of stand types and ages, including tree species diversity, forest openings, and standing and downed woody structure. The embedded Montane Meadows are particularly important, as the most biologically diverse ecosystem in the Sierra Nevada.
- The predominant threat from forest management activities is due to forest simplification – simplification of both the diversity of tree species and the structure of the forests. Additionally, road construction for forest management can impair Montane meadows.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Central California Critical Biodiversity Area (CBA).

CENTRAL THEME: Education & Outreach

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(#5) Influence suppliers that are land managers to implement best management practices that maintain or enhance the biodiversity of mixed conifer stands.</p> <p>(#1) Work with landowners and land managers to increase awareness of the environmental value of</p>	<ul style="list-style-type: none"> • Support across the board • Need to increase awareness of, and promote management that enhances, threatened biodiversity • ‘Influence’ and ‘work with/to’ may not be auditable

<p>Montane meadows, and the importance of maintaining them (particularly riparian areas within them).</p> <p>(#2) Work with landowners and land managers to establish, implement and monitor best management practices for snag, large tree, and hardwood retention.</p> <p>(#7) Produce / distribute educational communications to suppliers / landowners which includes information on management of mixed conifer stands to avoid loss of diversity, montane meadow management, invasive species, and other threats.</p>	<ul style="list-style-type: none"> • Many of options similar at the core, and could be combined into something around sharing information intended to influence actions that will conserve biodiversity in the region • Concern - actions may be more accessible to companies that are very close to the beginning of the supply chain; need some for other companies • Include an action specifically for getting suppliers who are land managers or purchase directly from the forest to change their behaviors
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Consultation Insights: Input included lots of support for education and outreach general, but notes that any related mitigation options need to be available to Organizations throughout the supply chain. Comments also emphasize that the mitigation options must be actionable and clearly address the mitigation need, without trying to make Controlled Wood into something equivalent to Forest Management certification. The following mitigation includes a mitigation option that merges a number of those originally proposed, but also introduces some flexibility to ensure companies throughout the supply chain are able to use this option within their unique context and characteristics. However, there is also is an option that focuses on those Organizations near the beginning of the supply chain that have a unique opportunity to influence actions on the ground.

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of Sierra Nevada biodiversity associated with mixed conifer forests and the montane meadows embedded within them, threats from incompatible forest management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management practices that reduce or eliminate these threats (e.g., management practices that maintain both within-stand diversity, such as maintenance of snags, large trees and hardwood, and between-stand diversity), with recognition of both even-age and uneven-age management practices if appropriate for the supply area. Communications should recognize the importance of maintaining or enhancing mixed conifer forests and montane meadows, and the role of fire and the importance of mimicking disturbance patterns in the Sierra Nevada region. The desired outcome of these communications is engaging landowners, foresters and loggers in conservation of Sierra Nevada biodiversity within the specified risk area and the Organization's supply area.

- **Materials:** Materials are developed by or developed in cooperation with organizations/individuals with expertise in Sierra Nevada biodiversity conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Sierra Nevada biodiversity.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Procurement Policy

Consultation Insights: Comments associated with a number of specified risk topics recognized that companies that are closer to the beginning of the supply chain are in a unique position to have a greater influence on the forest management activities within the source forest. Several commenters observed that this kind of influence could be achieved through a procurement policy that is linked to the education and outreach information themes.

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Sierra Nevada biodiversity is threatened as a result of forest management activities that produced the forest materials. This will require providing a description of the potential threats to Sierra Nevada biodiversity from forest management activities (as described in the FSC US National Risk Assessment), and of the kinds of activities that would maintain or enhance the Sierra Nevada biodiversity in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Sierra Nevada biodiversity is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Research

Participant Proposed Option	Topline Input
Further research and clarification on the actual risk from forest management activities should be conducted.	<ul style="list-style-type: none"> • Indication of support from other participants in the regional meeting

Consultation Insights: Additional knowledge regarding the positive and negative impact on the Sierra Nevada biodiversity could improve conservation of the biodiversity and reduce threats from forest management activities. However, based upon input on other similar mitigation option ideas, there is a concern that research on its own will likely not effectively mitigate the identified risk, therefore it needs to be linked to another action.

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on clarifying positive and negative impacts of forest management activities on Sierra Nevada biodiversity and/or on improving

management practices for conservation of Sierra Nevada biodiversity within the specified risk area; and

2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Sierra Nevada biodiversity.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Planning

Original Proposed Option	Topline Input
(#4) Participate in and support collaborative working groups and planning within the region that promote forest management that maintains and enhances the biodiversity of the region.	<ul style="list-style-type: none"> • Limited comments with neutral tone • This kind of work is already happening • If kept, need to adapt to include consideration of forest resiliency, particularly as it relates to fire. • Must improve auditability

Consultation Insights: There were fewer comments shared during the Regional Meeting on this mitigation option than on some of the others, however the + / - / ^ responses written in the worksheets show general support with limited opposition. Clarification requests focused on the need to better define what was meant by ‘support.’ As this option is generally aligned with the Shared Criteria, it is adapted and included in the revised set of mitigation options.

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include, goals, objectives and/or actions that are intended to achieve conservation of Sierra Nevada biodiversity within the specified risk area and the Organization’s supply area. This may include: federal, state and/or local resource planning and plans; planning and plans for Sierra Nevada mixed-conifer forest or montane meadow dependent species; regional planning and plans directly for Sierra Nevada biodiversity itself; and/or broad-spectrum regional conservation planning and plans that include Sierra Nevada biodiversity conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Sierra Nevada biodiversity.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where

the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Staff/Forester Training

Original Proposed Option	Topline Input
(#6) Conduct training for foresters to cover topics such as management of mixed conifer stands to avoid loss of diversity, montane meadow management, invasive species, and other threats.	<ul style="list-style-type: none"> Limited comments, but mostly positive Only applicable to landowners Need to be sure to not mix FM requirements with CW mitigation of risk

Consultation Insights: There were few comments provided on this mitigation option during the Regional Meeting, but the written responses on the worksheets indicate strong support from certificate holders and their suppliers, and no opposition from other participants. This idea represents a limited opportunity for Organizations that are closest to the beginning of the supply chain. Comments associated with other mitigation options were used to adapt this mitigation option to improve auditability and clarity, and to add a little flexibility.

The following is offered as an option for Organizations that purchase directly from the source forest:

Ensure staff and contract foresters receive training or the equivalent, with periodic refreshers that include any new information, on Sierra Nevada biodiversity, particularly mixed-conifer forest and montane meadows, threats from incompatible forest management activities (as described in the FSC US National Risk Assessment), management techniques that will conserve biodiversity, and provision of public values. The training or equivalent shall be: a) developed by or developed in cooperation with organizations/individuals with expertise in Sierra Nevada biodiversity, or developed in collaboration with FSC US; and b) result in foresters having knowledge on these subjects to the extent that they are able to communicate the same content to the landowners and land managers with whom they are working.

INTENT: The intent of this mitigation option is to train staff and contract foresters so that they are able to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

The following originally proposed mitigation option was not maintained in the final set of options due to the feedback received through the Controlled Wood Regional Meeting.

Forest Practice Rules

Original Proposed Option	Summary of Input
(#3) Work to revise the Forest Practice Rules to include explicit minimums for snag and large tree retention within planned harvest units.	<ul style="list-style-type: none"> Overall negative input Significant concern expressed about FSC shifting from voluntary system to functioning more like a regulator A prescriptive forest practice rule might result in actions that are not appropriate for the specific context in which management is being implemented Likely a long, difficult effort, without high probability of success

Consultation Insights: The topline input indicates a negative perspective on this proposed option, and individual comments in worksheets did not provide any strong support (across perspective). The Shared Criteria require consideration of effectiveness and feasibility, neither of which are supported by the input received, therefore this option is not included in the revised set of mitigation options.

HCV 1: Klamath-Siskiyou Critical Biodiversity Area

- The biodiversity in the Klamath-Siskiyou ecoregion is driven by geologic, topographic, and climatic complexity and history. The region was not covered by glaciers during recent ice ages, and provided a refuge for many species that did not survive elsewhere. Additionally, the diversity in the geophysical landscapes has resulted in many unique combinations of characteristics in different places that promote a diversity of forest and other ecosystem types, and unique species for those unique places. The forest-based biodiversity in the Klamath-Siskiyou is largely sustained in diverse mixed evergreen stands that are adapted to fire.
- Reported threats to forest ecosystems from forest management activities include structural changes due to conversion to forest stands that have a single dominant species (as opposed to the high diversity of tree species that would most likely occur naturally, and supports the concentration of biodiversity in this area), incompatible harvest practices that degrade habitats and loss of the full representation of forest successional stages at all elevations.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Klamath-Siskiyou Critical Biodiversity Area (CBA).

CENTRAL THEME: Education & Outreach

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(#1) Support and/or collaborate with University of California Cooperative Extension to provide educational information to landowners, foresters and loggers; ensure that these kinds of individuals understand that the supply chain desires for sustainable forest materials.</p> <p>(#2) Collaborate with organizations like the California Licensed Foresters Association, Forest Stewards Guild, California Licensed Timber Operators and local chambers of the Society of American Foresters on service delivery and information dissemination to share information about best practices that will help to maintain or enhance the biodiversity of the region.</p> <p>(#5) Improve/promote/support/develop/encourage educational outreach materials to increase knowledge about the high-diversity fine scale habitats found in the Klamath-Siskiyou CBA.</p>	<ul style="list-style-type: none"> • Broad support for educational efforts around maintaining and enhancing the biodiversity of the region • Target audience widely variable and includes general public, landowners, loggers, and forest managers • Emphasis on the high proportion (~85%) of the Klamath-Siskiyou CBA that is publicly managed • Many of the proposed options are similar and educational theme should be merged • Materials should be developed in collaboration with extension services, universities, tribes, and other technical entities and professional associations. Should not be limited to specific groups or organizations. • Materials should provide information about best practices to maintain and enhance biodiversity.

Consultation Insights: Stakeholder feedback shows broad support for all mitigation options related to education and outreach. Additionally, given that a number of the proposed options were similar, a number of stakeholders suggested that these should be further developed together with allow flexibility

for organizations to decide with who they will collaborate. The type of information provided through the communication should convey that the supply chain desires for sustainable forest materials as well as best practices for maintaining and enhancing the biodiversity of the Klamath-Siskiyou CBA. Therefore, the following mitigation includes a mitigation option that merges a number of those originally proposed, but also introduces some flexibility to ensure companies can decide with whom they will collaborate.

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of biodiversity in the Klamath-Siskiyou region, threats from incompatible forest management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management practices that reduce or eliminate these threats (e.g., management practices that maintain both within-stand and between-stand diversity). The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of the Klamath-Siskiyou biodiversity within the specified risk area and the Organization's supply area.

- **Materials:** Materials are developed by or developed in cooperation with tribes or with organizations/individuals with expertise in Klamath-Siskiyou biodiversity conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Klamath-Siskiyou biodiversity.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Procurement Policy

Consultation Insights: Comments associated with a number of specified risk topics recognized that companies that are closer to the beginning of the supply chain are in a unique position to have a greater influence on the forest management activities within the source forest. Several commenters observed that this kind of influence could be achieved through a procurement policy that is linked to the education and outreach information themes.

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Klamath-Siskiyou biodiversity is threatened as a result of forest management activities that produced the forest materials. This will require providing a description of the potential threats to Klamath-Siskiyou biodiversity from forest management activities (as described in the FSC US National Risk Assessment), and of the kinds of activities that would maintain or enhance the Klamath-Siskiyou biodiversity in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1.

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Klamath-Siskiyou biodiversity is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Research

<u>Participant Proposed Option</u>	<u>Topline Input</u>
Support scientific inquiry and participate in experimental forest management activities that mitigate threat to single species conversion	<ul style="list-style-type: none"> Stakeholders suggested that more research may be needed on improving management practices for managing for biodiversity in the region

Consultation Insights: While this mitigation option was not discussed widely at the meeting, and therefore, there wasn't any clear indication of broad support, it also wasn't rejected by those in attendance. Additionally, research into improving management practices has been proposed as a mitigation option in other specified risk topics. However, based upon input on other similar mitigation option ideas, there is a concern that research on its own will likely not effectively mitigate the identified risk, therefore it needs to be linked to another action.

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on improving management practices in order to maintain or enhance the Klamath-Siskiyou biodiversity within the specified risk area; and
2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Klamath-Siskiyou biodiversity.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Planning

<u>Participant Proposed Option</u>	<u>Topline Input</u>
Active participation in National Resource planning processes to influence protection of ecological values.	<ul style="list-style-type: none"> Indication of support from other participants in the regional meeting for participation in planning processes

Consultation Insights: This specific suggestion for a mitigation option was suggested at the meeting and a number of meeting attendees supported this as a potential mitigation option. Engagement with conservation planning processes has also been identified in other specified risk topics as a mitigation

option. Therefore, the following mitigation option is being included the set of mitigation options for Klamath-Siskiyou CBA.

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include, goals, objectives and/or actions that are intended to achieve conservation of Klamath-Siskiyou biodiversity within the specified risk area and the Organization’s supply area. This may include: tribes, federal, state and/or local resource planning and plans; planning and plans for Klamath-Siskiyou mixed conifer stands; regional planning and plans directly for Klamath-Siskiyou biodiversity itself; and/or broad-spectrum regional conservation planning and plans that include Klamath-Siskiyou biodiversity conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Klamath-Siskiyou biodiversity.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Implement Management Activities

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(#3) Work with local land conservancies to support establishment of working lands easements.</p> <p>(#4) Support the efforts of The Watershed Research and Training Center, University of California Cooperative Extension and others to build prescribed fire in the region through the Northern California Prescribed Fire Council, or other forums.</p> <p><u>Participant Proposed Option</u></p> <p>Add more ‘on the ground’ best practices implemented</p>	<ul style="list-style-type: none"> • Mix of support for efforts related to building prescribed fire in the region • Fire is an important management tool to retain and improve critical habitat and biodiversity • Confusion regarding prescribed fire and its role as a mitigation option for companies • Support should not be limited to a list of specific organizations, provide flexibility • Clarify what is meant by ‘support’ and ensure auditability • Mixed support specifically for easements: strong support from environmental and social, neutral from CBs, and more mixed from certificate holders and suppliers, but no consistent opposition • High-proportion of public lands may mean limited applicability of easements in the region • Concern about excessive costs for organizations to implement and support easements • No strong, consistent opposition to either option

Consultation Insights: Comments for both of the original proposed options ultimately focused on the need for implementing management activities that will conserve the Klamath-Siskiyou biodiversity, but without limiting the tools that are available for the mitigation approach. Feedback indicates that

management practices for maintaining and enhancing the area's biodiversity include, but are not limited to, use of prescribed fire. The National Risk Assessment does not identify any threats to the biodiversity from forest management activities related to fire, so implementing prescribed fire on its own would not mitigate the identified risk. In a somewhat similar sense, comments received suggest that simply initiating a conservation easement would not be a valid mitigation option, as that action by itself does not mitigate the identified risk. However, if the easement includes clear intent and requirements for management practices that conserve the biodiversity, this would represent valid mitigation.

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities (as described below) that are facilitating active, on-the-ground implementation of management activities (as described below) to maintain or enhance the Klamath-Siskiyou biodiversity within the specified risk area and the Organization's supply area.

- **Conservation Entities:** These may include: non-governmental organizations that have active programs/projects to conserve biodiversity; tribes, federal, state and/or local governmental organizations with natural resource conservation responsibilities or goals; and/or organizations that have active programs/projects focused on habitat conservation for species dependent upon habitats within the specified risk area.
- **Management Activities:** These should include efforts to maintain or enhance the within stand species diversity, and between stand diversity of successional stages, for mixed conifer forests at all elevations, and conservation of any other habitats identified as important for biodiversity.

INTENT: The intent of this mitigation option is to implement on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

HCV 1: Lesser Slender Salamander

- The Lesser Slender Salamander's distribution is restricted to the southern Santa Lucia Range of north-central San Luis Obispo County, CA, generally above 400m. The species is considered to have been common historically, but are now more difficult to find. No specific cause for this decline has been identified. The species was only fairly recently identified as being separate from other similar salamander species (via DNA analysis) in 2001.
- This species appears to be associated with forests of mixed oak, tanbark oak, sycamore and laurel, and may have an affinity for poison oak. They are typically found in areas either with higher elevation or that are more mesic than other sites near their location. Frequently, these are in mesic canyons, where the individuals are found on shaded slopes in deep leaf litter. They are always found in areas that also include black-bellied slender salamanders, but only occur in a small portion of this other species' range.
- Little is known about this salamander and specific threats to the species have not yet been documented. The species depends on forest habitat; canopy shading, moisture level and down woody debris appear to be important habitat elements, which can all be affected by forest management and potentially cause negative impacts.

Consultation Insights: Overall, stakeholder feedback on the proposed mitigation options for the LSS were limited. However, this limited feedback does provide support for the thematic approach of research and development of management practices to protect the LSS populations. Additionally,

comments on similar themes for other risk topics have consistently suggested merging similar mitigation options, adapting options to provide greater flexibility (e.g., avoid specifying any particular NGO for collaboration, avoid limiting the management tools that may be used for conserving the species), and providing more information on the intent of the mitigation option and what it is expected to achieve. Finally, consistency of mitigation approaches between risk topics should provide the potential for efficiencies for Organizations that would like to take similar approaches for different risk topics, or in different regions, and therefore, the following revised options draw from options for similar themes that were developed for other risk topics.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Lesser Slender Salamander.

CENTRAL THEME: Education & Outreach

Participant Proposed Option	Topline Input
Provide education on habitat identification	<ul style="list-style-type: none"> • Indication of support for educational efforts to landowners, foresters, loggers

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of Lesser Slender Salamander (LSS), potential threats from forest management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management that maintains, enhances, or restores LSS populations and reduces or eliminates potential threats. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of LSS populations within the specified risk area and the Organization’s supply area.

- **Materials:** Materials are developed by or developed in cooperation with organizations/individuals with expertise in LSS or amphibian conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization’s location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of LSS.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Procurement Policy

Consultation Insights: Comments associated with a number of specified risk topics recognized that companies that are closer to the beginning of the supply chain are in a unique position to have a

greater influence on the forest management activities within the source forest. Several commenters observed that this kind of influence could be achieved through a procurement policy that is linked to the education and outreach information themes.

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Lesser Slender Salamanders (LSS) are threatened as a result of the forest management activities that produced the forest materials. This will require providing a description of the forest type in which LSS populations occur, potential threats to LSS from forest management activities (as described in the FSC US National Risk Assessment), and the kinds of activities that would maintain or enhance LSS populations in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where LSS are threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Research

<u>Original Proposed Option</u>	<u>Topline Input</u>
(#1) Invest in research to improve knowledge of species distribution, abundance, trends, other population characteristics, threats and best management practices.	<ul style="list-style-type: none"> Support for researching proper management techniques to protect LSS habitat

The following is offered as a two-part option for when a ‘High’ level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on clarifying positive and negative impacts of forest management activities on Lesser Slender Salamander (LSS) populations and/or on management practices for LSS conservation within the specified risk area; and
2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of LSS populations.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Implement Management Activities

<p><u>Participant Proposed Option:</u></p> <p>Promote implementation of proper management techniques for LSS</p>	<p><u>Topline Input</u></p> <ul style="list-style-type: none"> • Indication of support for implementing proper management practices
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The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities (as described below) that are facilitating active, on-the-ground implementation of management activities (as described below) to restore, maintain or enhance Lesser Slender Salamander (LSS) populations, with a goal of long-term conservation of LSS within the specified risk area and the Organization’s supply area.

- Conservation Entities/Associations: These may include: non-governmental organizations that have active programs/projects to conserve LSS; federal, state and/or local governmental organizations with natural resource conservation responsibilities or goals; and/or organizations that have active programs/projects focused on amphibian conservation.
- Management Activities: These should include efforts to increase and improve the use of management practices that conserve LSS populations such as opportunities to provide proper canopy shading, moisture levels and down woody debris.

INTENT: The intent of this mitigation option is to implement on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

HCV 3: Old Growth Forest

- Old growth forests are important in maintaining biodiversity, values for society, and ecological services such as carbon sequestration and soil quality.
- There is no single, widely accepted definition, but this assessment uses the definitions of Type 1 and Type 2 Old Growth in the FSC US Forest Management Standard.
- Old growth forest is generally considered to be rare, but how rare depends on the part of the country being considered – generally, they are much less common in the eastern U.S., but those that exist are generally on public land and in some kind of protective designation, or inaccessible for forest management.
- Timber harvest (including post-wildfire harvest) continues to threaten Old Growth areas in the Pacific Coast and Rocky Mountain regions. The Northwest Forest Plan has significantly reduced harvests within Old Growth on Federally-managed plans, but recent reviews indicate it still occurs. Status assessments for species that are dependent upon late successional forests suggests that habitat losses continue on private lands.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 3 Old Growth Forest.

CENTRAL THEME: Education & Outreach

Original Proposed Options	Topline Input
<p>(#2) Educate landowners and land managers that late successional forest is important whether it has burned or not.</p> <p>(#5) Produce / distribute educational communication to suppliers / landowners which includes information on identification of old growth forests, management of existing old growth forests, and proper management of young forests with a goal of developing more old growth forests.</p>	<ul style="list-style-type: none"> • Consistent overall support from all perspectives • Many different important messages to be communicated • Desired outcome is maintenance/enhancement of existing Old Growth forests (not recruitment) • Many different potential audiences (landowners, foresters, forest managers, suppliers, etc.), but landowners are key • Should provide some sense of how much is enough • Important to clarify who produces the materials • Support for including content specific to fire-dependent forest types: the role and potential impacts (positive & negative) of fire • Some concern that education on its own will not mitigate risk; recognition that just producing materials will not mitigate risk • It's an option that can be implemented by organizations of any size • Seen as being auditable, as long as the expectations are clear • 'Communicate' instead of 'educate' • Consider separating options based upon location in supply chain, with procurement policy option for those closer to forest

Consultation Insights: There is broad support for education and outreach in general across all perspectives, with recognition of the need to emphasize landowner engagement on multiple topics related to old growth, but with focus on the desired outcome of maintenance or enhancement of Type 1 and Type 2 Old Growth Forests. Materials used should be either developed in collaboration with or leveraged from organizations already working on similar desired outcomes, or FSC US. Development of the materials must be linked to the delivery of messages for effective mitigation and auditability. There are multiple potential audiences and the Organization should focus on those audiences that have the greatest potential impact related to the desired outcome, and the Organization's location in the supply chain.

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the social benefits and values of Old Growth forests (as defined in the FSC US Forest Management Standard), threats from forest management (as described in the FSC US National Risk Assessment) and related loss of values, and opportunities for conservation (e.g., conservation easements, best management practices), with recognition of differences between moist and dry sites. In areas with fire-dependent forest systems, communications should recognize the role of fire, along with the potential positive and negative impacts of fire. The desired outcome of these communications is engaging landowners, foresters and loggers in conservation of Old Growth forests within the specified risk area and the Organization's supply area.

- Materials: Materials are developed by or developed in cooperation with organizations/individuals with expertise in Old Growth forest conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- Audiences: Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be

directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Old Growth forests.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Procurement Policy

Consultation Insights: Comments associated with a number of specified risk topics recognized that companies that are closer to the beginning of the supply chain are in a unique position to have a greater influence on the forest management activities within the source forest. Several commenters observed that this kind of influence could be achieved through a procurement policy that is linked to the education and outreach information themes.

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Old Growth forests (as defined in the FSC US Forest Management Standard) are threatened as a result of the forest management activities that produced the forest materials. This will require providing a description of the forest type (as it occurs in the supply area), potential threats to Old Growth forest from forest management activities (as described in the FSC US National Risk Assessment), and the kinds of activities that would maintain or enhance Old Growth forest in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Old Growth forest is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Research & Mapping

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(#1) Support development and implementation of regulatory policy that requires landowners to declare and map any old growth on their lands.</p> <p>(#3) Work to expand the mapping efforts completed by the USFS PNW Research Station for the Northwest Forest Plan.</p>	<ul style="list-style-type: none"> • Find a way to increase extent/resolution of old growth mapping, but not linked to anything regulatory (due to unintended consequences) • There may be restrictions on sharing information about old growth linked to sensitive information about listed species • Remote sensing (Lidar?) would achieve similar results without imposing requirements on private landowners • Include public AND private lands • Must be linked to some other action, mapping alone doesn't mitigate the risk • Clarify how to audit or measure for effectiveness

- Clarify how an organization can contribute to USFS efforts

Consultation Insights: Stakeholders from all perspectives identified concerns related to Option #1, including: the inability of certificate holders to influence government regulations; the potential that landowners might harvest old growth in advance of new regulation implementation; that FSC is a voluntary system and shouldn't be advancing regulations; and a perceived inability to audit or measure the effectiveness of an Organization's efforts along these lines. However, there was still a perceived value in improving maps of old growth, on both public and private lands. The mapping should be done in a way that: doesn't require landowner declarations; isn't focused only on the previous USFS mapping efforts; and doesn't require the Organization to do the mapping itself. And above all, it must link to actions that mitigate the identified risk and be auditable.

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research to map or refine existing maps of Old Growth forest within the specified risk area, where the research complements more recent US Forest Service and/or Northwest Forest Plan mapping efforts and includes mapping of private lands, using remote sensing or other techniques that do not require landowner declarations regarding their ownerships; and
2. Use the results of the mapping work to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Old Growth forests.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Planning

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(#4) Promote conservation planning for endangered species that are late-successional dependent (Intent: if habitat is being managed for the species, then it likely will not be lost to/degraded by forest management)</p> <p>(#6) Active participation in federal resource planning processes to encourage protection of existing identified primary forest.</p>	<ul style="list-style-type: none"> • Significant support and little opposition for engagement in planning processes, both those focused on Federal lands alone and those with broader focus – consider combining? • Not just Federal, also state and local governments • Some concern regarding planning specifically for endangered species, but overall broad support • 'Conservation' instead of 'protection' • 'Engage in' or 'complete' instead of 'promote' • Need consistent terminology – Type 1&2 old growth should be the focus, not 'primary forest' or 'late-successional forest' • Need action, not just planning

Consultation Insights: There is broad support for planning in general across all perspectives. The similar input received for both of the original actions indicates that defining the type of planning is not as crucial as ensuring that the intent of the option focuses on old growth conservation. Use of 'Conservation' instead of 'Protection' brings opportunity for restoration and enhancement, not just 'hands off' protection, which is particularly important within fire-dependent systems. For auditability, it is

important to clarify the action expected, with recognition that planning alone does not mitigate risk, while implementation of plans does.

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include, goals, objectives and/or actions that are intended to achieve conservation of existing Old Growth forest (as defined in the FSC US Forest Management Standard) within the specified risk area and the Organization’s supply area. This may include: federal, state and/or local resource planning and plans; planning and plans for old growth-dependent species; regional planning and plans directly for old growth itself; and/or broad-spectrum regional conservation planning and plans that include old growth conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Old Growth forests.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Staff/Forester Training

Original Proposed Option	Topline Input
(#7) Annual staff training to increase knowledge about identification, ecological function, and silvicultural techniques to maintain/develop late-successional functions and structural complexity.	<ul style="list-style-type: none"> • A lot of questions regarding the applicability of this idea to controlled wood • Likely only applicable to Organizations very close to the beginning of the supply chain • Perceived as being auditable • Training topics should include: identification, ecological function and management techniques; public ecosystem values • Consider allowing “or equivalent,” not just ‘training’ • Consider option of allowing an alternative of working this content into licensure requirements for licensed foresters (covered by ‘or equivalent’?)

Consultation Insights: The desired outcome for this training would need to be similar to the education/outreach option above, and the information communicated would also need to be similar. This option is applicable to only a very small portion of the Organizations (those closest to the forest), since the staff of organizations further from the forest have little ability to mitigate risks based simply upon increased knowledge about Old Growth Forests and associated management activities. Need to recognize that once is not enough, but that annual training may not be necessary if the information has not changed, and also that there may be alternatives to Organization-provided training

The following is offered as an option for Organizations that purchase directly from the source forest:

Ensure staff and contract foresters receive training or the equivalent, with periodic refreshers that include any new information, on Old Growth forest (as defined in the FSC US Forest Management

Standard) identification, ecological function, management techniques, and provision of public values. The training or equivalent shall be: a) customized for old growth associated with the forest types that occur within the Organization’s supply area; b) developed by or developed in cooperation with organizations/individuals with expertise in Old Growth conservation or developed in collaboration with FSC US; and c) result in staff having knowledge on these subjects to the extent that they are able to communicate the same content to the landowners and land managers with whom they are working.

INTENT: The intent of this mitigation option is to train staff and contract foresters so that they are able to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Landowner Incentives

<u>Original Proposed Options</u>	<u>Topline Input</u>
None	<ul style="list-style-type: none"> • Multiple suggestions received for a mitigation option associated with this central theme • Could be in support specifically of regional and national land trusts (particularly those that are acquiring working forest conservation easements), or generally in support of organizations that provide incentives to maintain or enhance old growth forests

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to: 1) conservation organizations or similar entities that are supporting or promoting programs or projects to develop new or augment existing incentive programs for landowner who maintain or enhance existing examples of Old Growth forests (as defined in the FSC US Forest Management Standard) within the specified risk area and the Organization’s supply area; or 2) organizations that work to connect landowners with incentives provided by other entities within the same area. These organizations may include: non-governmental organizations that have active programs/projects to conserve Old Growth forests; federal, state and/or local governmental organizations; and/or organizations that have active programs/ projects to conserve habitat for species dependent upon Old Growth forests. If the incentive involves a working forest easement, the easement language should include requirements for use of compatible forest management practices that will maintain or enhance the Old Growth forests.

INTENT: The intent of this mitigation option is to implement actions to increase incentives for landowners that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

The following originally proposed mitigation option was not maintained in the final set of options due to the feedback received through the Controlled Wood Regional Meeting.

Ring-counting for Avoidance/Acceptance of Individual Logs

Participant Proposed Options	Summary of Input
<p>A company in Pacific Coast Region cannot 'control' if log that exceeds 150 years of age; (to avoid purchase) policy & procedures that require that personnel who receive/scale logs to count growth rings & document /keep record.</p> <p>Accept young trees (regardless of size) from areas of specified risk when ring count can be used to find logs that are less than 150 years. This recognizes and allows auditing of support for regenerative ecological forest projects. Species specifically related to late succession target species i.e. ponderosa on east side dry forests in entered of removal white fir sub-canopy. Identify late succession species targets by ecological region</p>	<ul style="list-style-type: none"> • As this was proposed at the Regional Meeting, we received a lot of input specifically in regards to this proposed option – some positive, most negative • It was not possible to accurately determine the different perspectives of all of those providing input, but there appeared to be consistent opposition from an economic perspective, and mixed input from other perspectives

Consultation Insights: Most trees are now sectioned and sorted on site, with most Organizations receiving sections and not receiving whole trees, and therefore unable to determine (due to not knowing if they are receiving the bottom-most section) whether ring-counting would provide an accurate age for the tree. Many Organizations do not receive whole logs, but instead residuals from other manufacturers, so this would only be applicable to Organizations that are at the very beginning of the supply chain. The purpose of mitigation is to reduce the risk of receiving materials from places where the High Conservation Value (HCV) is being threatened by forest management activities, and in this case the HCV is the forest, not individual trees. Avoiding individual trees based upon age would not ensure that the other materials received did not come from places where this HCV is threatened (Old Growth forests include younger trees too). Due to the significant potential for lack of effectiveness, neither of these options are included in the revised set of mitigation options.

Category 4: Forest Conversion

- Overall in the US, the rates of forest loss are very low – with forest losses being balanced by forest gains at national and regional scales. However, at finer scales, forest conversion is occurring, primarily driven by urban development.
- Mitigation options to address forest must help to achieve one of the following outcomes (drawn from the USFS Open Space Conservation Strategy):
 - A. Convene partners to identify and protect priority forest areas
 - B. Promote national policies and markets to help private landowners conserve forests
 - C. Provide resources and tools to help communities expand and connect forests
 - D. Participate in community growth planning to reduce ecological impacts and wildfire risks

The input received on proposed mitigation options for Conversion in the Pacific Coast and Southeast Regions did not reveal any significant regional differences that might affect implementation of mitigation. Therefore, to provide consistency for organizations across US regions, the mitigation options that follow are for both regions where specified risk from conversion was designated.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 4.2 when sourcing from areas of specified risk designated for Forest Conversion.

CENTRAL THEME: Education & Outreach

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(Atlanta #1) Help landowners with tax relief programs, succession planning, etc. to reduce the incentives for them to view the forest as a financial burden, or to view conversion of their forest as a better financial alternative than maintaining it.</p> <p>(Portland #1) Educate landowners about tax relief programs, succession planning, etc. to encourage keeping forests as forests.</p> <p>(Portland #2) Support regional efforts to educate landowners as to the value-enhancing alternatives of maintaining forestland over conversion.</p>	<ul style="list-style-type: none"> • Educate landowners to encourage keeping forests as forests, such as through tax-relief programs, succession planning, etc. • Educate decision makers and regional planners • Efforts should be coordinated and collaborative • Education needs to happen at the landscape level • Clarity needed on 'support', in-kind or financial support • Clarify who is responsible for developing and conducting landowner education and who will lead a collaborative effort • Consideration of different approaches to education and variation depending on where a company is in the supply chain • Clarity needed on the auditability of education as a mitigation option and what conformance looks like for companies.

Consultation Insights: Stakeholders from both Regional Meetings and from all perspectives supported landowner outreach and education as an important tool to reduce conversion. At the Portland Regional Meeting, there was clear support for merging the central theme of education that was proposed in the two options and expanding educational efforts not just to landowners but to decision makers and regional planners. However, engagement with decision makers and regional planners has been addressed through a separate mitigation option under the central theme of regional planning, and the final draft mitigation option below focuses on engagement with landowners. Stakeholders also frequently highlighted the importance of a coordinated and collaborative approach to the educational efforts across the region. Lastly, there is a need for the final mitigation options to clearly articulate what is required by the Organization and to consider the auditability of the final mitigation option.

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the social benefits of keeping forests as forests, and the value-enhancing alternatives to conversion and opportunities for the maintenance of forests (e.g., tax-relief programs, succession planning). The desired outcome of these communications is engaging landowners within the specified risk area and the Organization’s supply area in the maintenance of forests.

- Materials: Materials are developed by or developed in cooperation with, organizations/individuals with expertise in the maintenance of forests, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- Audiences: Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome.

Depending upon the Organization’s location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for maintenance of forests.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Procurement Policy

Consultation Insights: Comments associated with a number of specified risk topics recognized that companies that are closer to the beginning of the supply chain are in a unique position to have a greater influence on the forest management activities within the source forest. Several commenters observed that this kind of influence could be achieved through a procurement policy that is linked to the education and outreach information themes.

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests that are being converted to a non-forest use.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where forest was converted to a non-forest use, or result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Research & Mapping

<u>Original Proposed Options</u>	<u>Topline Input</u>
None	<ul style="list-style-type: none"> Stakeholder suggestion to consider how urban growth modeling could be used to predict future growth patterns.

Consultation insights: A stakeholder at the Atlanta meeting identified the potential to research and utilize urban growth modeling to better predict future growth. This could be a tactic used to identify forests and landowners that may be at a higher risk of converting their forests to non-forests in the future. Findings of modeling and mapping efforts could assist in the improvement in implementation in the other mitigation options, such as through targeted educational outreach to identified landowners or enhanced engagement with conservation initiatives.

The following is offered as a two-part option for when a ‘High’ level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is working to improve predictions of future urban growth through modeling and mapping within the specified risk area, using remote sensing or other techniques that do not require landowner declarations regarding their ownerships; and

2. Use the results of the mapping work to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to maintain forests.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Conservation Initiatives

<u>Original Proposed Options</u>	<u>Topline Input</u>
<p>(Atlanta #5) Support organizations which address conversion but who do not permanently lock up conservation easements, rather promise to maintain and manage the forest as working forests.</p> <p>(Portland #5) Support organizations which address conversion but who do not permanently lock up forests in conservation easements.</p>	<ul style="list-style-type: none"> • Overall endorsement for a mitigation option related to supporting organizations working to maintain forests as forests • Some concerns expressed regarding land trusts and conservation easements, others supporting these endeavors to maintain forestland • Emphasis on land trusts that work on maintaining working forests as opposed to full preservation • Clarity needed on the audit parameters related to 'support' and how to define 'support' or 'address' in the context of the mitigation option • Establish flexibility in regards to which organizations are supported, but provide examples as opposed to prescription. • Proposed option #5 make conservation easements sound negative, but these are an important tool

Consultation insights: Based on stakeholder feedback, there is overall support for a mitigation option related to supporting organizations working to maintain forests as forests. However, there were varying perspectives regarding which organizations would receive support, and concern around the implied negative connotation in Option #5 with conservation easements. While there was an emphasis on supporting organizations that maintain working forestland, others also stressed that there should be a space in the mitigation option to work with organizations utilizing conservation easements. Stakeholders also expressed the need for the mitigation option to include clear the action required of certificate holders to ensure auditability, and more guidance on what types organizations would be acceptable.

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the Organization's supply area that will result in the maintenance of forests. These programs/projects may include incentives, such as working forest easements and other conservation easements. These entities may include, but are not limited to: land trusts, community forest programs, landowner cooperatives, forest industry groups, programs offering technical forest management assistance to landowners, government organizations or conservation organizations (public or private).

INTENT: The intent of this mitigation option is to implement actions through conservation programs/projects that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Planning

Original Proposed Options	Topline Input
<p>(Atlanta #4) Actively participate in regional planning processes to support policies aimed at limiting conversion.</p> <p>(Portland #4) Actively participate in regional planning processes (land use and/or sustainable forestry) to support policies aimed at limiting conversion.</p>	<ul style="list-style-type: none"> • Overall support across all perspectives for participation in regional planning • A key element of the conversion mitigation options developed • Specific suggestions for support and lobbying for farm bill providing incentives to landowners to keep forests as forests, and grant planning to support communities • Clarity needed on terminology for determining participation and the policies which are deemed viable to support • Clarify how 'active participation' will be audited

Consultation insights: There is broad support from stakeholders for participation in regional planning as a mitigation action to decrease the threat of conversion in areas of specified risk, and very little opposition from those providing feedback. However, while this mitigation option has received support from all perspectives, there are concerns with what will be required of certificate holders to show conformance with this mitigation option. Therefore, to ensure the mitigation option is auditable, the specific action will need to be clearly stated.

The following is offered as an option that could be scaled for any level of mitigation:

Engage in on-going regional landscape-level planning processes (land use and/or sustainable forestry) to support viable policies or regulations that are intended to promote maintenance of forests within the specified risk area and the Organization's supply area. Engagement may include, but is not limited to: direct communication with federal, state and/or local resource policy makers and planners; participation on regional planning groups/committees; and collaboration with, or support for, organizations/individuals advocating for viable policies or regulations with the goal of maintaining forests.

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

The following is offered as an option for when a 'High' level of mitigation is required:

If regional landscape level planning processes are not currently occurring, collaborate and develop an engagement strategy with 1) federal, state and/or local resource policy makers and planners, and 2) organizations/individuals advocating for policies or regulations aimed at maintaining forests, with a goal to establish a regional landscape level planning process (land use and/or sustainable forestry) to support the development of viable policies or regulations that are intended to achieve maintenance of forests within the specified risk area and the Organization's supply area.

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

The following originally proposed mitigation option was not maintained in the final set of options due to the feedback received through the Controlled Wood Regional Meeting.

Growing healthy markets

Original Proposed Options	Topline Input
<p>(Atlanta #3) Grow healthy competitive markets that will motivate landowners to actively manage their forests and keep them healthy in ways that benefit the environment, wildlife, and the general public.</p> <p>(Portland #3) Grow healthy and competitive markets that motivate landowners to manage their forests in ways that benefit the environment and maintain forestland (e.g., support economic development, sawmill expansion, pulpwood expansion)</p>	<ul style="list-style-type: none"> • Healthy wood markets important for maintaining value and keeping forests as forests • Many involved in promoting markets (FSC, members, Certificate Holders) • Developing financial incentives for landowners as healthy and competitive markets on their own do not motivate landowners • Certificate holders do not have ability to offer financial incentives • Certificate holders already work on this by virtue of being a business • Multiple suggestions that growing healthy and competitive markets should be FSC US's core function, and not the responsibility of certificate holders

Consultation insights: Feedback from stakeholders at both Regional Meetings showed support for Option #3 and the idea that by growing healthy and competitive markets for forest products, we will help ensure that forests maintain their economic value to landowners and therefore remain as forests. However, while this theme was supported, there was also concern expressed about what a company could really accomplish this in order to be effective on this as a mitigation option, and also how a mitigation option could be developed to meet the shared criteria of feasibility and auditability. There were some suggestions of creating market incentives and premiums for landowners in the regions where conversion was identified as a specified risk to help motivate landowners to maintain their forests. However, while this approach could be effective for landowners, it is not practical for a mitigation option to require organizations to offer financial incentives, and therefore, does not align with the requirements outline in the shared criteria for mitigation options. Incentives and premiums for landowners might result from a healthier market, but it's simply not feasible to expect this to happen as an outcome of the implementation of this mitigation option. Given the feedback received on this draft mitigation option, and taking the shared criteria into consideration, this will not be included in the revised set of mitigation options.

Annex 1 – Participants

Organizations Represented at the Portland Meeting

9Wood	Miller Veneers
American Forest Foundation	National Council for Air and Stream Improvement, Inc.
American Green Consulting	Northwest Forest Worker Center
Andersen Corporation	Northwest Hardwoods
Arauco North America	Oregon Wild
Biological Integrity, LLC	Packaging Corporation of America
Boise Cascade Company	Ponderay Newsprint Company
Boise Paper	PricewaterhouseCoopers
Boise White Paper	Rainforest Alliance
Bright Wood Corporation	Renewable Strategies
Columbia Forest Products	SCS Global Services
Ecotrust	Shady Creek Forest Products
Georgia-Pacific	Sierra Club
Green Diamond Resource Company	Sierra Pacific Industries
GreenWood Resources	Sustainable Northwest
Hancock Forest Management	The Forest Trust
International Paper	University of Washington
Jeld-Wen	WestRock
KapStone Kraft Paper Corporation	Weyerhaeuser
Mason, Bruce & Girard	Zimmfor Management Services Ltd.
Mendocino Redwood Company	

Organizations that Provided Comments During the Final Consultation

American Green Consulting Group, LLC	NEPCon
Bingaman & Son Lumber, Inc.	Packaging Corporation of America
Boise Cascade Company	Rayonier Advanced Materials
Columbia Forest Products	Resolute Forest Products
Conserving Carolina	SCS Global Services, Inc.
Georgia-Pacific LLC	Sierra Club
International Paper	University of Kentucky
KapStone Kraft Paper Corporation	Zimmfor Management Services Ltd.
Mendocino Redwood Company	

Additional input was provided by Certification Bodies during a 10/08/18 meeting on this topic.

Annex 2 – Mitigation Options by Specified Risk Topic

This annex presents the same final set of mitigation options, as above, for specified risk topics in the Pacific Coast and Rocky Mountain Regions, but without the Controlled Wood Regional Meeting feedback or initially proposed options that were not included in the final set.

NOTE 1: Almost any of the mitigation options may be done individually or in collaboration with other certificate holders, or other entities that have similar desired outcomes. Collaboration is encouraged to scale up potential mitigation impact, and FSC US will seek to assist with that collaboration when feasible.

NOTE 2: Active engagement will be evaluated to be two-way engagement such as providing support through participation in meetings.

HCV 1: Central California Critical Biodiversity Area

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Central California Critical Biodiversity Area (CBA).

CENTRAL THEME: Education & Outreach

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of Sierra Nevada biodiversity associated with mixed conifer forests and the montane meadows embedded within them, threats from incompatible forest management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management practices that reduce or eliminate these threats (e.g., management practices that maintain both within-stand diversity, such as maintenance of snags, large trees and hardwood, and between-stand diversity), with recognition of both even-age and uneven-age management practices if appropriate for the supply area. Communications should recognize the importance of maintaining or enhancing mixed conifer forests and montane meadows, and the role of fire and the importance of mimicking disturbance patterns in the Sierra Nevada region. The desired outcome of these communications is engaging landowners, foresters and loggers in conservation of Sierra Nevada biodiversity within the specified risk area and the Organization's supply area.

- **Materials**: Materials are developed by or developed in cooperation with organizations/individuals with expertise in Sierra Nevada biodiversity conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences**: Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Sierra Nevada biodiversity.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Procurement Policy

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Sierra Nevada biodiversity is threatened as a result of forest management activities that produced the forest materials. This will require providing a description of the potential threats to Sierra Nevada biodiversity from forest management activities (as described in the FSC US National Risk Assessment), and of the kinds of activities that would maintain or enhance the Sierra Nevada biodiversity in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005 V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Sierra Nevada biodiversity is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Research

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on clarifying positive and negative impacts of forest management activities on Sierra Nevada biodiversity and/or on improving management practices for conservation of Sierra Nevada biodiversity within the specified risk area; and
2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Sierra Nevada biodiversity.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Planning

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include,

goals, objectives and/or actions that are intended to achieve conservation of Sierra Nevada biodiversity within the specified risk area and the Organization's supply area. This may include: federal, state and/or local resource planning and plans; planning and plans for Sierra Nevada mixed-conifer forest or montane meadow dependent species; regional planning and plans directly for Sierra Nevada biodiversity itself; and/or broad-spectrum regional conservation planning and plans that include Sierra Nevada biodiversity conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Sierra Nevada biodiversity.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Staff/Forester Training

The following is offered as an option for Organizations that purchase directly from the source forest:

Ensure staff and contract foresters receive training or the equivalent, with periodic refreshers that include any new information, on Sierra Nevada biodiversity, particularly mixed-conifer forest and montane meadows, threats from incompatible forest management activities (as described in the FSC US National Risk Assessment), management techniques that will conserve biodiversity, and provision of public values. The training or equivalent shall be: a) developed by or developed in cooperation with organizations/individuals with expertise in Sierra Nevada biodiversity, or developed in collaboration with FSC US; and b) result in foresters having knowledge on these subjects to the extent that they are able to communicate the same content to the landowners and land managers with whom they are working.

INTENT: The intent of this mitigation option is to train staff and contract foresters so that they are able to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Sierra Nevada biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

HCV 1: Klamath-Siskiyou Critical Biodiversity Area

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Klamath-Siskiyou Critical Biodiversity Area (CBA).

CENTRAL THEME: Education & Outreach

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of biodiversity in the Klamath-Siskiyou region, threats from incompatible forest

management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management practices that reduce or eliminate these threats (e.g., management practices that maintain both within-stand and between-stand diversity). The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of the Klamath-Siskiyou biodiversity within the specified risk area and the Organization's supply area.

- **Materials:** Materials are developed by or developed in cooperation with tribes or with organizations/individuals with expertise in Klamath-Siskiyou biodiversity conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Klamath-Siskiyou biodiversity.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Procurement Policy

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Klamath-Siskiyou biodiversity is threatened as a result of forest management activities that produced the forest materials. This will require providing a description of the potential threats to Klamath-Siskiyou biodiversity from forest management activities (as described in the FSC US National Risk Assessment), and of the kinds of activities that would maintain or enhance the Klamath-Siskiyou biodiversity in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1.

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Klamath-Siskiyou biodiversity is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Research

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on improving management

practices in order to maintain or enhance the Klamath-Siskiyou biodiversity within the specified risk area; and

2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Klamath-Siskiyou biodiversity.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Planning

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include, goals, objectives and/or actions that are intended to achieve conservation of Klamath-Siskiyou biodiversity within the specified risk area and the Organization's supply area. This may include: tribes, federal, state and/or local resource planning and plans; planning and plans for Klamath-Siskiyou mixed conifer stands; regional planning and plans directly for Klamath-Siskiyou biodiversity itself; and/or broad-spectrum regional conservation planning and plans that include Klamath-Siskiyou biodiversity conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Klamath-Siskiyou biodiversity.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

CENTRAL THEME: Implement Management Activities

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities (as described below) that are facilitating active, on-the-ground implementation of management activities (as described below) to maintain or enhance the Klamath-Siskiyou biodiversity within the specified risk area and the Organization's supply area.

- **Conservation Entities:** These may include: non-governmental organizations that have active programs/projects to conserve biodiversity; tribes, federal, state and/or local governmental organizations with natural resource conservation responsibilities or goals; and/or organizations

that have active programs/projects focused on habitat conservation for species dependent upon habitats within the specified risk area.

- **Management Activities:** These should include efforts to maintain or enhance the within stand species diversity, and between stand diversity of successional stages, for mixed conifer forests at all elevations, and conservation of any other habitats identified as important for biodiversity.

INTENT: The intent of this mitigation option is to implement on-the-ground forest management activities that improve maintenance or enhancement of Klamath-Siskiyou biodiversity, and thereby mitigate the risk of sourcing materials from sites where the concentration of biodiversity in the specified risk area is threatened by forest management activities.

HCV 1: Lesser Slender Salamander

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 1 Lesser Slender Salamander.

CENTRAL THEME: Education & Outreach

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the conservation values of Lesser Slender Salamander (LSS), potential threats from forest management activities (as described in the FSC US National Risk Assessment), and opportunities for conservation through management that maintains, enhances, or restores LSS populations and reduces or eliminates potential threats. The desired outcome of these communications is engaging landowners, foresters, and loggers in conservation of LSS populations within the specified risk area and the Organization's supply area.

- **Materials:** Materials are developed by or developed in cooperation with organizations/individuals with expertise in LSS or amphibian conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of LSS.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Procurement Policy

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will

not supply materials from forests where Lesser Slender Salamanders (LSS) are threatened as a result of the forest management activities that produced the forest materials. This will require providing a description of the forest type in which LSS populations occur, potential threats to LSS from forest management activities (as described in the FSC US National Risk Assessment), and the kinds of activities that would maintain or enhance LSS populations in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where LSS are threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Research

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research on clarifying positive and negative impacts of forest management activities on Lesser Slender Salamander (LSS) populations and/or on management practices for LSS conservation within the specified risk area; and
2. Use the results of the research to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of LSS populations.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Implement Management Activities

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities (as described below) that are facilitating active, on-the-ground implementation of management activities (as described below) to restore, maintain or enhance Lesser Slender Salamander (LSS) populations, with a goal of long-term conservation of LSS within the specified risk area and the Organization's supply area.

- Conservation Entities/Associations: These may include: non-governmental organizations that have active programs/projects to conserve LSS; federal, state and/or local governmental organizations with natural resource conservation responsibilities or goals; and/or organizations that have active programs/projects focused on amphibian conservation.
- Management Activities: These should include efforts to increase and improve the use of management practices that conserve LSS populations such as opportunities to provide proper canopy shading, moisture levels and down woody debris.

INTENT: The intent of this mitigation option is to implement on-the-ground forest management activities that improve maintenance, enhancement or restoration of LSS populations, and thereby mitigate the risk of sourcing materials from sites where LSS in the specified risk area are threatened by forest management activities.

HCV 3: Old Growth Forest

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 3.1 when sourcing from areas of specified risk designated for HCV 3 Old Growth Forest.

CENTRAL THEME: Education & Outreach

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the social benefits and values of Old Growth forests (as defined in the FSC US Forest Management Standard), threats from forest management (as described in the FSC US National Risk Assessment) and related loss of values, and opportunities for conservation (e.g., conservation easements, best management practices), with recognition of differences between moist and dry sites. In areas with fire-dependent forest systems, communications should recognize the role of fire, along with the potential positive and negative impacts of fire. The desired outcome of these communications is engaging landowners, foresters and loggers in conservation of Old Growth forests within the specified risk area and the Organization's supply area.

- **Materials:** Materials are developed by or developed in cooperation with organizations/individuals with expertise in Old Growth forest conservation, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences:** Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for conservation of Old Growth forests.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Procurement Policy

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where Old Growth forests (as defined in the FSC US Forest Management Standard) are threatened as a result of the forest management activities that produced

the forest materials. This will require providing a description of the forest type (as it occurs in the supply area), potential threats to Old Growth forest from forest management activities (as described in the FSC US National Risk Assessment), and the kinds of activities that would maintain or enhance Old Growth forest in the specified risk area.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where Old Growth forest is threatened by forest management activities, or result in changes to on-the-ground forest management activities that mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Research & Mapping

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is currently conducting, or has the capacity to initiate, research to map or refine existing maps of Old Growth forest within the specified risk area, where the research complements more recent US Forest Service and/or Northwest Forest Plan mapping efforts and includes mapping of private lands, using remote sensing or other techniques that do not require landowner declarations regarding their ownerships; and
2. Use the results of the mapping work to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to improve maintenance or enhancement of Old Growth forests.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Planning

The following is offered as an option that could be scaled for any level of mitigation:

Engage in and/or provide monetary or in-kind resources to conservation planning processes, and, when possible, the implementation of conservation plans, that include, or could potentially include, goals, objectives and/or actions that are intended to achieve conservation of existing Old Growth forest (as defined in the FSC US Forest Management Standard) within the specified risk area and the Organization's supply area. This may include: federal, state and/or local resource planning and plans; planning and plans for old growth-dependent species; regional planning and plans directly for old growth itself; and/or broad-spectrum regional conservation planning and plans that include old growth conservation. The desired outcome of this engagement or provision of resources is to increase and improve forest management practices that conserve Old Growth forests.

NOTE: There are some situations where engagement/support by the Organization may not be possible for both the planning process and the plan implementation (e.g., when the relevant plan has already been developed, or when there is an opportunity to participate in a planning process where implementation of the plan will be the complete responsibility of a public agency and there is no opportunity to engage or support implementation).

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Staff/Forester Training

The following is offered as an option for Organizations that purchase directly from the source forest:

Ensure staff and contract foresters receive training or the equivalent, with periodic refreshers that include any new information, on Old Growth forest (as defined in the FSC US Forest Management Standard) identification, ecological function, management techniques, and provision of public values. The training or equivalent shall be: a) customized for old growth associated with the forest types that occur within the Organization's supply area; b) developed by or developed in cooperation with organizations/individuals with expertise in Old Growth conservation or developed in collaboration with FSC US; and c) result in staff having knowledge on these subjects to the extent that they are able to communicate the same content to the landowners and land managers with whom they are working.

INTENT: The intent of this mitigation option is to train staff and contract foresters so that they are able to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

CENTRAL THEME: Landowner Incentives

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to: 1) conservation organizations or similar entities that are supporting or promoting programs or projects to develop new or augment existing incentive programs for landowner who maintain or enhance existing examples of Old Growth forests (as defined in the FSC US Forest Management Standard) within the specified risk area and the Organization's supply area; or 2) organizations that work to connect landowners with incentives provided by other entities within the same area. These organizations may include: non-governmental organizations that have active programs/projects to conserve Old Growth forests; federal, state and/or local governmental organizations; and/or organizations that have active programs/ projects to conserve habitat for species dependent upon Old Growth forests. If the incentive involves a working forest easement, the easement language should include requirements for use of compatible forest management practices that will maintain or enhance the Old Growth forests.

INTENT: The intent of this mitigation option is to implement actions to increase incentives for landowners that will result in changes to on-the-ground forest management activities that improve restoration or maintenance of Old Growth forests, and thereby mitigate the risk of sourcing materials from sites where Old Growth forests in the specified risk area are threatened by forest management activities.

Category 4: Forest Conversion

The input received on proposed mitigation options for Conversion in the Pacific Coast and Southeast Regions did not reveal any significant regional differences that might affect implementation of mitigation. Therefore, to provide consistency for organizations across US regions, the mitigation options that follow are for both regions where specified risk from conversion was designated.

The following mitigation options are available to certificate holders so that they may implement Control Measure CM 4.2 when sourcing from areas of specified risk designated for Forest Conversion.

CENTRAL THEME: Education & Outreach

The following is offered as an option that could be scaled for any level of mitigation:

Using materials as described below, communicate to audiences (also described below) the social benefits of keeping forests as forests, and the value-enhancing alternatives to conversion and opportunities for the maintenance of forests (e.g., tax-relief programs, succession planning). The desired outcome of these communications is engaging landowners within the specified risk area and the Organization's supply area in the maintenance of forests.

- **Materials**: Materials are developed by or developed in cooperation with, organizations/individuals with expertise in the maintenance of forests, or developed in collaboration with FSC US. Materials are delivered in a manner that has a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Materials may already exist or may need to be created.
- **Audiences**: Communications are directed toward audiences where there is a proven or reasonable expectation of effectiveness in achieving the above defined desired outcome. Depending upon the Organization's location in the supply chain, communications may be directly with landowners, foresters, or loggers, or through intermediaries such as community members, forest managers, suppliers, forestry associations or landowner associations, or through collaboration with organizations/individuals already working for maintenance of forests.

INTENT: The intent of this mitigation option is to implement education and outreach-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Procurement Policy

The following is offered as an option for Organizations that purchase directly from the source forest:

Develop/adapt a procurement policy that reflects the above Education & Outreach communications themes and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests that are being converted to a non-forest use.

NOTE: Actions to demonstrate policy enforcement and communicate policies on sourcing to suppliers should be audited under the Due Diligence system requirements within the 40-005V3-1 standard section 1.1

INTENT: The intent of this mitigation option is to implement a procurement policy that will either result in avoidance of materials from sites where forest was converted to a non-forest use, or result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Research & Mapping

The following is offered as a two-part option for when a 'High' level of mitigation is required:

1. Engage with and/or provide monetary or in-kind resources to an entity or alliance that is working to improve predictions of future urban growth through modeling and mapping within the specified risk area, using remote sensing or other techniques that do not require landowner declarations regarding their ownerships; and
2. Use the results of the mapping work to improve implementation of another mitigation option or demonstrate that the results of the research are being used in some other way to maintain forests.

INTENT: The intent of this mitigation option is to implement research-related actions and then use the research outputs to increase the effectiveness of another implemented mitigation option that, in turn, will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Conservation Initiatives

The following is offered as an option that could be scaled for any level of mitigation:

Engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the Organization's supply area that will result in the maintenance of forests. These programs/projects may include incentives, such as working forest easements and other conservation easements. These entities may include, but are not limited to: land trusts, community forest programs, landowner cooperatives, forest industry groups, programs offering technical forest management assistance to landowners, government organizations or conservation organizations (public or private).

INTENT: The intent of this mitigation option is to implement actions through conservation programs/projects that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

CENTRAL THEME: Planning

The following is offered as an option that could be scaled for any level of mitigation:

Engage in on-going regional landscape-level planning processes (land use and/or sustainable forestry) to support viable policies or regulations that are intended to promote maintenance of forests within the specified risk area and the Organization's supply area. Engagement may include, but is not limited to: direct communication with federal, state and/or local resource policy makers and planners; participation on regional planning groups/committees; and collaboration with, or support for, organizations/individuals advocating for viable policies or regulations with the goal of maintaining forests.

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

The following is offered as an option for when a 'High' level of mitigation is required:

If regional landscape level planning processes are not currently occurring, collaborate and develop an engagement strategy with 1) federal, state and/or local resource policy makers and planners, and 2) organizations/individuals advocating for policies or regulations aimed at maintaining forests, with a

goal to establish a regional landscape level planning process (land use and/or sustainable forestry) to support the development of viable policies or regulations that are intended to achieve maintenance of forests within the specified risk area and the Organization's supply area.

INTENT: The intent of this mitigation option is to implement planning-related actions that will result in maintenance of forests, and thereby mitigate the risk of sourcing materials from sites in the specified risk area where the forest is being converted to non-forest use.

Annex 3 – Specified Risk Overview Documents

The following documents were made available to interested stakeholders in advance of the Controlled Wood Regional Meeting in Portland. Individuals and organizations were encouraged to review the information that they provide about the specified risk designations in the Pacific Coast and Rocky Mountain Regions and then propose mitigation actions to address the identified risk either through the online discussion forum (<https://www.engage.us.fsc.org>) or at the Regional Meeting itself.

FSC US CONTROLLED WOOD REGIONAL MEETINGS CENTRAL CALIFORNIA CBA



FSC
FOREST
STEWARDSHIP
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HCVS IN FSC A High Conservation Value (HCV) is a biological, ecological, social or cultural value of outstanding significance or critical importance. FSC is working to ensure that our system helps to maintain and enhance the special places that support these values. For more information on HCVs, see the Common Guidance for the Identification of High Conservation Values.¹

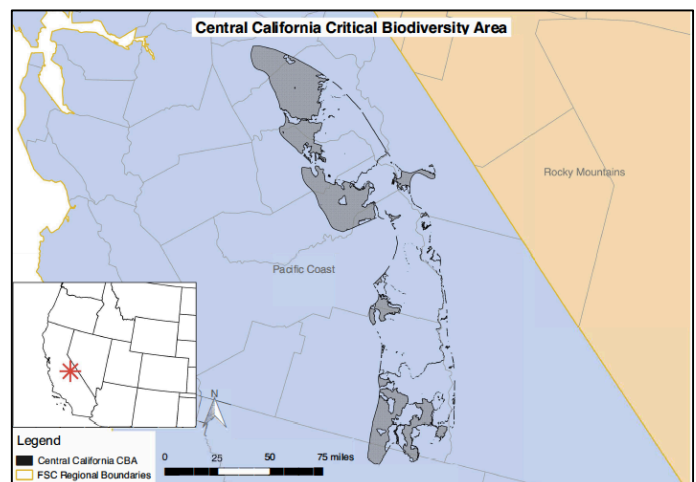
WHY IS CENTRAL CALIFORNIA CBA CONSIDERED AN HCV? This CBA is considered an HCV because it contains a high overall species richness, diversity, or uniqueness within a defined area compared to other sites within the same biogeographic area. The CBA was identified using a species richness index originally published by NatureServe and The Nature Conservancy that identifies areas with high concentrations of rare species. This index preferences species that have limited ranges by applying additional weighting. The results identify areas with concentrations of high biological diversity and spaces with an increased conservation significance.

SUMMARY OF CENTRAL CALIFORNIA CBA The California Floristic Province is recognized by many international conservation organizations as a globally significant center of biodiversity. This CBA includes two general ecological regions that both support high levels of biodiversity – the higher elevation Sierra Nevada mountains and the lower elevation California coastal region. For the purposes of this assessment, the focus is on the Sierra Nevada portion, because the concentrations of biodiversity in the coastal area are primarily associated with non-forested coastal prairies.

The Sierra Nevada hosts a wide variety of biodiversity including hundreds of vertebrates, rare species, and endemic plants. Approximately 400 terrestrial vertebrate species have been documented the Sierra Nevada – 13 are endemic to the mountain range and a number are rare. Biodiversity in the forested areas of this part of the California Floristic Province is dependent on a diversity of stand types and ages, including tree species diversity, forest openings, and standing and downed woody structure. Forest management has the potential to influence this within stand and between stand diversity. Mixed Conifer Stands and Montane Meadows drive the concentration of biodiversity in this area.

The Sierran mixed conifer habitat is a vegetation band ranging 770 to 1230 m (2500 to 4000 ft) in the north to 1230 to 3076 m (4000 to 10,000 ft) in the southern Sierra Nevada and supports a number of rare species.

Montane meadows are grassland habitats, both wet and dry, that occur in the higher elevations of the Sierra Nevada. They are the most botanically diverse ecosystems in the Sierra Nevada and are also important for wildlife species, especially birds.



¹Common Guidance for the Identification of High Conservation Values (<https://ic.fsc.org/en/what-is-fsc-certification/consultations/archive/hcv-common-guidance>)

IDENTIFIED THREATS TO CENTRAL CALIFORNIA CBA

<u>Mixed Conifer Stands</u> Threats include forest simplification due to forest management activities (affecting both within stand and between stand diversity), logging, grazing, and fire suppression.	<u>Montane Meadows</u> Threats include habitat loss to vineyards, orchards & development, fire suppression, invasive species, grazing, and road construction (resulting in channel incision) for forest management and other activities are all identified as threats
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While a portion of the Sierra Nevada is protected, the priority habitats also occur in portions of the CBA that are not protected. The portion of the CBA in the Rocky Mountain region is almost completely non-forested.

WHAT ARE MITIGATION ACTIONS AND WHAT WOULD WE LIKE TO ACHIEVE?

Companies that mix FSC-certified forest materials and non-certified materials to make products with an 'FSC Mix' claim/logo are required to address certain risks before using the non-certified forest materials. One of these is the risk that their forest materials come from areas where HCVs are threatened by forest management activities. FSC has completed a US National Risk Assessment to identify where this risk is greater than 'low' and the Central California CBA is one of these places - specifically, the portions of the CBA that occur within World Wildlife Fund's Sierra Nevada ecoregion and are not effectively protected². Companies that wish to use non-certified materials from the identified places (like this CBA) are required to either avoid sourcing from specific sites where the threats are occurring, or to implement mitigation actions that reduce the risk of sourcing from those sites. For this CBA, any mitigation actions will need to address the threats identified above in **bold**.

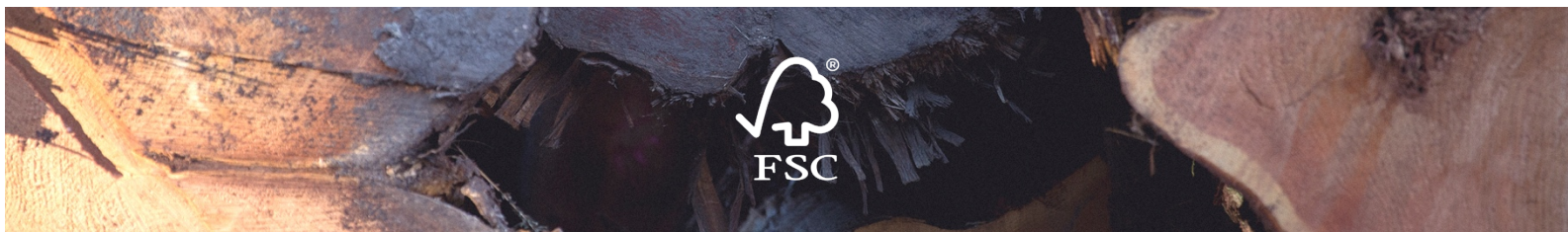
The FSC US National Risk Assessment also introduces the concept of holding regional meetings to bring stakeholders together to collaboratively identify effective and practical mitigation actions. We are asking participants to consider landscape-scale mitigation actions, that will help to reduce risks across the landscape in which the companies source forest materials. An effective way to do this may be to build on existing programs and projects that are already tackling these issues. The companies implementing mitigation actions are required to select one or more from the options identified at the regional meetings.

Please help us to determine what these mitigation actions should be, by visiting engage.fsc.us.org and joining the virtual discussion, or attending a regional meeting.

INFORMATION SOURCES THAT MAY HELP GENERATE MITIGATION IDEAS

- [World Wildlife Fund](http://www.worldwildlife.org)
- [California Department of Fish and Game](http://www.california.gov)
- [USDA Forest Service Pacific Southwest Research Station](http://www.fs.fed.us/pacific)
- [Sierra Forest Legacy – Montane Meadows](http://www.sierraforestlegacy.org)

² Effective protection is demonstrated by GAP Status 1 & 2 areas in the PAD-US dataset (<https://gapanalysis.usgs.gov/padus/data/download/>) and USFS Inventoried Roadless Areas (<https://www.fs.usda.gov/detail/roadless/2001roadlessrule/maps/?cid=stelprdb5382437>).



FSC US CONTROLLED WOOD REGIONAL MEETINGS KLAMATH-SISKIYOU CBA



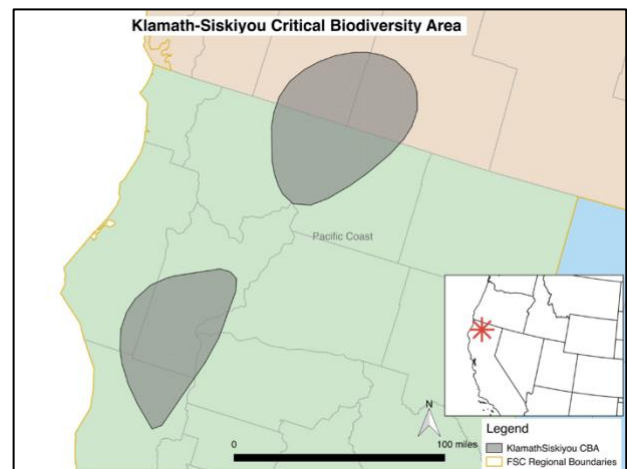
FSC REGION Pacific Coast

HCVS IN FSC A High Conservation Value (HCV) is a biological, ecological, social or cultural value of outstanding significance or critical importance. FSC is working to ensure that our system helps to maintain and enhance the special places that support these values. For more information on HCVs, see the Common Guidance for the Identification of High Conservation Values.¹

WHY IS KLAMATH-SISKIYOU CBA CONSIDERED AN HCV? This CBA is considered an HCV because it contains a high overall species richness, diversity, or uniqueness within a defined area compared to other sites within the same biogeographic area. The CBA was identified using a species richness index originally published by NatureServe and The Nature Conservancy that identifies areas with high concentrations of rare species. This index preferences species that have limited ranges by applying additional weighting. The results identify areas with concentrations of high biological diversity and spaces with an increased conservation significance.

SUMMARY OF KLAMATH-SISKIYOU CBA

The biodiversity in the Klamath-Siskiyou ecoregion is driven by geologic, topographic, and climatic complexity and history. The region was not covered by glaciers during recent ice ages, which mean that it provided a refuge for many species that did not survive elsewhere. Additionally, the diversity in the geophysical landscapes has resulted in many unique combinations of characteristics in different places that promote a diversity of forest and other ecosystem types. In turn, this high diversity of unique fine-scale habitats supports a very large number of terrestrial and aquatic species, including many invertebrate and plant species. The forest-based biodiversity in the Klamath-Siskiyou is largely sustained in diverse mixed conifer stands that are adapted to low- to mid-severity and frequency fires.



IDENTIFIED THREATS TO THE KLAMATH-SISKIYOU CBA HABITATS

Reported threats to mixed conifer stands include structural changes due to altered fire regimes and **conversion through forest management activities to forest stands that have a single dominant species (as opposed to the high diversity of tree species that would most likely occur naturally, and supports the concentration of biodiversity in this area)**. Other threats include fire suppression, **habitat loss and degradation (due to logging and other human activities) including a loss of the full representation of forest successional stages at all elevations**, mining, road building and grazing.

¹Common Guidance for the Identification of High Conservation Values (<https://ic.fsc.org/en/what-is-fsc-certification/consultations/archive/hcv-common-guidance>)

WHAT ARE MITIGATION ACTIONS AND WHAT WOULD WE LIKE TO

ACHIEVE? Companies that mix FSC-certified forest materials and non-certified materials to make products with an 'FSC Mix' claim/logo are required to address certain risks before using the non-certified forest materials. One of these is the risk that their forest materials come from areas where HCVs are threatened by forest management activities. FSC has completed a US National Risk Assessment to identify where this risk is greater than 'low' and the Klamath-Siskiyou CBA is one of these places. Companies that wish to use non-certified materials from the identified places (like this CBA) are required to either avoid sourcing from specific sites where the threats are occurring, or to implement mitigation actions that reduce the risk of sourcing from those sites. For this CBA, any mitigation actions will need to address the threats identified above in **bold**.

The FSC US National Risk Assessment also introduces the concept of holding regional meetings to bring stakeholders together to collaboratively identify effective and practical mitigation actions. We are asking participants to consider landscape-scale mitigation actions, that will help to reduce risks across the landscape in which the companies source forest materials. An effective way to do this may be to build on existing programs and projects that are already tackling these issues. The companies implementing mitigation actions are required to select one or more from the options identified at the regional meetings.

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INFORMATION SOURCES THAT MAY HELP GENERATE MITIGATION IDEAS

- [California Department of Fish and Game](#)
- [Oregon Conservation Strategy – Klamath Mountains](#)
- [World Wildlife Fund](#)
- [The Conservation Fund](#)
- [Wildlife Conservation Society](#)



FSC US CONTROLLED WOOD REGIONAL MEETINGS

LESSER SLENDER SALAMANDER



FOREST
STEWARDSHIP
COUNCIL®

FSC REGION Pacific Coast

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WHY ARE LESSER SLENDER SALAMANDERS CONSIDERED AN HCV? The Lesser Slender Salamander is considered an HCV because it is a rare species population with very limited distribution. The species was identified through an analysis of the NatureServe dataset, considering criteria including level of imperilment (both global and state scales), taxa (e.g., vertebrate species), forest habitat dependency, and recency of confirmed occurrences.

SUMMARY OF LESSER SLENDER SALAMANDERS

The Lesser Slender Salamander's distribution is restricted to the southern Santa Lucia Range of north-central San Luis Obispo County, CA, generally above 400m. The species is considered to have been common historically, but are now more difficult to find. No specific cause for this decline has been identified. The species was only fairly recently identified as being separate from other similar salamander species (via DNA analysis) in 2001.

This species appears to be associated with forests of mixed oak, tanbark oak, sycamore and laurel. They are typically found in areas either with higher elevation or that are more mesic than other sites near their location. Frequently, these are in mesic canyons, where the individuals are found on shaded slopes in deep leaf litter. They are always found in areas that also include black-bellied slender salamanders, but only occur in a small portion of this other species' range.



IDENTIFIED THREATS TO LESSER SLENDER SALAMANDERS Little is known about this salamander and specific threats to the species have not yet been documented. **The species depends on forest habitat; canopy shading, moisture level and down woody debris appear to be important habitat elements**, which can all be affected by forest management and potentially cause negative impacts.

¹Common Guidance for the Identification of High Conservation Values (<https://ic.fsc.org/en/what-is-fsc-certification/consultations/archive/hcv-common-guidance>)

WHAT ARE MITIGATION ACTIONS AND WHAT WOULD WE LIKE TO ACHIEVE?

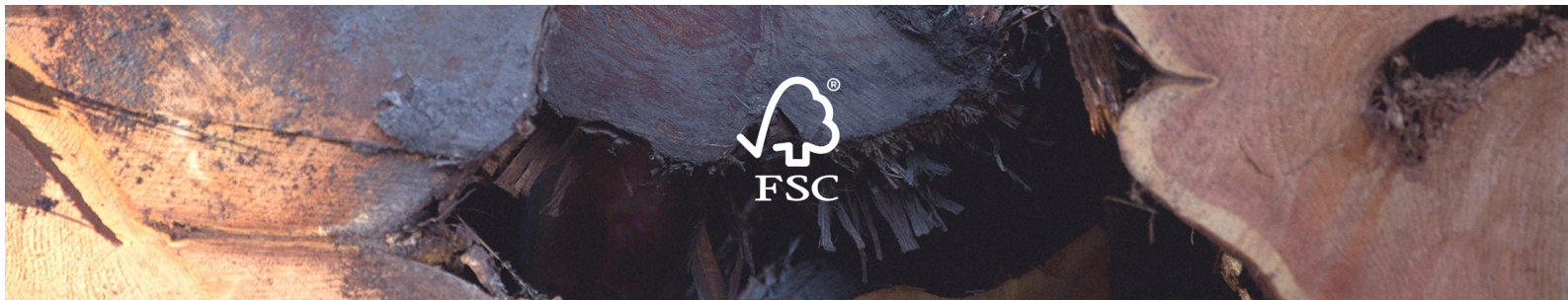
Companies that mix FSC-certified forest materials and non-certified materials to make products with an 'FSC Mix' claim/logo are required to address certain risks before using the non-certified forest materials. One of these is the risk that their forest materials come from areas where HCVs are threatened by forest management activities. FSC has completed a US National Risk Assessment to identify where this risk is greater than 'low' and the lesser slender salamander's range is one of these places – specifically within its range, defined by the California Department of Fish & Wildlife, in portions of San Luis Obispo County, CA. Companies that wish to use non-certified materials from the identified places are required to either avoid sourcing from specific sites where the threats are occurring, or to implement mitigation actions that reduce the risk of sourcing from those sites. For this rare species, any mitigation actions will need to address the threat concerns identified above.

The FSC US National Risk Assessment also introduces the concept of holding regional meetings to bring stakeholders together to collaboratively identify effective and practical mitigation actions. We are asking participants to consider landscape-scale mitigation actions, that will help to reduce risks across the landscape in which the companies source forest materials. An effective way to do this may be to build on existing programs and projects that are already tackling these issues. The companies implementing mitigation actions are required to select one or more from the options identified at the regional meetings.

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INFORMATION SOURCES THAT MAY HELP GENERATE MITIGATION IDEAS

- [NatureServe Explorer](#)
- [California Department of Fish and Wildlife](#)
- [International Union for Conservation of Nature and Natural Resources](#)
- [Amphibiaweb](#)
- [California Herps](#)



FSC US CONTROLLED WOOD REGIONAL MEETINGS OLD GROWTH FORESTS



FSC REGIONS Pacific Coast and Rocky Mountain

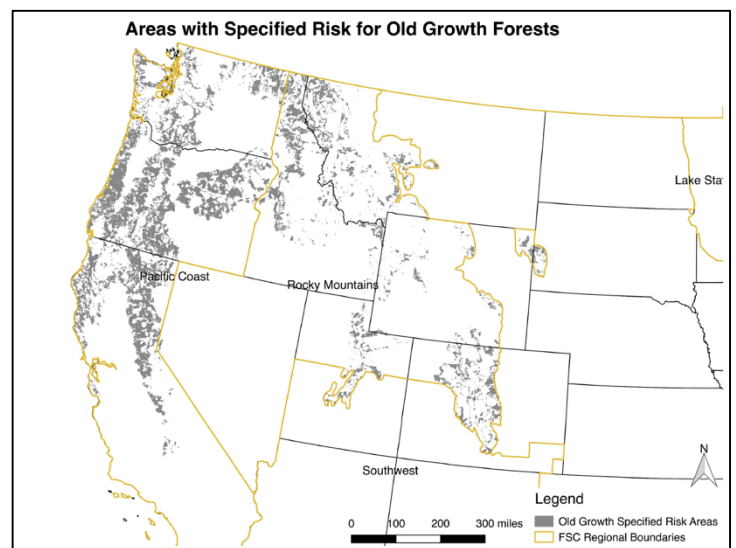
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WHY ARE OLD GROWTH FORESTS CONSIDERED AN HCV? Their rarity – old growth forest ecosystems have been greatly reduced by human activities compared to the historic extent. Old growth includes both Type 1 (stands that have never been logged and that display late successional/old growth characteristics) and Type 2 (stands that have been logged, but that retain significant late-successional/old growth structure and functions). Primary forests (a forest ecosystem with the principal characteristic and key elements of native ecosystems that is relatively undisturbed by human activity) are generally synonymous with old growth forests. This forest type was identified as an HCV using guidance associated with the FSC US Forest Management Standard.

SUMMARY OF OLD GROWTH FORESTS Old growth forests are highly important to human populations for ecological, social and economic reasons. They are important in maintaining biodiversity, values for society (recreational and spiritual), and ecological services such as carbon sequestration and soil quality. In addition, they also harbor highly valued timber resources.

There is no single, widely accepted definition, but this assessment uses the definitions of Type 1 and Type 2 Old Growth in the FSC US Forest Management Standard. As with most old growth definitions, the Type 1 and Type 2 definitions focus on old trees and structural complexity. These habitat characteristics are important to a number of rare species that depend upon western U.S. old growth forests, including Northern Spotted Owls, Marbled Murrelet, and American marten, along with much lesser known species of land snails, mollusks, and amphibians.

Old growth forest is generally considered to be rare, but how rare depends on the part of the country being considered: in the Pacific Northwest (including Northern California), the estimate is that old growth constitutes approximately 6% of the existing forest, in the northeast, it's less than 1%, while in the southeast it's closer to 0.5% and even less in the southwest and Great Lakes. A comprehensive spatial inventory of old growth forests across the entire US does not exist, although a few localized inventories have been completed.



¹Common Guidance for the Identification of High Conservation Values (<https://ic.fsc.org/en/what-is-fsc-certification/consultations/archive/hcv-common-guidance>)

IDENTIFIED THREATS TO OLD GROWTH FORESTS Threats include a lack of managing younger forests with a goal of creating old growth forests, **timber harvest**, invasive species, pests, pathogens, forest fragmentation, fire suppression, catastrophic wildfires and climate change. In frequent-fire forests of the western US, logging is no longer the primary threat to old growth, threats also include land management policies that suppress fire and do not mimic its effects through active management. While the Northwest Forest Plan has significantly reduced the loss of Old Growth to timber harvest on federal lands, losses continue at lower rates. Losses on non-federal lands, particularly private lands, have continued at much higher rates than on federal lands. Supporting evidence for these conclusions and generally that Old Growth is still being lost to timber harvest was drawn from status assessments for late successional forest dependent species.

MAPPING METHODOLOGY FSC US used a step-wise filtering process, developed in consultation with experts, to identify areas in the Pacific Coast and Rocky Mountain regions with a higher likelihood of containing old growth forests. The process began with an above ground forest biomass data layer developed by the US Forest Service² to which FSC US applied ecoregion-specific thresholders (based upon a literature search). Next, FSC US removed areas within perimeters of fires recorded since 2000 (US Geological Survey³), and then removed areas with recent forest gain or loss (Global Forest Watch⁴) as indicators of recent forest management activity. The final step removed areas with GAP Status 1 or 2 protections (PAD-US dataset⁵), Inventoried Roadless Areas (US Forest Service⁶) and/or conservation easements with an environmental purpose (Natural Resources Conservation Service⁷).

MITIGATION ACTIONS AND WHAT WOULD WE LIKE TO ACHIEVE Companies that mix FSC-certified forest materials and non-certified materials to make products with an 'FSC Mix' claim/logo are required to address certain risks before using the non-certified forest materials. One of these is the risk that their forest materials come from areas where HCVs are threatened by forest management activities. FSC has completed a US National Risk Assessment to identify where this risk is greater than 'low' and old growth forests are one of these places - specifically, the lands in the Pacific Coast and Rocky Mountain regions that were identified using the mapping methodology described above. Companies that wish to use non-certified materials from the identified places are required to either avoid sourcing from specific sites where the threats are occurring, or to implement mitigation actions that reduce the risk of sourcing from those sites. For this rare ecosystem, any mitigation actions will need to address the threats identified above in **bold**.

The FSC US National Risk Assessment also introduces the concept of holding regional meetings to bring stakeholders together to collaboratively identify effective and practical mitigation actions. We are asking participants to consider landscape-scale mitigation actions, that will help to reduce risks across the landscape in which the companies source forest materials. An effective way to do this may be to build on existing programs and projects that are already tackling these issues. The companies implementing mitigation actions are required to select one or more from the options identified at the regional meetings.

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SOME SOURCES THAT CAN HELP GENERATE MITIGATION OPTION IDEAS

- [National Commission on Science for Sustainable Forestry](#)
- [Ecology and Society](#)

² <https://data.fs.usda.gov/geodata/rastergateway/biomass/index.php>

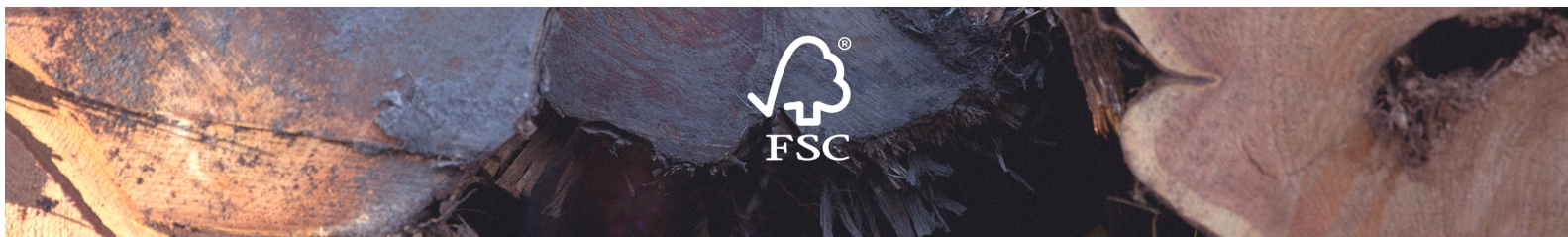
³ https://rmgsc.cr.usgs.gov/outgoing/GeoMAC/historic_fire_data/

⁴ <http://data.globalforestwatch.org/datasets/tree-cover-loss-hansenumdgoogleusgsnasa>

⁵ <https://gapanalysis.usgs.gov/padus/data/download/>

⁶ <https://www.fs.usda.gov/detail/roadless/2001roadlessrule/maps/?cid=stelprdb5382437>

⁷ <https://www.conservationaleasement.us/downloads/?created=true>



FSC US CONTROLLED WOOD REGIONAL MEETINGS CONVERSION



FSC REGIONS Southeast and Pacific Coast

CONVERSION IN FSC FSC considers materials that come from places where forests are converted to non-forest use or plantation to be unacceptable, no matter the reason for the conversion. FSC is working to ensure that there is a low risk of forest materials from forest conversions being used in FSC-certified products.

SUMMARY OF CONVERSION ISSUES IN THE US Overall in the US, the rates of forest loss are very low – with forest losses being balanced by forest gains. However, numerous sources indicate that the forest losses are most often driven by urban development. Rates of urban development are highest and most recent in the Pacific Coast and Southeast regions of the US. Therefore, the greatest risk of materials entering the supply chain from conversions will most likely be in these areas; however, the risk is not consistent across these regions.

IDENTIFIED DRIVERS OF CONVERSION In the United States, there is no legal framework that consistently or comprehensively governs conversion of forestland to non-forestland or from forestland to plantation. Regional analyses found that the rates of forest conversion are so small as to be statistically insignificant, and demonstrate that at this scale, forest cover is relatively stable. However, there is evidence that forest conversion continues to be an issue at a sub-regional scale.

Historically, the largest forest losses in the US were due to urban and agricultural expansion. The rate of forest loss in the US has slowed and some areas are beginning to gain forestland. The U.S. Department of Agriculture has conducted a Natural Resources Inventory since 1982 that shows trends in land use on a state-by-state basis. Forestland cover changes depend on the state, and generally track other forestland change estimates. In every state, agricultural land diminished in that time frame, from a national total of 420 million acres in 1982 to 357 million acres by 2007. Concurrently, developed (urban) land increased by 40 million acres to 111 million acres. These data indicate that conversion to agricultural lands is likely no longer a driver for conversion of forested lands. Additionally, while tree plantations are expected to continue to increase in extent in the US, this will most likely occur through afforestation (from agricultural lands), not conversion of existing forests [18]. Urban expansion, however, continues to be a concern.

Population growth and associated urban development are a primary driver of conversion from forest to non-forest land uses. Rates of urban development vary throughout the United States with higher rates in the Pacific Coast region and portions of the Southeast Region. These two regions are also the regions identified as experiencing more recent forestland loss.

WHAT ARE MITIGATION ACTIONS AND WHAT WOULD WE LIKE TO

ACHIEVE? Companies that mix FSC-certified forest materials and non-certified materials to make products with an 'FSC Mix' claim/logo are required to address certain risks before using the non-certified forest materials. One of these is the risk that their forest materials come from areas where forests are being converted to non-forest use or plantation. FSC completed a US National Risk Assessment that identifies where this risk is greater than 'low.' Population growth by county between 2015 and 2016 and residential building permits issued by Core Based Statistical Areas (CBSAs) over the same time period were used together as a proxy to identify counties where there is likely a greater risk of materials from conversions entering the FSC supply chain. CBSAs consist of the county or counties associated with a core urbanized or urban area with a population of at least 10,000. These data were analyzed using a population growth threshold of 2% and a building permits issued threshold of 1500. These thresholds were selected based on analyses done by the US Census Bureau and the US Department of Housing and Urban Development. Finally, non-forested portions of

counties were removed from consideration. The Risk Assessment identifies the forested portions of 53 counties across the FSC US Southeast and Pacific Coast Regions as areas where there is a risk greater than 'low' receiving forest materials from forest conversions. Companies that wish to use non-certified materials from the identified areas are required to either avoid sourcing from specific sites where forest conversion is occurring, or to implement mitigation actions that reduce the risk of sourcing from these sites.

The FSC US National Risk Assessment also introduces the concept of holding regional meetings to bring stakeholders together to collaboratively identify effective and practical mitigation actions. We are asking participants to consider landscape-scale mitigation actions, that will help to reduce risks across the landscape in which the companies source forest materials. An effective way to do this may be to build on existing programs and projects that are already tackling these issues. The companies implementing mitigation actions are required to select and implement one or more from the options identified at the regional meetings.

For Conversion, the identified mitigation options must align with a framework established by the US Forest Service's Open Space Conservation Strategy, and help to achieve one of the following outcomes:

- A. Convene partners to identify and protect priority forest areas
- B. Promote national policies and markets to help private landowners conserve forests
- C. Provide resources and tools to help communities expand and connect forests
- D. Participate in community growth planning to reduce ecological impacts and wildfire risks

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INFORMATION SOURCES THAT MAY HELP GENERATE MITIGATION IDEAS

- [US Forest Service – Southern Research Station](#)
- [US Forest Service – Pacific Northwest Research Station](#)
- [US Forest Service – Forests on the Edge](#)
- [U.S. Forest Service – Open Space Conservation Strategy](#)
- [Southern Group of State Foresters](#)

