Supply Area and Supply Chain:
Zellstoff Celgar LP (ZCL) is a pulp mill in South Eastern British Columbia which retains no forest tenure and secures 100% of its fibre on the open market in both roundwood and as co-products in chip form. The Supply Area encompasses South East British Columbia, North East Washington, the Idaho pan handle, and Western Montana. Roundwood (logs) are sourced from within British Columbia only, whereas chips are purchased from British Columbia, Washington, Idaho and Montana. The attached supplier map outlines the state and provincial jurisdictions from which our suppliers have sourced fibre which was used to produce the chips we have purchased and the logs we have purchased.

Zellstoff Celgar LP procures approximately 2.3 million cubic meters of fibre annually of which 25% is in the form of logs and 75% is in the form of chips. Logs are primarily sourced directly from suppliers who are also forest owners/managers, co-products (chips) have a much more complex supply chain which includes mixing of fibre sourced from suppliers and sub-suppliers at many levels in the supply chain.

The Supply Area overlaps with the following WWF ecoregions:
- NA0505 – Blue Mountains Forest – WWF Status Critical / Endangered (very small overlap at the very southern edge of our supply area)
- NA0507 - Cascade Mountains leeward forests - WWF Status Relativley Stable / Intact
- NA0518 - Northern Central Rockies forests - WWF Status Vulnerable
- NA0522 - Okanagan Dry forests - WWF Status Critical / Endangered
- NA0528 - South Central Rockies Forest - WWF Status Vulnerable (very small overlap at the very southern edge of our supply area)
- NA0808 - Montana Valley and Foothill grasslands – WWF Status Critical / Endangered (Biome is Temperate Grassland, Savannas, and Shrublands)
- NA0813 – Palouse grasslands - WWF Status Critical / Endangered (Biome is Temperate Grassland, Savannas, and Shrublands)
- NA1309 – Snake-Columbia shrub steppe - WWF Status Critical / Endangered (Biome is Deserts and Xeric Shrublands)

The World Wildlife Fund defines an ecoregion as a “large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions”.

**District of Origin Forest Management Overview:**

**British Columbia:**

**British Columbia Crown Land:** Within British Columbia, the *Forest and Range Practices Act* governs the activities of forest and range licensees operating on Crown land. The statute sets the requirements for planning, road building, logging, reforestation, and grazing. FRPA maintains high standards for protecting forest values, ensuring good forest management, and promoting sustainable environmental values. FRPA encourages innovation by skilled resource professionals and holds industry responsible for outcomes.

All forest and range license holders must comply with laws to protect forest values. Before conducting any activities like logging or road building, a licensee must prepare a Forest Stewardship Plan or a Woodlot License Plan. This plan sets out how the licensee will address government objectives for the protection of wildlife, fish, biodiversity, soils, water, forage, recreation, resource features, visual quality, and cultural heritage resources. By law, these plans must be made available for public review and comment. Generally, a licensee must advertise that the plan is available and allow at least 60 days for public input. This process allows the public, First Nations, and those whose activities might be affected by timber harvesting activities to provide input on these plans. Government cannot approve any harvest plan unless the licensee proves that it has provided the public and stakeholders with the opportunity to review and comment on the plan in a manner required by law. The BC government is responsible for developing strategic direction for the management of Crown land and natural resources as well as maintenance of existing strategic land and resource planning legacy. Strategic Land and Resource Plans (SLRP’s) provide increased certainty and form the foundation for balanced solutions that meet economic, environmental, and social requirements throughout the province. Strategic land and resource planning is the process and associated outcomes that provide direction for the management and allocation of public lands and resources over a defined area. SLRP’s also known as Higher Level Plans are legally established local landscape level plans that have had input from local stakeholders and indigenous groups in the development of the requirements within the plans. The plans are given legal status through the approval of orders in government under the Land Act, Forest Practices Code Act or the Forest and Range Practices Act. Additionally Species at Risk are also protected by orders in government established under the Government Action Regulation. (GAR)

Biodiversity, species and ecosystems at risk, old growth management, soil conservation, protection of water resources, maintenance of scenic areas, are legislated under FRPA and Local Strategic Land and Resource Plans and/or Higher Level Plans. Within ZCL’s supply area there are 3 Higher Level Plans:

- The East Kootenay Land Use Plan
- West Kootenay Boundary Land Use Plan
  - Kootenay Boundary higher Level Plan Order
- Revelstoke Higher Level Plan Order
- Okanagan Shuswap LRMP

BC also maintains a forest Compliance and Enforcement Program (C&E). Its main purpose is to ensure forestry laws are being followed in BC’s public forests and to take action where there is non-compliance. The province also has an established network of protected areas in the form of Federal, Provincial and Municipal Parks as well as Wildlife Management Areas (WMA), and Conservation Areas. There are also several large NGO fee simple lands within the province and within ZCL’s Supply Area held by organizations like the Nature Conservancy.

BC also has a public watchdog organization called the **Forest Practices Board**. In fulfilling its mission, the Board encourages:

- sound forest practices that warrant public confidence
- fair and equitable application of the Forest and Range Practices Act
- continuing improvements in forest practices

**USA - Washington:**

Washington has some of the strictest Forest Practices Rules in the nation. Forest practices are practices related to growing, harvesting, or processing timber, including but not limited to, road construction and maintenance, thinning, salvage, harvesting, reforestation, brush control and using fertilizers or pesticides. These activities
have been regulated since 1974 when the state first adopted the Forest Practices Act. The rules protect soils, water, fish, wildlife, and capital improvements (roads and power lines) from impacts related to forest practices on private, county and state forest land. The rules are enforced by the Washington Department of Natural Resources. Most forest practices require an approved permit from the WA DNR. Since 1974, Forest Practice Rules have been amended and strengthened numerous times. In 1999, the Washington Legislature adopted the Forest & Fish Law as a result of federal listings of endangered salmon and impaired water quality on non-federal forested streams.

The Forests & Fish Law is an historic, science-based set of forest practices regulations that protect 60,000 miles of streams running through 9.3 million acres of state and private forestland. In 2006, the Forests & Fish Law was endorsed by the federal government, through a statewide habitat conservation plan. As one of the largest and most comprehensive pieces of environmental legislation in the U.S., the law is designed to fully comply with both the federal Endangered Species Act (ESA) and the Clean Water Act (CWA) to protect Washington's native fish and aquatic species.

Approximately 52% of Washington State is classified as forest land (DNR Timber Harvest 2011). The percentage breakdown of forest land is as follows:

- National Forest 43%,
- Forest industry private 21%
- Non-industrial private 15%
- State and other public lands 14%
- Tribal lands 8%

Timber in Washington is accessed through timber sales offered by the government through the Department of Natural Resources (DNR). This agency is responsible for state land forest management. There is some harvesting on Federal forest land. Private timber consumed in Washington is purchased from individual land owners. The DNR, Forest Practices Division implements the rules approved by the Washington State Forest Practices Board (FPB) and provides staff to regulate forestry and related operations on all non-federal forestlands in Washington State.

The DNR has implemented Forest Practices Rules (http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesRules/Pages/fp_rules.aspx). The Forest Practices Rules establish standards for forest practices such as timber harvest, pre-commercial thinning, road construction, fertilization, and forest chemical application (Title 222 WAC). They give direction on how to implement the Forest Practices Act (chapter 76.09 RCW) and Stewardship of Non-industrial Forests and Woodlands (chapter 76.13 RCW). The rules are designed to protect public resources such as water quality and fish habitat while maintaining a viable timber industry. They are under constant review through the adaptive management program.

DNR field staff, forest landowners, timber owners, and operators are responsible for ensuring that ongoing forest practices are in compliance with the Forests Practices Act and Forest Practices Rules. In order to ensure these objectives are realized, DNR is required to develop and implement:

- Effectiveness monitoring to ensure the rules are accomplishing these goals,
- Projects designed to guide adaptive management, and

Compliance monitoring

The objectives of the DNR Compliance Monitoring Program are set out in WAC 222-08-160 (4), which states in part: The department shall conduct compliance monitoring that addresses the following key question: "Are forest practices being conducted in compliance with the rules?" The department shall provide statistically sound, biennial audits and monitoring reports to the board for consideration, program and support of rule, and guidance analysis. Compliance monitoring shall determine whether forest practice rules are being implemented on the ground.” The DNR Summary Report of Compliance Reviews itemizes findings of DNR compliance inspections http://www.dnr.wa.gov/Publications/fp_cm_interim_report_2013.pdf.

The DNR has examined their approach to sustainable management of forested state trust lands in Western Washington, and recently recalculated the sustainable harvest level for those forests. This evaluation process, which occurs roughly every ten years, began in 2001. The process incorporated new information and changes in federal and state laws since the last calculation and allowed the Board of Natural Resources to identify and evaluate potential policy changes. Alternatives for managing the forests were computer modeled so the BNR could examine the potential results of those various changes in forest health, habitat, and harvest conditions over time. During the sustainable harvest process, they undertook comprehensive public opinion research to understand the public's feelings and values
about stewardship on state trust lands. In an effort to measure the impact of timber harvests on state lands on communities across the state, the BNR also received a report on Socio-Economic Resiliency which provided an indication of how reduction or increase in timber harvest will affect counties across the state. The DNR Cultural Resource Protection and Management Plan (CRPMP) establishes the tribal, forest landowner, and state agency response to the cultural resource planning, protection, and management commitments identified in both the 1987 Washington State Timber, Fish & Wildlife Agreement, and the 1999 Forests & Fish Report. The four main purposes of the Cultural Resource Protection & Management Plan are as follows:

**Provide for the protection and management of cultural resources** that are significant to the history and cultures of the people of Washington State, and which are located on state, private, and non-federal forest lands.

**Establish and maintain productive communications** among agencies, forest landowners, land managers, and affected tribes.

**Ensure cultural resource protection is accomplished through the development of cooperative processes** including the development of voluntary measures for credibly protecting and managing cultural resources within the context of commercial forestry, and recommended adjustments to Forest Practices Rules and Board Manuals as necessary to implement the CRPMP and its recommendations.

**Improve access to tribal cultural resources** so that the affected tribes have a better opportunity to maintain and perpetuate their traditional values and practices.

The DNR works toward collaborative relationships and good communication with Tribes in all its programs, at all levels across the agency. The Department recognizes the Tribes separate rights and authorities and maintains government to government relations with the 29 recognized Indian Tribes residing in the state of Washington as well as other interested Indian Tribes outside of the state of Washington. The Centennial Accord was established in 1989 through the governor and the signatory tribes. In addition, the Commissioner of Public Lands also recognizes the department’s relationship with Washington’s sovereign tribes with an official Commissioner’s Order on Tribal Relations. Doug Sutherland’s Commissioner’s Order serves as the department’s overall tribal relations policy and commits the department to conduct relations with the tribes as one government to another. Building on the foundation that the Centennial Accord provided, the Governor and tribes met in 1999 to again express their desire to build stronger working relationships by adopting the Millennium Agreement. These various documents provide the context for DNR’s tribal relations program. DNR’s Tribal Relations Manager coordinates these efforts for the agency.

**USA - Idaho:**

Approximately 65% of Idaho State is classified as forest land (Idaho Forest Products Commission 2014). The percentage breakdown of forested land is as follows:

- Federal Lands 75%
- State and other public lands 10%
- Non-industrial private 10%
- Forest industry private 5%

Because government owns so much of the Idaho forest, the future of Idaho’s forest products industry is greatly dependent on timber from state and federal lands and influenced by forest management policies. For example, between 1980 and 1995, there was a 60% decline in the amount of timber harvested on national forest land. The Idaho Forest Practices Act and associated legislation (http://www.idahoforests.org/bmps.htm) provide an effective legislative framework for granting licenses and harvest permits and regulating forest practices. A Certificate of Compliance – Fire Hazard Management Agreement and Notification of Forest Practice must be obtained prior to any harvesting and wood purchases. Legal ownership is validated and all wood purchase volumes are reported to the Idaho State Tax Commission.

Traditional First Nations rights and interests are recognized in the USA by way of treaties, legislation, and other agreements. In the US, Native Americans with a land base are recognized as Sovereign Nations and accorded rights to manage their land and affairs. In addition, Native Americans have an equitable process to resolve conflicts over land management. Through the US court system, many Native American tribes have challenged, won decisions, and resolved issues concerning land management and use rights. There are many examples within the US where tribes have successfully been able to exercise treaty rights through formal and informal conflict resolutions systems.
USA - Montana:
Approximately 23% of Montana State is classified as forest land (State Trust Land Management and Forest Regulation in Montana 2007). The percentage breakdown of forested land is as follows:
- Federal Lands 60%
- Non-industrial private 24%
- State and other public lands 8%
- Forest industry private 8%

Forestry practices in Montana are regulated through a variety of laws and rules including:

Montana’s Forest Practices Regulatory Framework is comprised of regulated and non-regulated approaches. Federal statutes which govern state forests (Federal Clean Water Act) provide a regulated pressure for improved forest management practices by the threat of enforcement and continued pressure for the state to develop a Forest Practices Act. Montana State currently chooses to manage forestry through a non-regulatory approach by means of the Montana Best Management Practices Law, Landowner and Logger Education, and state monitoring. The Forestry Best Management Practices (BMP’s) provide minimum standards for protecting forest values by emphasizing practices that improve upon road construction, timber harvesting, stream crossings, hazardous substances, and streamside management zones.

Education and Monitoring programs include the following:
- Loggers – Accredited logger professional program and stewardship education
- Landowners – Forest Stewardship Program and Individual on-site advice
- Monitoring – Field audits every two years; reports to state legislature; and additional regulation when justified by audits. The 1991 Streamside Management Zone Law is a more recent example of justified regulation to support voluntary programs.

In 2012, three interdisciplinary teams were formed to conduct monitoring reviews, covering the northwestern region, the western region, and the central/eastern region of the state. Each team was comprised of a fisheries biologist, a forester, a hydrologist, a representative of a conservation group, a road engineer, a soil scientist, and a non-industrial private forest (NIPF) landowner or logging professional. Results showed that across all ownerships, BMPs were properly applied 98% of the time. This percentage maintains the 2012 overall rating showing that the BMP’s are maintaining a very high level of compliance amongst all ownership groups. Traditional First Nations rights and interests are recognized in the USA by way of treaties, legislation, and other agreements. In the US, Native Americans with a land base are recognized as Sovereign Nations and accorded rights to manage their land and affairs. In addition, Native Americans have an equitable process to resolve conflicts over land management. Through the US court system, many Native American tribes have challenged, won decisions, and resolved issues concerning land management and use rights. There are many examples within the US where tribes have successfully been able to exercise treaty rights through formal and informal conflict resolutions systems.
Summary of Risk Assessment:
The overall results of the analysis indicates low risk of sourcing wood from uncertified sources when assessed at the ecoregion level against the requirements of standard FSC-STD-40-005 V3-1. The risk ratings indicated below are consistent with the FSC Centralized National Risk Assessment for Canada for Categories 1, 2, and 5 and for the US Categories 1 and 5. Additionally for Category 3 areas of specified risk have been identified in the detailed risk assessment however Indicator 3.2 eliminated (or greatly mitigated) the treat posed to the supply area by the non-conformity with 3.1.

<table>
<thead>
<tr>
<th>ZCL District of Origin</th>
<th>Category 1: Illegally Harvested Wood</th>
<th>Category 2: Violation of Traditional or Civil Rights</th>
<th>Category 3: High conservation Value Forests</th>
<th>Category 4: Forest Conversion</th>
<th>Category 5: Genetically Modified Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Low Risk</td>
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<tr>
<td>Washington</td>
<td>Low Risk</td>
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<tr>
<td>Idaho</td>
<td>Low Risk</td>
<td>Low Risk</td>
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<tr>
<td>Montana</td>
<td>Low Risk</td>
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<td>Low Risk</td>
</tr>
</tbody>
</table>
## Controlled Wood Risk Assessment:

### Category 1: Illegally Harvested Wood - **LOW RISK**

- The supply area may be considered low risk in relation to illegal harvesting when all of the following indicators related to forest governance are met.

<table>
<thead>
<tr>
<th>Requirements of the Standard</th>
<th>Sources of information reviewed</th>
<th>Description of Risk Assessment and Rationale</th>
</tr>
</thead>
</table>
| 1.1 Evidence of enforcement of logging related laws in the supply area.  
  a) The organization shall use the ‘Minimum list of applicable laws, regulations and nationally-ratified international treaties, conventions and agreements’ (Table A, below for the identification of logging related laws in the supply area under evaluation.  
  b) The organization may use existing national lists from approved FSC National Forest Stewardship Standards and other reputable sources in order to compile the list.  
  Where the FSC Global Forest Registry contains an FSC approved list of applicable laws for a country, it is mandatory to use this list.  
  Refer to:  
  Centralized National Risk Assessments for Canada (FSC-CNRA-CAN V1-0)  
  Centralized National Risk Assessments for the United States of America  
  [www.iea-internationa.info](http://www.iea-internationa.info)  
  LOW RISK  
  The FSC Global Forest Risk Registry ranks both Canada and the U.S.A as low risk for indicator 1.1. There is legislation in place regulating forest activities and enforcement is effective. There is no evidence of widespread illegal logging in either country. Each province (CAN) and State (US) has its own regional regulations governing forestry and forest management. Evidence of enforcement is found in all jurisdictions.  
  Both Canada and the US have strong legal and enforcement systems in place to regulate forest harvesting. **LOW RISK**  
| 1.2 There is evidence in the supply area demonstrating the legality of harvests and wood purchases, including, e.g. robust and effective systems for granting licenses and harvest permits.  
| 1.3 There is little or no evidence or reporting of illegal harvesting in the supply area.  
| 1.4 There is a low perception of corruption related to the granting or issuing of harvesting permits and other areas of law enforcement related to harvesting and wood trade.  
|  | LOW RISK  
|  | All harvesting in BC requires a timber mark for transport of timber (private and crown land). All crown and managed private land also requires a license for harvest.  
|  | Harvesting without legal rights is prohibited in the USA by both national and state laws. **LOW RISK**  
|  | There are no reports of illegal logging or harvesting in the country. There is no evidence that illegal logging is widespread in the USA. **LOW RISK**  
|  | The 2016 Corruption Perception Index for Canada is 82 and for the United States is 74. Both are well above 50 which is the low risk indicator according to FSC directive (FSC-DIR-40-005). **LOW RISK**
The supply area may be considered low risk in relation to the violation of traditional and human rights when all the following indicators are met:

### Requirements of the Standard

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sources of Information reviewed</th>
<th>Description of Risk Assessment and Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 There is no UN Security Council ban on timber exports from the country concerned.</td>
<td>Refer to: Centralized National Risk Assessments for Canada (FSC-CNRA-CAN V1-0)</td>
<td>Canada has no UN Security Council export ban on timber (Global Witness). The United States has no UN Security Council ban on timber (Global Witness). There is no evidence of UN bans on forest products from Canada or the US. <strong>LOW RISK</strong></td>
</tr>
<tr>
<td>2.2 The country or supply area is not designated a source of conflict timber (e.g. USAID Type 1 conflict timber).</td>
<td>Centralized National Risk Assessments for the United States of America</td>
<td>Canada has not been identified as a source of conflict timber according to the latest available research (USAID -GFR). The United States has not been identified as a source of conflict timber according to the latest available research (USAID -GFR). Canada and the USA are not considered as sources of conflict timber. <strong>LOW RISK</strong></td>
</tr>
<tr>
<td>2.3 There is no evidence of child labour or violation of ILO Fundamental Principles and Rights at Work taking place in forest areas in the assessed supply area.</td>
<td>Global Witness <a href="http://www.globalwitness.org">www.globalwitness.org</a> <a href="http://map.usaid.gov/">http://map.usaid.gov/</a> Global Forest Registry (GFR) <a href="http://www.globalforestregistry.org/map">http://www.globalforestregistry.org/map</a></td>
<td>Both Canada and the USA have labour codes at both the federal and provincial level that respect the following ILO provisions: - freedom of association and the effective recognition of the right to collective bargaining; - the elimination of all forms of forces or compulsory labour; - the effective abolition of child labor; and - the elimination of discrimination in respect of employment and occupation. <strong>LOW RISK</strong></td>
</tr>
<tr>
<td>2.4 There are recognized and equitable processes in place to resolve conflicts of substantial magnitude pertaining to traditional rights including use rights, cultural interests or traditional cultural identity in the assessed supply area.</td>
<td>USAID - Natural Resources Management and Development Portal <a href="https://rmportal.net/library/content/conflict">https://rmportal.net/library/content/conflict</a> International Labour Organization (ILO) - <a href="http://www.ilo.org/ipec/lang--en/index.htm">http://www.ilo.org/ipec/lang--en/index.htm</a> Canadian Labour Code <a href="http://laws-lois.justice.gc.ca/eng/acts/L-2/index.html">http://laws-lois.justice.gc.ca/eng/acts/L-2/index.html</a> Employment and Social Development in Canada <a href="http://wwwhrsd.gov.ca/eng/contact/index.shtml">http://wwwhrsd.gov.ca/eng/contact/index.shtml</a> USA: <a href="https://www.col.gov/whd/childlabor.htm">https://www.col.gov/whd/childlabor.htm</a> U.S. Employment Law Guide <a href="http://www.dol.gov/compliance/guide">http://www.dol.gov/compliance/guide</a></td>
<td>In Canada, disputes related to land use rights are resolved through treaty processes with federal and provincial governments or through the courts. Additionally with respect to Forestry in British Columbia there is a duty to consult with Indigenous groups, this duty to consult is conducted by the provincial government prior to approval of any harvesting. In addition where an infringement of rights is identified there is also a duty to accommodate the indigenous group(s). There are several different forms of accommodation in BC related to forestry and they vary from site specific retention of site features to revenue sharing agreements and provision of First Nations Forestry Tenures. Additional provincial legalisation and regulations are in place to protect cultural interests. In the US there are 556 federally recognized tribes many of which hold significant timberlands. With respect to traditional rights including use rights, cultural interests or traditional cultural identity the legal system in the US is considered fair at resolving conflicts. Mechanisms available include legal avenues, federal and state initiatives for collaboration, lobbying, public comments within the National Environmental Policy Act (NEPA) and coalitions. Violations of traditional rights of substantial magnitude are not a significant problem in the USA. <strong>LOW RISK</strong></td>
</tr>
</tbody>
</table>
| 2.5 There is no evidence of violation of the ILO Convention 169 on Indigenous and Tribal Peoples taking place in the forest areas in the supply area concerned. The standard does not refer to the ratification of ILO 169 and a risk assessment shall involve an assessment of evidence of violation of ILO requirements, irrespective of whether or not they have been ratified by the country in which the risk assessment is made. | US Labour Relations [http://www.dol.gov/dol/topic/labor-relations/](http://www.dol.gov/dol/topic/labor-relations/) [http://www.ilo.org/ipecinfo/product/viewProduct.do?productId=2299](http://www.ilo.org/ipecinfo/product/viewProduct.do?productId=2299)
BC Ministry of Indigenous Relations and Reconciliation [http://www2.gov.bc.ca/gov/content/governments/organizations/ministries/indigenous-relations-reconciliation](http://www2.gov.bc.ca/gov/content/governments/organizations/ministries/indigenous-relations-reconciliation)
FSC-US National Initiatives Guidance on Controlling Wood Sources [www.fscus.org](http://www.fscus.org) | Although Canada has not ratified the ILO Convention 169, Canada officially endorsed the UN Convention on Rights of Indigenous Peoples. No evidence of violation of the ILO convention 169 on Indigenous and Tribal Peoples is taking place in Southeastern BC. Canadian legislation, treaties and other agreements with respect to First nations demonstrate conformance with ILO and the Canadian Human Rights Commission prohibits discriminatory practices against First Nations. Section 35 of the Constitution recognizes and affirms aboriginal and treaty rights in Canada additionally the Supreme Court of Canada has also specified the government has a fiduciary duty in its dealings with indigenous peoples of Canada. The Courts system has and is being used as the tool to define what those rights include. Equitable processes and mechanisms are in place in the US that allow indigenous groups, as well as any private citizen avenues to deal with disagreement and conflict related to natural resource and forestry decisions. Violation of ILO Convention 169 and the rights of Indigenous and Tribal people is generally not known to be a problem in the USA.

**LOW RISK** |
Category 3: Wood harvested from forest in which high conservation values are threatened by management activities - LOW RISK

- The supply area may be considered low risk in relation to threat to HCV's if:
  a) Indicator 3.1 is met; or
  b)Indicator 3.2 eliminates (or greatly mitigates) the threat posed to the supply area by non-conformity with 3.1

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- Specifies the treat in the context of category 3 means having an uncertain chance of continued survival or presence of HCV's at the ecoregion level and the identification of threats to HCV's caused by forest management activities.
- Additionally the objective of the CW standard with respect to HCV’s is to avoid material from forests where HCV’s are being threatened (unspecified risk) at the ecoregional level.

### Indicator 3.1

**3.1 Forest management activities at the relevant level** (ecoregion, sub-ecoregion, local) do not threaten eco-regionally significant HCVs.

The organization shall first assess whether any HCVs are threatened at the ecoregional level. If any HCVs are threatened at the ecoregional level, the organization shall assess how forest management activities relate to these HCVs at the supply area level.

For the risk assessment of this category the identification of ecoregionally significant HCVs is required, which in practical terms implies that locally relevant values are not in the focus of this step of the risk assessment.

Threatened ecoregions can be identified through the supporting information that references, but is not limited to e.g. Biodiversity Hotspots, Global 200 Ecoregion, Frontier Forest, Intact Forest Landscapes.

Regarding Intact Forest Landscapes, firefighting or fire prevention for the protection of public safety is not considered to be an economic activity of minimal disturbance.

Fire control in the context of forest management activities is not considered to be an economic activity of minimal disturbance.

Low risk for this indicator may be demonstrated as follows:

a) Material does not originate from any of the mapped areas of HCVs (as listed in 3.1), or

b) There are no ecoregionally significant HCVs in the supply area according to independent verifiable information at the supply area/supply unit level (NGO reports, environmental impact assessments, etc.).

**Summary conclusion:** the risk assessment identifies eco-regionally significant high conservation values (HCV) within the Supply Area for HCV’s 1, 2, 3 and 6 which are mitigated through Indicator 3.2 as specified under FSC-DIR-005-014.

Of the 8 ecoregions overlapping Celgar’s Supply area, three are grassland or shrubland ecoregions and five are considered forested. All of the five contain High Conservation Value Forests (HCVF’s) which are at potential risk of impact from forest management activities. These five ecoregions have been assessed for the presence of HCV in 3.1 below and for the risk forestry activities pose to the HCV in section 3.2.

- (WA) NA0505 – Blue Mountains Forest – WWF Status Critical / Endangered (very small overlap at the very southern edge of our supply area)
- (BC, WA) NA0507 - Cascade Mountains leeward forests - WWF Status Relatively Stable / Intact
- (BC, WA, ID, MO) NA0518 - Northern Central Rockies forests - WWF Status Vulnerable
- (BC, WA) NA0522 - Okanagan Dry forests - WWF Status Critical / Endangered
- (MO) NA0528 - South Central Rockies Forest - WWF Status Vulnerable (very small overlap at the very southern edge of our supply area)
**Eco-regional Assessment of HCV’s**

Assessment of threats of forest management activities on HCV’s at an eco-regional level can be identified through supporting information that references but is not limited to:

- Biodiversity Hotspots, Global 200 Ecoregions, Frontier Forest, Intact Forest Landscapes.
- Additional information may include NGO reports, environmental impact assessments, etc.
- Reference should also be made to the following sources: FSC documentation on HCV’s, ecoregion definition and information, regions identified by Conservation International as Biodiversity hotspots, or ecosystems and communities that are explicitly identified by CI as a key component of a Biodiversity Hotspot, Global 200 Ecoregions assessed as having a conservation status of endangered or critical. If a sub ecoregion has a conservation status other than critical or endangered the Global 200 ecoregion can be considered low risk.

Where the eco-regional assessment below indicates specified risk a more detailed supply level assessment of threats will be completed for each HCV to determine if the specified risk applies at the supply level. Where specified risk is identified at the supply level further assessment of level of protection to mitigate the risk will be completed in indicator 3.2 below.

**Sources of Information Reviewed: the following assessment is for HCV’s 1-3. HCV’s 4-6 have been assessed further on in this indicator.**

<table>
<thead>
<tr>
<th>Terrestrial Ecoregion</th>
<th>Key Biodiversity Area or IBA</th>
<th>Alliance for Zero Extinction</th>
<th>IUCN Red List Spp</th>
<th>Intact Forest</th>
<th>Frontier Forest</th>
<th>Global 200 WWF Status</th>
<th>CI Global Hotspot</th>
<th>IUCN Centers for Plant Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA0505 - Blue Mountains Forest</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Critical / Endangered</td>
<td>N</td>
</tr>
<tr>
<td>NA0507 - Cascade Mtns leeward forests</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Relatively Stable/Intact</td>
<td>N</td>
</tr>
<tr>
<td>NA0518 - North Central Rockies forest</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Vulnerable</td>
<td>N</td>
</tr>
<tr>
<td>NA0522 - Okanagan Dry forests</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y*</td>
<td>N</td>
<td>Critical / Endangered</td>
<td>N</td>
</tr>
<tr>
<td>NA0528 - South Central Rockies Forest</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Vulnerable</td>
<td>N</td>
</tr>
</tbody>
</table>

*Note: Red or Y indicates unspecified risk further review is required to refine where the risk applies and how forest management activities relate to these HCV’s at the supply area level. An * indicates that there is a minor overlap with the ecoregion. Fields above shaded in green indicate impacts are forestry related supply level assessment required or assessment of level of protection in indicator 3.2 below is required.*

---

**3.1 - HCV 1 In-depth Assessment of Risk of Forest Management Activities At the Supply Level**

**HCV1: Species Diversity**

Concentrations of biological diversity including endemic species and rare, threatened or endangered (RTE) species that are significant at global, regional or national levels.

- BC Ecosystems Explorer (BC List, Global Status, COSEWIC, and Federal SARA) [http://a100.gov.bc.ca/pub/eswp/](http://a100.gov.bc.ca/pub/eswp/)
- [https://ecos.fws.gov/ipac/location/2JGT7WBKMBEK7AMBI7UOC723PY/resources](https://ecos.fws.gov/ipac/location/2JGT7WBKMBEK7AMBI7UOC723PY/resources)

**SPECIFIED RISK**

**NA0522** Picoides albolarvatus (White-headed Woodpecker) in [British Columbia](https://www.cdnparks.bc.ca/en/conservation/what-we-do/biodiversity/)


**Areas of Specified Risk mitigated under section 3.2 below**
HCV 1 RATIONALE:

**World Database of Key Biodiversity Areas** identifies 4 areas within or adjacent to Celgars Supply area.

**British Columbia**
- Creston Valley Wildlife Management Area – formally protected and in an area outside of forest management **LOW RISK**
- Douglas Lake Plateau – Outside of Celgars sourcing basket monitor annually to ensure that our fibre supply area has not expanded to this area. **LOW RISK**

**Washington** - Lake Chelan and Grand Coulee area – non forested grassland area **LOW RISK**

**Montana** - Inside Glacier National Park – Protected **LOW RISK**

**The Alliance for Zero Extinction** identifies one site in British Columbia on the Southeast of Vancouver Island which lies outside of Celgars Supply Area and the ecoregions listed above. The Alliance for Zero Extinction has not identified any sites in Washington, Idaho or Montana.

**IUCN Red List** species were assessed for threats from forestry in the section above. No species identified under the IUCN list are threatened due to forest activities.

---

<table>
<thead>
<tr>
<th>HCV 1 IUCN Red List Species (Y) - assessment for forest management at supply level</th>
<th>Federal Species at Risk Assessed at the Supply Level for endangered species only, NA0507 - <em>Astragalus sinuatus</em> (Whited’s Milkvetch) - Chelan county Washington no threats from forestry; county is outside of Celgar’s Supply Area (Low Risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NA0507</strong></td>
<td><strong>- Astragalus sinuatus</strong> (Whited’s Milkvetch) - Chelan county Washington no threats from forestry; county is outside of Celgar’s Supply Area (Low Risk)</td>
</tr>
<tr>
<td><strong>NA028</strong></td>
<td><strong>- Pyrgulopsis bruneauensis</strong> (Bruneau Hot Springsnail) – Threats not due to forestry (Elmore County ID) (Low Risk)</td>
</tr>
<tr>
<td><strong>NA028</strong></td>
<td><strong>- Urocitellus brunneus</strong> (Northern Idaho Ground Squirrel) – species is primarily threatened by habitat loss due to forest encroachment into meadow habitats. (Adams and Washington County ID) <a href="https://ecos.fws.gov/docs/recovery_plan/030916b.pdf">https://ecos.fws.gov/docs/recovery_plan/030916b.pdf</a> (Low Risk)</td>
</tr>
<tr>
<td><strong>NA0505, NA0507, NA0518, NA0522, NA0528</strong></td>
<td><strong>- Bombus suckleyi</strong> (Suckley Cuckoo Bumble Bee) – threats not due to forestry (Low Risk)</td>
</tr>
<tr>
<td><strong>NA0505, NA0507, NA0518, NA0522, NA0528</strong></td>
<td><strong>- Bombus variabilis</strong> (Variable Cuckoo Bumblebee) – habitat is open fields and grasslands threats are not due to forestry (Low Risk)</td>
</tr>
</tbody>
</table>

**Federal Species at Risk Lists** (assessment of forest management activities at the supply area level on Federally listed Endangered species)

<table>
<thead>
<tr>
<th><strong>Canada / BC</strong></th>
<th><strong>US – Forest Dwelling or Forestry Threats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provincial S1/S2, BC Red Listed and SARA Species indicates the following species of concern that overlap districts in which Celgar Sources:</strong></td>
<td><strong>Mammals</strong></td>
</tr>
<tr>
<td><strong>- Hypsiglena chlorophaea (Desert Nightsnake) - Not threatened by forest management activities</strong> <strong>Low Risk</strong></td>
<td><strong>- Columbia Basin Pygmy Rabbit (Brachylagus idahoensis) – (not forest habitat dependant) Low Risk</strong></td>
</tr>
<tr>
<td><strong>- Icteria virens (Yellow-breasted Chat) – Not threatened by forest management activities.</strong> <strong>Low Risk</strong></td>
<td><strong>- Gray Wolf (Canis lupus) – threats not due to forestry activities Low Risk</strong></td>
</tr>
<tr>
<td><strong>- Picoides albolarvatus (White-headed Woodpecker) – Threatened by forestry activities - Specified Risk see section 3.2 regarding legal protections in place</strong></td>
<td><strong>- Northern Idaho Ground Squirrel (Urocitellus brunneus) –(not forest habitat dependant) Low Risk</strong></td>
</tr>
<tr>
<td><strong>- Pinus flexilis (limber pine) – non-commercial species , known locations area outside of Celgars supply area.</strong> <strong>Low Risk</strong></td>
<td>**- <strong>Woodland Caribou (Rangifer tarandus caribou) – Endangered – threats due to habitat loss from forestry activities. Critical Habitat identified. Specified Risk</strong></td>
</tr>
<tr>
<td><strong>- Rangifer tarandus pop.1 (Caribou - southern mountain population) - threatened by forestry - Specified Risk see section 3.2 regarding legal protections in place</strong></td>
<td><strong>Fishes (Primary threats not due to forestry)</strong></td>
</tr>
<tr>
<td><strong>- Taxidea taxus (American Badger) – threats are not from forest harvesting Low Risk</strong></td>
<td><strong>- White Sturgeon (Acipenser transmontanus) - aquatic Low Risk</strong></td>
</tr>
</tbody>
</table>
### 3.1 - HCV 2 In-depth Assessment of Risk of Forest Management Activities At the Ecoregion Level in the Supply Area

**HCV 2: Landscape-level ecosystems and mosaics**

Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and in abundance. (An area threshold of 500km² (50,000 ha) has been widely used as guidance.)

**SPECIFIED RISK for**

- NA0518 - Northern Central Rockies forests – Intact forest landscapes
- NA0528 - South Central Rockies Forest - Frontier Forests in Idaho and Valley Counties of Idaho

**mitigated under 3.2.**

### HCV 2 RATIONALE (Note GIS Analysis Completed and Available for review)

This assessment uses the FSC Interim Guidance for the Delineation* Intact Forest Landscapes (IFL) ADVICE-20-007-018 V1-0

Harvesting and road building may proceed in IFL’s, if they:

- Do not impact more than 20% of Intact Forest Landscapes within the Management Unit (MU), and
- Do not reduce any IFLs below the 50,000 ha threshold in the landscape.

**NA0505 – (Blue Mountains Forest) – 92.1% of the IFL within NA0505 (IFL 55) is protected within the Wenaha-Tucannon Wilderness Area. The treats from forestry are low. Low Risk**

**NA0507 – (Cascade Mtns leeward Forests) – 79.3% of the IFL within NA0507 lies within Parks Protected Areas or Conservation Lands. The two IFL’s within this ecoregion are 90 in the USA which is 72.9% in parks and protected areas and 99 in British Columbia which is 87.2% within Parks, PA’s or Conservation lands. Neither of the IFL’s in this ecoregion could fall below the 50,000 ha threshold. Threats from forestry are low. There is one frontier forest that overlaps with NA0507. It is rated as having a medium or high threat. Supply level review indicates that this frontier forest is heavily overlapped with the same park and protected areas as the intact forests in this ecoregion. There is one small section of the mapped frontier forest outside of protected areas that lies within the Celgar supply Area. This area makes up less than 0.5% of the frontier forest area and is on the far west side of the Okanagan County in Washington State. Threats from Forestry Activities occurring within Celgars Supply Area are low. Low Risk**

**NA0518 – (Northern Central Rockies Forests) – 53.65 of the IFL within NA0528 lies within Parks, Protected Areas or Conservation Lands. The frontier forests in British Columbia in NA0518 lie outside of Celgars Supply Area. Those frontier forests in Montana in NA0518 lie primarily with Glacier National Park and the Great Bear, Bob Marshall and Scapegoat Wilderness Areas. Over 80% of frontier forest is protected. Specified Risk for IFL in NA0518 in the Celgar supply Area mitigated under 3.2 below.**

**NA0528 – (South Central Rockies Forest) – 95.5 % of the IFL within NA0528 lies within Parks, Protected Areas or Conservation Lands. There is only one IFL in this ecoregion it is IFL 46. The sections of the IFL outside of the Frank Church River of No Return Wilderness Area also lie outside of Celgars Supply Area. There is a frontier forest that also overlaps all of IFL 46 and a large section of the Frank Church River of No Return Wilderness Area and the Selway-Bitteroot Wilderness Area. This frontier forest is rated as having a medium to high threat. The portions outside of the wilderness areas lie within the Nezpece and Payette National Forests. https://www.fs.usda.gov/detail/nezperceclearwater/landmanagement/planning/?cid=stelprdb5447338 Further assessment of level of protection for frontier forests is required in 3.2 below. Specified Risk for Frontier Forests in NA0528 in Idaho and Valley Counties of Idaho. Mitigated under 3.2 below.**

### 3.1 - HCV 3 In-depth Assessment of Risk of Forest Management Activities At the Supply Level

**HCV 3: Ecosystems and habitats Rare, threatened, or endangered ecosystems, habitats or refugia.**

JICUN Centers of Plant Diversity

http://biodiversitya-z.org/content/centres-of-plant-diversity-cpd

**SPECIFIED RISK for**

- NA0505 – Blue Mountains Forest
- NA0522 - Okanagan Dry Forests

**mitigated under 3.2.**

### HCV 3 RATIONALE:

The table above in the ecoregion review indicates there are no overlaps or concerns with

- Global 200 Ecoregions, IUCN Centers of Plant Diversity, or Conservation International Global Hotspots

As identified above Celgars sourcing Area overlaps the following forested Critical / Endangered WWF Terrestrial Ecoregions:

- NA0505 – Blue Mountains Forest - WWF Status Critical / Endangered Specified Risk
- NA0522 - Okanagan Dry forests - WWF Status Critical / Endangered Specified Risk
### 3.1 - HCV 4, 5 and 6 Assessment of Risk related to meeting basic needs of local communities

NOTE: Indicator 3.8 a) HCVs that provide basic services of nature in critical situations and those that are fundamental to meeting basic needs of local communities can be considered low risk, if indicators 2.4, and 3.1 and/or 3.2 are met. That is, there are recognizable and equitable processes in place to resolve conflicts of substantial magnitude pertaining to traditional rights including use rights, cultural interests or traditional cultural identity in the supply area concerned.

#### 3.1 - HCV 4 In-depth Assessment of Risk of Forest Management Activities At the Supply Level

<table>
<thead>
<tr>
<th>HCV 4: Critical Ecosystem Services</th>
<th>Although there are water catchments and sensitive soils within Celgars Sourcing Area they are not considered critical to a degree that a disruption would pose a threat of severe, catastrophic effect. Additionally threats from forestry are effectively mitigated through legislative protective measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes.</td>
<td>British Columbia protects drinking water through the Drinking Water Protection Act and Regulations. Additionally Community Watersheds are designated under the Government Actions Regulation and provided extra protection through the Forest &amp; Range Practices Act (FRPA), which also addresses sensitive soils. A third and final level of protection is also through local land use plans like the Kootenay Boundary Land Use Plan Order (KBLUB) which adds provisions for operating around Consumptive Use Streams. <a href="http://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/laws-related-to-health-in-bc/drinking-water-protection-act">http://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/laws-related-to-health-in-bc/drinking-water-protection-act</a> <a href="http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/community-watersheds">http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/community-watersheds</a></td>
</tr>
<tr>
<td>Note: An ecosystem service is critical where a disruption of that service poses a threat of severe, catastrophic or cumulative negative impacts on the welfare, health or survival of local communities, on the functioning of important infrastructure (roads, dams, reservoirs, hydroelectric schemes, irrigation systems, buildings, etc.), or on other HCV’s.</td>
<td>Washington, Idaho and Montana water quality is regulated at the Federal Level by the Clean Water Act and Best Management Practices and the Safe Drinking Water Act. Additionally in Washington State applications for harvest also require a review of resources including watershed analysis and soils and landslide analysis. Idaho and Montana have additional BMP’s for water quality and Idaho does audits on compliance. <a href="https://www.uidaho.edu/extension/idahoforestrybmps/topic-areas/forest-practices">https://www.uidaho.edu/extension/idahoforestrybmps/topic-areas/forest-practices</a> <a href="http://www.deq.idaho.gov/media/60179553/idaho-2016-interagency-forest-practices-water-quality-audit-1216.pdf">http://www.deq.idaho.gov/media/60179553/idaho-2016-interagency-forest-practices-water-quality-audit-1216.pdf</a> <a href="http://dnrc.mt.gov/divisions/forestry/forestry-assistance/forest-practices/best-management-practices-bmp-2">http://dnrc.mt.gov/divisions/forestry/forestry-assistance/forest-practices/best-management-practices-bmp-2</a></td>
</tr>
</tbody>
</table>

**LOW RISK**

#### 3.1 - HCV 5 In-depth Assessment of Risk of Forest Management Activities At the Supply Level

<table>
<thead>
<tr>
<th>HCV 5: Community Needs</th>
<th>Community Needs would be identified in British Columbia through the consultation and referral process. Where sites and resources are identified in the consultation and referral process effective accommodation measures must be in place to address the infringement on rights which would affect the livelihood of the indigenous peoples. Additionally in the US Federal law requires that potentially affected communities have opportunities to comment on major federal forest management decisions, such as timber sales. There is also a clear process for appealing major decisions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (e.g., for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples.</td>
<td>Indigenous groups and others who may experience traditional or civil rights infractions have access to recognized legislative and legal systems to resolve conflicts. Some indigenous groups and individuals have successfully used these systems to obtain greater deference to their customary land access and uses.</td>
</tr>
</tbody>
</table>

**LOW RISK**
### 3.1 - HCV 6 In-depth Assessment of Risk of Forest Management Activities At the Supply Level

<table>
<thead>
<tr>
<th>HCV 6: Cultural Values</th>
<th>Within all jurisdictions there are sites of global or national cultural, archaeological or historical significance and sites of religious/sacred importance for the traditional cultures of local communities or indigenous peoples. As these values are present 3.1 is Specified Risk for this HCV however there is a system of protection in place identified in 3.2 below that mitigates the risk to these values.</th>
<th>SPECIFIED RISK mitigated via 2.4 and 3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| SPECIFIED RISK | mitigated via 2.4 and 3.2 | | |
|----------------|----------------------------|----------------|
**Indicator 3.2**

**3.2 A strong* system of protection** (effective protected areas and legislation) is in place that ensures survival of the HCVs in the ecoregion. Low risk for this indicator shall be demonstrated as follows:

- **a)** A strong system of protection of HCVs is in place. The definition of strong shall be based on the effectiveness of law enforcement in the country. This can be demonstrated through a high rating (≥ 75%) in the World Bank ‘rule of law’ index (www.govindicators.org), and
- **b)** There is significant support by relevant national/regional stakeholders from the assessed supply area, or
- **c)** The forest manager has agreed to an approach of HCV protection at the supply unit level with national/regional environmental stakeholders relevant for the assessed supply area. c) Indicator 3.2 cannot be met if there is substantial objection from relevant national or regional stakeholders against a low risk designation for the HCV category.

**Assessment Criteria - All HCV’s - * Strong System of Protection** – FSC does not define criteria or measures related to a strong system of protection. The following guidance has been used to evaluate whether the tests of strong protection in an ecoregion have been met and can mitigate the risk identified in 3.1 above.

FSC Directive on FSC Controlled Wood FSC-DIR-40-005 ADVICE-40-005-14 Compliance with Indicatory 3.2 shall be demonstrated as follows:

- **a)** A strong system of protection of high conservation values is in place. The definition of strong shall be based on the effectiveness of law enforcement in the country. This can be demonstrated through a high rating (≥ 75%) in the World Bank “rule of law” index (www.govindicators.org), and
- **b)** Significant support by relevant national / regional stakeholders from the assessed district, or
- **c)** The company has agreed to an approach of HCV protection at the forest management unit level with national / regional environmental stakeholders from the assessed district.

Controlled Wood Information Matrix FSC Canada Support Document Rolling Draft – September 2007 V1.0 –

- A strong system is not defined simply by assertions made by a provincial government that it has a strong system of protection
- Alternately a system is not weak simply because NGO’s are advocating for further protection. Strong systems can always be improved upon.

It is necessary to consult and document existing information such as:

- **a)** Percentage of the ecoregion in protected areas
- **b)** Degree of protection compared with the degree of protection in neighbouring jurisdictions
- **c)** Recent and current activities to increase protection
- **d)** Results of recent published, peer reviewed gap analysis
- **e)** Information provided by interested parties (NGOs, Aboriginal communities, etc.)


**Indicator 3.2 OVERALL RATIONALE**

The following information is used in a broad manner to support the strong system of protection in British Columbia, Washington, Idaho and Montana in general related to Forestry Practices and conservation efforts. Elements of the system of protection specific to each HCV are also further expanded upon in the HCV specific justifications below.

**World Bank Rule of Law** governance indicators in 2016 rank Canada at 97% and the United States at 92% both surpass the 75% identified in the FSC Directive on Controlled wood and both are higher than countries such as Germany, Bulgaria and Poland. Canada is also higher than countries like Australia and Austria.

**Degree of Protection compared with the degree of protection in neighbouring jurisdictions**

A review of levels of protection for primary forest producing countries indicates that Russia maintains 11% protected areas, Canada 9% the USA 14% and Australia 14.6%. Canada protects 10.6% of its land and inland waters and is a signatory on the Convention on Biological Diversity. A provincial review indicates British Columbia at 15.3% has the highest percentage of terrestrial area protected followed by Alberta at 12.6%. British Columbia also maintains the highest level of protection by ecozone. Celgar


Washington maintains 12.31% parks and protected areas, Idaho 11.5% and Montana 6.76%. [https://gapanalysis.usgs.gov/padus/protected-areas-stats/](https://gapanalysis.usgs.gov/padus/protected-areas-stats/) All states and provinces also have additional areas that have conditional protection ie endangered species protection (GAR, WHA, critical habitat) or old growth management areas that are not accounted for in the Parks and Protected Areas numbers.

**Recent and current activities to increase protection**

A review of the trend in protection in British Columbia indicates that there is a steady upwards increase in protected area with an average of 11.1% percentage in 2000 increasing to 15.4% in 2015. [http://www.env.gov.bc.ca/soe/indicators/land/protected-lands-and-waters.html](http://www.env.gov.bc.ca/soe/indicators/land/protected-lands-and-waters.html)

There is no readily available information on trends in state protected areas for Washington, Idaho and Montana. The USA however has the gap analysis referenced above does provide detailed information related to the type of protections available by state. Gap Status 1 indicates permanent protection, Gap Status 2 indicates permanent protection from conversion of land cover and a requirement to maintain a primarily natural state and Gap status 3 indicates the area has protection from conversion of the natural land cover for a majority of the area but it may be subject to low intensity or localized use. Requires protection of federally listed endangered and threatened species. The remaining Gap 4 lands have no known protections. The following shows the breakdown by state:

<table>
<thead>
<tr>
<th>State</th>
<th>Gap Status 1</th>
<th>Gap Status 2</th>
<th>Total 1 and 2</th>
<th>Gap Status 3</th>
<th>Total 1, 2 and 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>3.81</td>
<td>8.50</td>
<td>12.31</td>
<td>23.91</td>
<td>36.22</td>
</tr>
<tr>
<td>Idaho</td>
<td>0.25</td>
<td>11.30</td>
<td>11.55</td>
<td>55.10</td>
<td>66.65</td>
</tr>
<tr>
<td>Montana</td>
<td>2.21</td>
<td>4.55</td>
<td>6.76</td>
<td>30.60</td>
<td>37.36</td>
</tr>
</tbody>
</table>

Additionally in the US conservation efforts are supplemented by land trusts. There are increased government incentives for land trusts and large tracts of forest land for sale. Washington has 866,467 acres of land protected and 35 active land trusts, Idaho has 704,533 acres protected with 12 land trusts and Montana has 3,516,933 acres of protected land and 10 active land trusts. [http://www.landtrustalliance.org/about/national-land-trust-census](http://www.landtrustalliance.org/about/national-land-trust-census)

Washington, Idaho and Montana also have Forest Legacy Programs; Washington also maintains a Natural Areas Program both of which protects or conserves lands. [https://www.dnr.wa.gov/leaving-legacy-forests](https://www.dnr.wa.gov/leaving-legacy-forests) [https://www.idl.idaho.gov/forestry/forest-legacy/index.html](https://www.idl.idaho.gov/forestry/forest-legacy/index.html) [http://fwp.mt.gov/fishAndWildlife/habitat/wildlife/programs/forestLegacy.html](http://fwp.mt.gov/fishAndWildlife/habitat/wildlife/programs/forestLegacy.html)
British Columbia

British Columbia’s forest lands are 94% crown owned and regulated. Regionally there is an agreed to approach of HCV protection at the forest management level which is provided for through the provincial land use planning process. Within British Columbia there has been significant effort for Strategic Land and Resource planning across the province. These land use plans have been developed at regional scales as Land and Resource Management Plans (LRMP’s), at the landscape or watershed level as Sustainable Resource Management Plans (SRMP’s). A Celgars Supply Area overlap with two LRMP’s the Okanagan Shuswap Land and Resource Management Plan and the Kootenay – Boundary Regional Land Use Plan. During the development of these plans there was considerable input from a variety of stakeholders and indigenous groups. These plans resulted in the establishment of several parks and protected areas as well as land use objectives for a variety of values including species at risk, biodiversity targets and habitat protection, water quality, and management of old and mature forests.

In addition to the input from indigenous groups at the land use planning stage there are also other avenues available for stakeholder engagement and involvement in forestry development and the consideration of HCV values. Forest tenure holders must have an approved Forest Stewardship Plan or Woodlot License Plan prior to harvesting. These plans must include objectives to resources including biodiversity, species at risk, soils, water, fisheries, visuals, recreation and wildlife habitat areas among other things. These plans must be consistent with the requirements outlined in the higher level plans identified above and must also meet all of the legal requirements defined by government surrounding species at risk, identified wildlife, heritage conservation and Old Growth Management. These Forest Stewardship plans are subject to public consultation and referral to First Nations. Tenure holders are obligated to notify relevant stakeholders of planned activities and offer an opportunity for input. These stakeholders include water user groups, recreation tenure holders, trappers, range tenure holders and other interested parties or tenure holders.

Rare and Endangered Species including plants animals and plant communities have several levels of protection in BC including Part 2 of the Forest and Range Practices Act (FRPA) which requires development and approval of a Forest Stewardship Plan or other Forest plan that must specify results and strategies for the Objectives Defined in The Forest Planning and Practices Regulations (FPPR) that include: soils, timber, wildlife, water, biodiversity, fish, visual quality and cultural heritage resources along with any others identified by government. These plans must be consistent with Orders approved under the Government Actions Regulations (GAR) which specify additional protection measures for wildlife and wildlife habitat community watersheds, scenic areas, ungulate winter range, Species at Risk and regionally important wildlife, fisheries sensitive watersheds, and other resource features. Additionally under FRPA and the Wildlife Act rare and endangered species can be classified as a Species at Risk or a Regionally Important Wildlife this is via the Identified Wildlife Management Strategy (IWMS). Identified wildlife are managed through the establishment of Wildlife Habitat Areas (WHA’s) and the development and approval of GAR orders. Wildlife Habitat Areas (WHA) that are spatially mapped and must be considered in all planning and are restricted from harvesting. Identified species will have accounts and measures defined for them by forest region to aid in best management practices and identification of critical habitat. Some species are also managed for under Section 7 of the FPPR and they have special tracking notices and orders which must be met and included in all plans.
In the USA harvesting is done on Federal, Tribal, State and Private Lands. The levels of engagement and input vary by land type. In the USA on Federal Lands the National Forest Management Act of 1976 requires development and maintenance of an effective Forest Plan. In 2012 the planning rule was updated the new planning rule requires collaboration throughout the planning process. The rule itself was developed using a collaborative process and included over 300,000 public comments. National Forest planning is now using this planning rule to update and revise their forest plans. Under this new planning rule there are increased requirements for public involvement, an emphasis on restoration of lands, increased protection measures and updated science based requirements related to species at risk. [https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3839583.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3839583.pdf) Several plans are up for revision and have been completed or are being completed with this process.

**Washington**
In Washington forest harvesting is 43% Federal, 21% Private, 15% Non-Industrial Private, 14% State and 8% Tribal. Timber in Washington is accessed through timber sales offered by the government through the Department of Natural Resources (DNR). This agency is responsible for state land forest management. There is some harvesting on Federal forest land. Private timber consumed in Washington is purchased from individual land owners. The DNR, Forest Practices Division implements the rules approved by the Washington State Forest Practices Board (FPB) and provides staff to regulate forestry and related operations on all non-federal forestlands in Washington State.

**Idaho**
In Idaho forest harvesting is 73% Federal, 11% private, 9% state and 7% forest product companies. Regardless of ownership all forest lands must meet the requirements of the Idaho Forest Practices Act related to reforestation and protection of forest streams, fish and wildlife.

**Montana**
23% of Montana is classified as forest land the percentage breakdown of forest land is as follows: 60% federal, 24% Non-industrial private, 8% State and 8% private forest industry. Montana State currently chooses to manage forestry through a non-regulatory approach by means of the Montana Best Management Practices Law, Landowner and Logger Education, and state monitoring. The Forestry Best Management Practices (BMP’s) provide minimum standards for protecting forest values by emphasizing practices that improve upon road construction, timber harvesting, stream crossings, hazardous substances, and streamside management zones.

In 2012, three interdisciplinary teams were formed to conduct monitoring reviews, covering the northwestern region, the western region, and the central/eastern region of the state. Each team was comprised of a fisheries biologist, a forester, a hydrologist, a representative of a conservation group, a road engineer, a soil scientist, and a non-industrial private forest (NIPF) landowner or logging professional. Results showed that across all ownerships, BMPs were properly applied 98% of the time. This percentage maintains the 2012 overall rating showing that the BMP’s are maintaining a very high level of compliance amongst all ownership groups.

<table>
<thead>
<tr>
<th>Terrestrial Ecoregion</th>
<th>HCV1</th>
<th>HCV 2</th>
<th>HCV 3</th>
<th>HCV 4</th>
<th>HCV 5</th>
<th>HCV 6</th>
<th>% Protected Area*</th>
<th>% Habitat Loss (2000)*</th>
<th>% Habitat Loss (2009)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA0505 – Blue Mountains Forest</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td><strong>Critical / Endangered</strong></td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Y</td>
<td>55.4%</td>
<td>3.48%</td>
<td>6.1%</td>
</tr>
<tr>
<td>NA0507 - Cascade Mtns leeward forest</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Relatively Stable/Intact</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Y</td>
<td>43.4%</td>
<td>0.67%</td>
<td>0.3%</td>
</tr>
<tr>
<td>NA0518 - North Central Rockies forest</td>
<td><strong>Species</strong></td>
<td>IFL</td>
<td>Vulnerable</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Y</td>
<td>39.7%</td>
<td>2.19%</td>
<td>0.3%</td>
</tr>
<tr>
<td>NA0522 - Okanagan Dry forests</td>
<td><strong>Species</strong></td>
<td>Low Risk</td>
<td><strong>Critical / Endangered</strong></td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Y</td>
<td>9.52%</td>
<td>4.53 %</td>
<td>0.5%</td>
</tr>
<tr>
<td>NA0528 - South Central Rockies Forest</td>
<td>Low Risk</td>
<td>Frontier</td>
<td>Vulnerable</td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Y</td>
<td>82.6%</td>
<td>1.66%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

3.2 - HCV 1 In-depth Assessment of Effective Protection Measures

**HCV1: Species Diversity**

Concentrations of biological diversity including endemic species and rare, threatened or endangered (RTE) species that are significant at global, regional or national levels.

3.1 above is rated as Specified Risk for HCV 1 for:

- **NA0522** Picoides albolarvatus (White-headed Woodpecker) in **British Columbia**
- **NA0518** Rangifer tarandus pop. 1 (Caribou - Southern Mountain Population) **British Columbia, Washington State** (Pend Orielle County) and **Idaho State** (Bonner, Boundary Cty)

**FSC Direction or Guidance**

FSC-PRO-60-002a V1-0 provides guidance for the development of a National Risk Assessment. The thresholds identified for HCV 1 have additionally been considered in the evaluation of risk along with the context and considerations.

(7) HCV 1 is identified and/or its occurrence is likely in the area under assessment, but it is effectively protected from threats from management activities.

**Context** – Is the country signatory to the Convention on Biological Diversity and are the CBD targets met? And can threats caused by management activities be effectively managed using management tools (e.g., application of best practices)

Canada is signatory to the Convention on Biological Diversity, the US is not. The CBD target (Aichi Target) for conservation lands in Canada is 17% conserved terrestrial areas. Canada was the first industrialized country to sign and ratify the CBD. British Columbia currently maintains 15.3% parks and protected areas which does not account for species specific protected habitat areas established under Government Actions Regulations (GAR). In addition to the species identified as significant at a global, regional or national level BC also has identified wildlife which it has approved wildlife habitat areas for; these areas also add to the amount of protected area in the province and contribute to species diversity. [http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=show_approved](http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=show_approved)

Additionally British Columbia maintains the highest proportion of Protected Areas by Ecological Region than any other province.

NA0522 currently has 9.5% conservation and NA0518 currently has 39.7% protected areas.

A review of the Atlas of Global Conservation from the Nature Conservancy indicates that the % Habitat loss in NA0522 has decreased from 4.53% in 2000 to 0.5% in 2009. NA0518 indicates a decrease in habitat loss from 2.19% to 0.3%.

**Effective Management Tools**

Rangifer tarandus pop. 1 (Caribou - Southern Mountain Population) is protected in British Columbia through a variety of legislative instruments which identify areas spatially such as Wildlife habitat areas and Ungulate winter range areas, protected areas and ecological reserves as well as parks. The Acts that direct these areas are the Forest Act, The Forest and Range Practices Act, the Government Actions Regulations, the Forest Planning and Practices Regulation, the Wildlife Act, the Land Act and several others. Within Celgars sourcing area Caribou in BC are protected through the following UWR areas (U-4-010, 012, 013 and 014 in the Kootenays and U-8-004 in the Okanagan). UWR requirement specifies No Harvest in areas of core habitat and allow conditional harvest in migration corridors. Additionally Caribou has been provided additional consideration in the higher level planning process.

[http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlife-conservation/caribou/southern-mountain-caribou](http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlife-conservation/caribou/southern-mountain-caribou)
In the US Caribou is protected through the Endangered Species Act as Caribou is listed as an endangered species and has designated critical habitat. The entire critical habitat in the US is designated on Federal Lands as such any authorized actions cannot result in the destruction or adverse modification of critical habitat.

Picoides albolarvatus (White-headed Woodpecker) is an identified wildlife in BC it has identified Wildlife Habitat Areas established under the following GAR Orders (8-014,015-016-017). These orders have restrictions to ensure that the habitat is retained in a manner to ensure the viability of the species. These orders stipulate general wildlife measures to protect the species and its habitat.

### 3.2 - HCV 2 In-depth Assessment of Effective Protection Measures

**HCV 2: Landscape-level ecosystems and mosaics**

- Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and in abundance.

An area threshold of 500km\(^2\) (50,000 ha) has been widely used as guidance.

#### 3.1 above is rated as Specified Risk for HCV 2 for:

- **NA0518** - Northern Central Rockies forests – Intact forest landscapes
- **NA0528** - South Central Rockies Forest - Frontier Forests in Idaho and Valley Counties of Idaho

**FSC Direction or Guidance**

FSC-PRO-60-002a V1-0 thresholds identified for HCV 2 have additionally been considered in the evaluation of risk along with the context and considerations.

10) There is low/negligible threat to HCV 2 caused by management activities in the area under the assessment; OR

11) HCV 2 is identified and/or its occurrence is likely in the area under assessment, but it is **effectively protected from threats caused by management activities**.

**Effective Protection**: The effectiveness of nature protection in an area shall be determined based on:

- **Quality of nature protection, and**
- **Quantity of nature protection**.

Quality is demonstrated by a **legally established protected area network**, whose protection is legally enforced.

Quantity of nature protection is **considered sufficient if the minimum quantum of protected areas meets the Aichi targets established under the CBD for terrestrial ecosystems**, or equivalent for countries which have not ratified the CBD.

Interim Guidance for the Delineation* Intact Forest Landscapes (IFL) ADVICE-20-007-018 V1-0

Harvesting and road building may proceed in IFL’s, if they:

- **Do not impact more than 20% of Intact Forest Landscapes** within the Management Unit (MU), and
- **Do not reduce any IFLs below the 50,000 ha threshold** in the landscape.

Canada has defined an Aichi Target of 17% of terrestrial areas and inland waters conserved through networks of protected areas and other effective area-based conservation measures. British Columbia currently has 15.3% protected areas. Additionally all of the IFLs in Celgars Supply area overlap WWF ecoregion NA0518 - Northern Central Rockies forests. NA0518 currently has 39.7% protected areas according to the Atlas of Global Conservation.

**British Columbia**

Most of the IFL’s in NA0518 lie in British Columbia. A GIS analysis of the **BC portion** of NA0518 indicates in addition to the formal protection in place there is an additional 12% or 2,913,000 ha designated as No Harvest within the ecoregion and effectively protected via Species at Risk legislation. 53.6% of the total IFL area in the ecoregion is lies in parks, protected areas.
or conservation lands. Additionally when exposed land is considered 75.3% of the total IFL's in the Ecoregion are outside of the available timber land base in British Columbia. When considering IFL size and reducing an IFL below the 50,000 ha threshold only IFL 145 within Celgar Supply Area has a potential of falling below 50,000 ha when considering the Parks, Protected Areas, No Harvest Areas and non-forested areas. IFL 145 is 82,449 ha and 43,053 ha lies outside of the timber harvesting land base.

**NA0528 - South Central Rockies Forest**  - Frontier Forests in Idaho and Valley Counties of Idaho
There is a frontier forest that also overlaps all of IFL 46 and a large section of the Frank Church River of No Return Wilderness Area and the Selway-Bitteroot Wilderness Area. This frontier forest is rated as having a medium to high threat. The portions outside of the wilderness areas lie within the Nezpearce and Payette National Forests. National Forests are planned and managed by the US Forest Service. The National Forest Management Act of 1976 requires development and maintenance of an effective Forest Plan on all National Forests. In 2012 the planning rule was updated the new planning rule requires collaboration throughout the planning process. National Forest planning is now using this planning rule to update and revise their forest plans. Under this new planning rule there are increased requirements for public involvement, an emphasis on restoration of lands, increased protection measures and updated science based requirements related to species at risk. [https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3839583.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3839583.pdf) Several plans are up for revision and have been completed or are being completed with this process.

### 3.2 - HCV 3 In-depth Assessment of Effective Protection Measures

<table>
<thead>
<tr>
<th>HCV 3: Ecosystems and habitats</th>
<th>3.1 above is rated as Specified Risk for HCV 3 for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rare, threatened, or endangered ecosystems, habitats or refugia.</td>
<td>NA0505 – Blue Mountains Forest</td>
</tr>
<tr>
<td></td>
<td>NA0522 - Okanagan Dry Forests</td>
</tr>
<tr>
<td></td>
<td>FSC-PRO-60-002a V1-0 thresholds identified for HCV 3 considered in the evaluation of risk.</td>
</tr>
<tr>
<td></td>
<td>(15) HCV 3 is identified and/or its occurrence is likely in the area under assessment, but it is effectively protected from threats caused by management activities, OR</td>
</tr>
<tr>
<td></td>
<td>There is documented progress in achieving Aichi biodiversity targets relevant for the area under assessment confirming these targets will be met OR Aichi targets are met.</td>
</tr>
<tr>
<td></td>
<td>Specified Risk thresholds:</td>
</tr>
<tr>
<td></td>
<td>(17) HCV 3 is identified and/or its occurrence is likely in the area under the assessment and it is threatened by forest management activities; AND/OR</td>
</tr>
<tr>
<td></td>
<td>(18) There is no progress in achieving Aichi biodiversity targets.</td>
</tr>
</tbody>
</table>

**NA0505 – Blue Mountains Forest**
The Blue Mountains ecoregion lies within northeastern Oregon and extreme south east Washington. As noted above, nearly all the intact forests identified in Washington are fully protected as wilderness or are under federal ownership and management. Only a small portion of this ecoregion is within Washington; the bulk of the ecoregion is in Oregon. The intact forest is within the WT wilderness area created by the endangered American wilderness act of 1978. The atlas of global conservation lists the Blue mountain forests ecoregion as 55.4% formally protected. Canada is signatory to the Convention on Biological Diversity, the US is not. Although the US has not signed the CBD the level of protection in this ecoregion is well above Canadas Aichi target of 17%  [https://www.worldwildlife.org/ecoregions/na0505](https://www.worldwildlife.org/ecoregions/na0505)
NA0522 - Okanagan Dry Forests
NA0522 currently has 9.5% conservation and protected areas. Although this does not meet the Aichi target a review of the Atlas of Global Conservation from the Nature Conservancy indicates that the % Habitat loss in NA0522 has decreased from 4.53% in 2000 to 0.5% in 2009 which indicates that there is progress being made in reducing habitat loss.

The Okanagan Dry Forest has been identified by WWF as an ecoregion that is critical or endangered. The types and severity of threats listed are primarily land conversion for agriculture and urban development, with some grassland seriously over-grazed by livestock. This ecoregion contains the northern continental range extensions of many species of reptiles, amphibians, insects and plants. Threats include growing urban expansion conversion of land for agricultural production, livestock grazing, logging, open pit mines, agriculture, and transmission and pipeline corridors. Priority actions are for restoration and an increase in protection for the grassland habitats. [https://www.worldwildlife.org/ecoregions/na0522](https://www.worldwildlife.org/ecoregions/na0522)

Although forestry is one of the threats in this ecoregion it is not a primary threat. Celgar has used the provincial legislated Species of Concern, identified wildlife and red listed species to filter down what is primarily at risk in this ecoregion and has identified the following ecological communities that may be ecoregionally significant within NA0522 and lie within Celgars Supply Area.

Terrestrial *grassland* habitat type (All in the Okanagan Valley bottom (NA0522)
- NA0522 / NA0518 - Distichlis spicata var. stricta - Puccinellia nuttalliana (Nuttall's Alkali Saltgrass),
- NA0522 - *Purshia tridentata* / *Pseudoroegneria spicata* (Antelope-brush / bluebunch wheatgrass) , (threats are grazing, urban dev, invasive spp)
- NA0522 - *Purshia tridentata* / *Hesperostipa comata* (Antelope-brush / needle-and-thread grass), (threats are grazing, urban dev)

Terrestrial *forest* habitat type
- NA0522 - Pinus ponderosa / *Pseudoroegneria spicata* - *Lupinus sericeus* (Ponderosa Pine / Bluebunch Wheatgrass-Silky Lupine) - Kettle Valley (threats are fire suppression, grazing range, mining, urbanization, and forest management.)
- Terrestrial *Sub Alpine* - (Keremeos area highlands)
- NA0522 - Artemisia tridenta spp. vaseyana / Calamagrostis rubescens (Vasey's Big Sage / Pinegrass) (threats are range, fire suppression and invasive spp)
- Terrestrial *Flood* (Riparian) -
- NA022 - Betula occidentalis / *Rosa spp.* - Water birch / roses (Okanagan Valley bottom riparian) (threats are urban development and cultivation, inv spp, grazing)

From the above the only plant communities within our sourcing basket that could be at risk to forest harvesting activities is Pinus ponderosa / *Pseudoroegneria spicata* - *Lupinus sericeus* (Ponderosa Pine / Bluebunch Wheatgrass-Silky Lupine). This is a very small ecological community although it is significant at the local level it does not appear to be significant at the ecoregion level. This ecological community lies in the Ponderosa Pine dh1 and dh2 biogeoclimatic units. These subzones lie in valley bottoms are Ponderosa Pine dominated and is an open forest type. This is primarily outside of the timber harvesting land base in British Columbia. The key to restoring this community is emulating fire effects and conducting light intensity burns. [http://www.env.gov.bc.ca/wld/documents/identified/iwCEBC000415.pdf](http://www.env.gov.bc.ca/wld/documents/identified/iwCEBC000415.pdf)
| **HCV 4: Critical Ecosystem Services** | LOW RISK in 3.1 Above  
Basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes. | LOW RISK | LOW RISK |
| **HCV 5: Community Needs** | LOW RISK in 3.1 Above  
Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (e.g., for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. | LOW RISK | LOW RISK |

### 3.2 - HCV 3 In-depth Assessment of Effective Protection Measures

**HCV 6: Cultural Values**  
Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.

In *British Columbia* FRPA has a protection measure to address Cultural Heritage.  
[http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/policy-legislation/legislation-regulation/forest-range-practices-act](http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/policy-legislation/legislation-regulation/forest-range-practices-act)

Archaeological Impact Assessments are required prior to all harvest applications where there overview assessments have indicated potential for archaeological findings. Additionally the Heritage Conservation Act forbids damage, desecration or excavation that alters any heritage objects or archaeological values.  
[https://www.for.gov.bc.ca/archaeology/forest_licensees_and_natural_resource_stakeholders/index.htm](https://www.for.gov.bc.ca/archaeology/forest_licensees_and_natural_resource_stakeholders/index.htm)

**Federally in the US** protection of Archaeological resources is provided under Title 16 Chapter 1B of the US Code. Under this section it is illegal to excavate, remove, damage, alter, and damage any archaeological resource on public or Indian lands without an archaeological permit. Issuance of any permit cannot result in harm or destruction of a religious or cultural site or site with cultural importance.

**Washington, Idaho and Montana** also have a variety of state and federal preservation laws for the protection of cultural heritage sites including Federally: the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), the American Indian Religious Freedom Act (AIRFA), the Native America Graves Protection and Repatriation Act.  
[https://dahp.wa.gov/project-review/preservation-laws](https://dahp.wa.gov/project-review/preservation-laws)  
**Category 4: Wood harvested from areas being converted from forests and other wooded ecosystems to plantations or non-forest uses.**

**LOW RISK**

- The supply area may be considered low risk in relation to conversion of forests to plantations or non-forest uses when the following indicator is met:
  - **NOTE:** the change from plantations to other land uses is not considered forest conversion.
  - **NOTE:** The intent of the risk assessment for this category is to reveal risk in regions where there is a significant occurrence of deforestation of natural forests. The organization is encouraged to seek for guidance from FSC network partners and regional offices on the interpretation of ‘significant rate of loss’ for forests in their counties and regions.

<table>
<thead>
<tr>
<th>Requirements of the Standard</th>
<th>Sources of information reviewed</th>
<th>Risk Assessment</th>
</tr>
</thead>
</table>
| 4. There is no net loss of no significant rate of loss (> 0.5% per year) of natural forests and other naturally wooded ecosystems such as savannahs taking place in the eco-region in question. | [http://www.fao.org/forest-resources-assessment/current-assessment/maps-and-figures/en/](http://www.fao.org/forest-resources-assessment/current-assessment/maps-and-figures/en/)  
[FSC Global Forest Registry](http://www.globalforestregistry.org)  
The State of the World Forests 2012  
[http://www.fao.org/docrep/016/i3010e/i3010e00.htm](http://www.fao.org/docrep/016/i3010e/i3010e00.htm)  
[UNEP/GRID](http://www.grida.no/graphicslib/detail/the-health-of-our-forests_a7f0#)  
The State of BC Forests 2010  
Ministry of FLNRO Annual Service Plan Report  
The State of Canada’s Forests 2012  
American Hardwood Export Council – October 2008  
State of Forestry in the United States of America  
[http://www.fao.org/docrep/meeting/x4995e.htm](http://www.fao.org/docrep/meeting/x4995e.htm)  
World Bank Forest Area Data  
Forest Resources of the United States, 2007  
Canada has had a small gain or loss <50 (100 ha) and the United States has had net annual increase of 250-500 (1000 ha) in forest area between 2010 and 2015.  
Canada State of the Forests 2017 states that from 1990 to 2015 Canada forest area decreased by 0.34%.  
USA The rate of loss for the period 1997 to 2007 is 0.23%, USDA report – Forest Resources of the US, 2007.  
FAO statistics show that the extent of forest and other wooded land has been increasing in the USA since 1920. According to the World Bank, the area of US forest has expanded from 33.2% in 2010 to 33.3% in 2011.  
British Columbia has a forest management regime based on natural forests and the use of native species. The area of forest in BC increased between 1957 and 2000.  
Washington State: According to DNR timberland (excluding national forest land) in western Washington declined at an average rate of 0.37 percent per year from 1978 to 2001. All State (DNR Timber Sales) timber harvest is required to be replanted and managed to free to grow status. | **LOW RISK** |
Category 5: Wood from forests in which genetically modified trees are planted. - **LOW RISK**

-The supply area may be considered low risk in relation to wood from genetically modified trees when one of the following indicators is met:

<table>
<thead>
<tr>
<th>Requirements of the Standard</th>
<th>Sources of information reviewed</th>
<th>Risk Assessment</th>
</tr>
</thead>
</table>
| a) There is no commercial use of genetically modified trees of the species being sourced; or | **Refer to:**  
**Centralized National Risk Assessments for Canada (FSC-CNRA-CAN V1-0)**  
**Centralized National Risk Assessments for the United States of America**  
FSC Global Forest Registry  
[http://www.globalforestregistry.org](http://www.globalforestregistry.org)  
FAO Corporate Document Repository  
[www.fao.org/docrep/008/ae574e/AE574E00.HTM](http://www.fao.org/docrep/008/ae574e/AE574E00.HTM):  
There are no GMO trees utilized in the forest for replanting purposes. In Canada GMO trees are used experimentally only (page 10 Report of Preliminary Review of Biotechnology in Forestry including Genetic Modification – 2004). Genetically modified (GM) trees are regulated nationally by the Canadian Food Inspection Agency. GMO trees are included within a larger class of Plants with Novel Traits. The Plant Biosafety Office is responsible for regulating the release of plants with novel traits.  
Canadian Food Inspection Agency  
BC Ministry of Forests Tree Improvement Branch  
The Tree Improvement Branch of the Ministry of Forests and Range ensures that no genetically modified tree seed is registered or used in operational forest planting on Crown land in British Columbia.  
Currently, there is no commercial use of genetically modified trees in the USA; however, field experimentation is occurring on a number of trial species. | **LOW RISK** |
| b) Licenses are required for commercial use of genetically modified trees and there are no licenses for commercial use of the species being sourced; or | | |
| c) It is forbidden to use genetically modified trees commercially in the country concerned. | | |