



Annex 2: RED II Supply Base Evaluation

Please add all countries where RED II Supply Base Evaluation is used	
Country	Canada
Area	Alberta
Sustainable harvesting criteria 29(6)	
(i) The legality of harvesting operations	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input checked="" type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	<p>Context</p> <p>The risk relating to the legality of harvesting operations can be measured by assessing the SBP indicators for:</p> <ul style="list-style-type: none"> - Compliance with Laws & Regulations - Legal Ownership of the Land - Payment for Harvest Rights - CITES & EUTR, and - Protection from Illegal Activities <p>Standing timber on Crown land and private land is generally cut by harvest contractors, who pay for the right to harvest the timber subject to any requirements in the contract or licence. The price of standing is known as stumpage and is often charged as a rate per cubic metre of timber. Stumpage rates usually vary by one or more of species, grade/quality, and product. Revenue from the sale of Crown timber is frequently described as a ‘royalty’ and the revenue from royalties contributes to overall government revenues. In contrast, private owners receive payments from the sale of goods such as standing timber as income.</p> <p>CITES</p> <p>The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an important safeguard against exploitation of endangered species caused by (often illicit) demand in international markets.</p> <p>EUTR</p>

The additional legality safeguard with this Indicator is the European Union’s Timber Regulation (EUTR). The EUTR prohibits the placement of timber and timber products on the EU market if harvested illegally under the laws of the country of origin. It requires those who place timber on the EU market to employ a due diligence system to ensure timber was harvested legally. EUTR due diligence means businesses along the supply chain must keep records to facilitate the traceability of the products (i.e. they must maintain chain of custody data for the feedstock used).

Canada is the second largest exporter of forest products in the world, but it also imports wood and wood products. Unauthorized activities have the potential to cause damage to sites, values and forests and encroachments may do likewise.

Potential Threats

One of the pillars of our society is the concept of ownership and the system in place that enables ownership to be recognized, respected and enforceable. Legality of ownership and land use is important in ensuring that the management of the forest, including the harvest of timber, can be conducted in an orderly manner. The threat, should ownership be contested or poorly established, is degradation of both the resource and the timber industry. A lack of clarity regarding permitted land use would have similar effects.

One of the rights of ownership is the right to sell or exchange the owned property, which is done under contract or agreement. If payments are not made or cannot be collected for property that is sold, this undermines the principle of ownership. The social contract also recognizes the right of the government to impose and collect fair fees and taxes and failure to pay undermines the social contract and the authority of the government. The specific threat for timber, in the absence of the rule of law, is a loss of revenue and more broadly, a degradation of both the resource and the timber industry. In addition, timely payment for standing timber provides trust within the market.

CITES

Trade in endangered forest species elevates the threats of extirpation and extinction of commercially valuable species at risk.

EUTR

Illegal timber harvesting threatens the integrity of sustainable forest management and may lead to the damage of sites or values, deprives the timber

owner of revenue, and is often associated with the activities of larger illegal networks.

Unauthorized and illegal activities, including encroachment have the potential to undermine the sustainability of forest management especially from undetected violations and may deprive landowners of potential revenue from timber and other resources or values.

Regulatory Requirement & Agency of Authorization

Canada’s Constitution Act of 1867 gives the provinces jurisdiction over the “development, conservation and management of ... forestry resources” and the provinces generally control and manage the non-private land in the province, except for some lands under federal jurisdiction. The provincial and federal governments, as well as many First Nations in AB, are in negotiation or in court regarding Indigenous rights and title, with the focus on Crown Land. The Supreme Court of Canada has ruled that the Tsilhqot’in Nation holds Aboriginal title to traditional territory in British Columbia. These processes are generally proceeding as guided by legal determinations.

The Alberta Bill of Rights declares the existence of the right to the “*enjoyment of property, and the right not to be deprived thereof except by due process of law.*”

The *Public Lands Act* applies to “*public land in right of Alberta*” and paragraph 2.1 of the *Act* confirms “*the right, title and interest of the Crown as owner of public land.*” The *Public Lands Act* is also the instrument that authorises the Minister of Environment and Protected Areas (MEPA) to make decisions regarding public land. On Crown land, the *Forest Act* provides the authority for the issuance of forest management licenses and permits.

On private land, legal ownership is conferred by the *Land Titles Act*. The *Land Titles Act* provides the legislative framework for the department to register land related documents that both create and terminate legal rights in property. The land registration system used in Alberta operates under the legislative authority of the *Land Titles Act*.

On Crown land, the *Forests Act* authorizes the Lieutenant-Governor to make regulations prescribing how timber dues are determined and Alberta’s Ministry of Forestry, Parks and Tourism (MFPT) is authorized to set and collect royalties for Crown timber harvested under licence or permit. The Timber Management Regulation (Reg 60/1973) provides the methodologies for setting dues rates which are available at <https://www.alberta.ca/timber-dues-and-crown-fees.aspx>.

Dues rates are set by species group and product type—there is one dues rate for coniferous timber used for lumber, pulpwood and roundwood, another rate for deciduous pulpwood, and separate rates for veneer, OSB bolts and LVL bolts.

	<p>Dues rates are calculated monthly and are based on end-product price index levels.</p> <p>Transactions involving timber harvested from private land are governed by contract law. Generally there is a written contract between the landowner and the timber purchaser that includes a purchase price or a formula for determining the purchase price. Owners of private forest land pay property taxes to the government. The property tax is made up of a municipal tax and an education tax—for non-residential properties (excluding farmland) the educational rate is 0.37% of the assessed property value. Municipal taxes vary by municipality.</p> <p>CITES</p> <p>CITES sets controls on three levels of allowable trade; Appendices I, II and III provide distinct trade restrictions and requirements that must be observed. Any type of wild plant or animal may be included in the list of species protected by CITES, and new species can be listed at any time depending on their degree of endangerment.</p> <p>In Canada, Environment and Climate Change Canada (ECCC) is the lead agency responsible for implementing and administering CITES on behalf of the federal government, which it does under the <i>Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA)</i> and the <i>Wild Animal and Plant Trade Regulations</i>. Within ECCC, the Canadian Wildlife Service (CWS) administers CITES and interacts with provincial, territorial, and other federal agencies. The <i>Wild Animal and Plant Trade Regulation – Schedule 1</i> provides a listing of CITES flora and fauna.</p> <p>EUTR</p> <p>In Alberta, the issuance of licences on Crown lands is tightly regulated by the provincial government. The provincial framework, notably the <i>Forest Act (2000)</i> ensures that timber must be harvested in compliance with licence requirements (management agreements, timber permits or licences and timber quotas) including associated Forest Management Plans (FMPs). On private lands there is no legislation pertaining to illegal logging.</p> <p>Legal mechanisms as defined in the <i>Forest Act</i> and the associated Transportation Regulation ensure that primary forest products are accompanied by a transportation certificate when being transported on public roads from both crown and private land. This transportation certificate must identify the source of the primary forest product. Within Alberta, the <i>Act</i> requires Crown timber be manufactured into forest products within Alberta, although the Minister of Forestry, Parks, and Tourism (MFPT) may issue an exemption for specific lots of timber. This <i>Act</i> does not regulate timber exports from private lands. Export restrictions for Crown logs do not apply to timber harvested on private land.</p> <p>On Crown land and private land, legal authority for ownership comes from the <i>Forests Act</i> and the <i>Land Titles Act</i> and Regulations. The issuance of licences on Crown lands is tightly regulated by the provincial government. The <i>Forests Act</i></p>
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ensures timber must be harvested in compliance with licence requirements (management agreements, timber permits or licences and timber quotas) including associated Forest Management Plans (FMPs). The Timber Management Regulation ensures primary forest products are accompanied with transportation certification of origin (timber licence, permit or quota) when being transported on public roads from both Crown and private land. Other legislation that may be pertinent to extractive resource encroachment or trespass include the *Mines and Minerals Act*, *Public Lands Act* and the *Water Act*. Most dispute aspects of these *Acts* are settled by the Alberta Energy Regulator particularly for below surface activity, or Alberta Ministry of Environment and Protected Areas (MEPA) or Ministry of Forestry, Parks and Tourism (MFPT) for surface related infractions.

On private land, legal ownership is conferred from the land *Titles Act* and the Proof of Identity Regulation as well as the *Public Service Act* which regulates land title registration and the registrar of titles. In Alberta, the ownership of forest land is well-established and the system of property rights functions to maintain the rights and benefits of ownership. Private land trespass is illegal under the *Petty Trespass Act* and the *Mines and Minerals Act*.

Mechanism & Supporting Evidence

The regulatory mechanisms that enable the Alberta government to issue licences and permits to harvest Crown timber were described above. The terms and conditions of the licences and permits, and of forest management plans where applicable, set out the requirements that a licence or permit holder must adhere to, as well as government responsibilities.

Under this system, the government has custody of all original titles, documents and plans and has the legal responsibility for the validity and security of all registered land title information.

The *Land Titles Act* and the Proof of Identity Regulation regulate land title registration and the registrar of titles. In Alberta, the ownership of forest land is well-established and the system of property rights functions to maintain the rights and benefits of ownership. Private land trespass is illegal under the *Petty Trespass Act* and the *Mines and Minerals Act*.

The Alberta government derives revenue from the harvest of Crown timber in the form of royalties. Most Crown timber is scaled at the receiving mill. The scale data is used to calculate the amount of royalties owed to the government—the rates in force at the time the timber is scaled are applied.

The conditions of sale/purchase of private timber, including the payment for the timber, are part of the timber sale contract. These contracts are enforceable through provincial law. Timber harvested on private land is either scaled at roadside or more commonly is measured by weight when it arrives at a mill.

CITES

WAPPRIITA regulates the export/import of CITES listed species, including tree species. CITES-listed species may not be imported into Canada without a CITES permit. ECCC works with a broad range of partners, including the Canada Border Services Agency (CBSA), to ensure imports comply with CITES and with relevant legislation and regulations in foreign countries for non-CITES species. To help customs agents distinguish between wood products from CITES-listed tree species and from other trees, Canada has created and distributed internationally the CITES Identification Guide – Tropical Woods and is working on means to increase the reliability of species identification on trade permits, customs forms, border declarations and associated documents.

EUTR

On Crown land, a licensee must harvest timber subject to an FMP, associated regulations and government approval and permits.

The *Forest Act* ensures that primary forest products are accompanied with transportation certification of origin (timber licence, permit or quota) when being transported on public roads from both crown and private land.

On private land, the ownership of forest land is generally well-established in Alberta and the system of property rights functions to maintain the rights and benefits of ownership. Common law ensures the right of property owners to make contracts to sell or otherwise dispose of timber on their land, and these laws are rigorously enforced. There is no pertinent legislation regarding illegal logging on private land.

On private land the landowner is responsible for supervision of illegal activity, encroachment, or trespass. Common law ensures the right of property owners to make contracts to sell or otherwise dispose of timber on private land and these laws are rigorously enforced.

Timber imports into Canada require purchase agreements and documentation of species verified by scale reports. Most timber imports and exports are associated with cross-border trade with the United States, which is a low-risk jurisdiction for illegal harvesting and border/customs governance. In addition, the import of wood/wood products is not for the purpose of sawmills and/or feedstock for the pellet industry.

On Crown and private land encroachment or trespass for either timber harvest or other extractive resource uses are subject to adjudication under the conditions of licence or ownership conferred by legislation. In these instances, a system is implemented to identify, report, control, prevent and mitigate unauthorized or illegal activities. Non-compliances are reported quarterly and annually by MOEPA and MFPT.

The forest manager or landowner is required to report illegal activity, encroachment or trespass either to the Crown authority, or for private land the Municipality or the police. When it is not the responsibility of the Crown or police, the forest manager or landowner will implement preventive measures and monitoring and mitigation measures if illegal or unauthorized activities are detected.

	<p>Oversight Framework</p> <p>The Minister of Forestry, Parks, and Tourism (MFPT) has the responsibility to oversee the licencing and permitting of timber harvesting and the adherence of licensees and permit holders to the terms of those instruments. The <i>Forest Act</i>, as well as Forest Management Agreements (FMAs), provide some direction regarding dispute resolution and the provincial court system is available to handle disputes that cannot be settled otherwise.</p> <p>The rights of private property owners are protected by the judicial system and disputes that cannot be settled by negotiation are decided in the courts.</p> <p>The Timber Management Regulation sets out penalties for late payment and provides the MFPT with options to allow for alternative payment schedules. The <i>Forests Act</i> provides compliance and enforcement mechanisms that are intended to ensure royalties will be paid for Crown timber.</p> <p>Private sellers of timber have recourse via the judicial system if a dispute over payment for timber cannot be resolved.</p> <p>CITES</p> <p><i>WAPPRIITA</i> is used to enforce CITES in Canada as well as to control imports of non-CITES-listed species obtained illegally. All CITES permits must be presented to, and validated by, the CBSA. In Alberta on Crown and private land, the Ministry of Environment and Protected Areas (MEPA), Wildlife Branch has the licencing and enforcement responsibility for wildlife harvesting. They help ensure provincial implementation of <i>WAPPRIITA</i>.</p> <p>EUTR</p> <p>On Crown land, MFPT is responsible for oversight and enforcement of legal harvesting in compliance with licence requirements and various FMPs.</p> <p>There appears to be no government oversight or pertinent legislation to enforce regarding illegal logging on private land. Ownership and rights to harvest Crown timber are affected by resolution of Aboriginal rights and title issues and changing social values.</p> <p>Results</p> <p>Illegality associated with forestry is very uncommon in Canada, which is assessed by Transparency International as having a very high standard of legality (Canada tied for eleventh least corrupt country in 2020). The ownership of forest land is generally well-established in Alberta and the system of property rights functions to maintain the rights and benefits of ownership.</p> <p>The Alberta Bill of Rights provides high-level protection of property rights and on Crown land, the <i>Forest Act</i> authorises the MFPT to issue licences and permits and ensure that the terms thereof are met. This system appears to</p>
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work effectively as there was no evidence located of problems in the system or long-running disputes.

On private land, the legal basis for ownership is established and the land titles registry system works effectively.

Tenure holders pay timber dues when timber is harvested and scaled, in addition to other charges and fees associated with holding tenure. The general rates of timber dues are updated monthly to reflect current market and financial conditions, ensuring that Albertans receive a fair return for the resource. In fiscal year 2021-22, the Government of Alberta and the Forest Resource Improvement Association of Alberta (FRIAA) collected \$651 million in timber dues. The dues are used to fund provincial programs and services and forest improvement activities. FRIAA-funded projects enhance Alberta's Forest resources and improve the integrated management of Alberta's forested lands for the benefit of Albertans. FRIAA-funded projects create jobs and economic activity in rural Alberta.

Statistics regarding the number of incidences of non-payment were not publicly available for either Crown or private land. Because MFPT has the authority to deny approval of harvesting operations on Crown land, instances of non-payment of royalties are likely very infrequent.

On private land, a contractor that doesn't meet the payments provisions in contracts will rapidly become unemployed as word circulates. Hence non-payment is also likely very uncommon on private land.

CITES

ECCC reports annually regarding the enforcement of *WAPPRIITA*. The five most recently available annual reports were reviewed (2015-19). During these five years, annual inspections under *WAPPRIITA* averaged 1,600 in the first three years, with an average of 284 violations. During the last two years, the inspections increased 85% with the majority focused on foreign species. None of the five *WAPPRIITA* annual reports mentioned violations regarding timber or live tree species.

EUTR

Canada is assessed by Transparency International as having a very high standard of legality. In 2020, Canada scored 77/100 on the Corruption Perceptions Index (tied for eleventh (out of 180) least corrupt country).

The Forest Stewardship Council (FSC) National Risk Assessment determined that illegality associated with forestry is very uncommon in Canada including in Alberta and the risk of violations or corruption is low.

In Alberta, the movement of fibre from all land ownerships to the processing mill is tracked by the provincial system, which provides elevated level of assurance that timber from crown land is legally harvested and supplied. Although there is limited harvest oversight on private land, transportation

regulations are in place. The 2022 *Forests Act* contravention report indicated 15 contraventions, none related to illegal harvesting.

There is no evidence of other resource extraction conflicts, encroachment, or trespass on Crown or private land.

Rationale for Risk Designation

The legal basis for the ownership of land and the issuance of licences and permits on public land is well established and no evidence was located of systematic issues or disputes. The indicator is assessed as low risk on Crown and private land.

Although no data were located that reported the rate of non-payment of stumpage, royalties, duties or other fees for timber, MFPT has strong powers to enforce payment and the judicial system is fully capable of resolving disputes related to private timber sales.

CITES

Review of the CITES Appendices I, II, and III confirms there are no Alberta tree species on the CITES list of species and there are no records of CITES timber importation for local processing. Therefore, the risk of harvesting CITES species is designated as low at the provincial level.

EUTR

Illegality associated with forestry is very uncommon in Canada. The movement of fibre from all land ownerships to the processing mill is tracked by the provincial system, which provides high level of assurance timber from Crown is legally harvested and supplied. Although there is limited harvest oversight on private land, transportation regulations and low harvest levels ensure minimal illegal harvest risk. Therefore, the provincial risk of illegal harvesting is designated as low at the provincial level.

Illegal logging and activities in Canada are very uncommon. Alberta has a robust mixture of legislation establishing rights and title over Crown and private land. Illegal harvesting is rigorously monitored under Crown licencing and on Crown and private land under transportation certification. Current Crown and private legislation provide significant protection from extensive alternative resource extraction encroachment and trespass.

Therefore, the risk of unauthorized and illegal activities is determined to be low for both Crown and private land.

Means of Verification

- Review of legislations
- Evidence of disputes
- Transportation certificate tracking process
- Fiber Procurement Contracts – legality obligations

	<ul style="list-style-type: none"> - Payment invoices - District of Origin forms - Chain of Custody procedure manuals - Species list – scale reports & load slips - Government notices - Forest Management Agreements & maps of license boundaries - Registered land titles & lot boundary maps <p>Evidence Reviewed</p> <ul style="list-style-type: none"> - Alberta Government. 2000. Bill of Rights - Alberta Government. 2000. Forests Act - Alberta Government. 2000. Land Titles Act - Alberta. 2023. Land titles web page - Transparency International. Corruption Perceptions Index 2020 - Review of CITES legislation and Appendices I, II, & III Species List vs Tree Species of Alberta - Transportation Management Regulation - Canadian federation of woodlot stats - Crown Charges Related to Tenure - Alberta’s Forest Economy 2022 A Handbook of Public Economic and Socioeconomic Accounts – Royalties, Taxes Sections – Pg 40 & 41 - Alberta Property Tax Calculator - Timber Management Regulation - Proof of Identity Regulation - Mines & Minerals Act - Public Lands Act - Wildlife Act - Water Act - Public Service Act - Petty Trespass Act - Woodlot Association of Alberta - FSC National Risk Assessment (2019)
(ii) Forest regeneration of harvested areas	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input checked="" type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	<p>Context</p> <p>The National Deforestation Monitoring System (NDMS) provides the following definitions that are applicable to the assessment of this indicator:</p> <ul style="list-style-type: none"> - Deforestation – The direct human-induced conversion of forested land to non-forested land use. - Forest – A minimum area of land of 1 ha with tree crown cover of more than 25%, and with trees having the potential to reach a minimum

height of 5 m at maturity in situ. Young natural stands and all plantations that have yet to reach a crown density of 25% or tree height of 5 m are included, as are areas that normally form part of the forest area which are temporarily un-stocked as a result of human intervention such as harvesting or natural causes but that are expected to revert to forest.

To ensure sustainable future forests, regeneration with either natural or planted seedlings following harvest needs to be prompt and adequate to meet future needs. Sufficiency is a measure of species selection, seedling distribution and time of establishment. Species selection needs to be consistent with site ecology (i.e. original stand composition, ecosite and natural disturbance regime) and considerate of future climate change risks. Distribution needs to be sufficient to allow future crop trees to occupy the site in a free growing state and timing needs to be prompt enough to allow early establishment unhindered from competing vegetation.

Potential Threats

Deforestation following harvesting is a practice that reduces or eliminates the biological diversity associated with the natural forest and reduce or eliminate any social benefits from the area. Extensive deforestation continues to be an important global contributor to climate change.

Inadequate reforestation can be a result of considerable time delay following harvest, unacceptable species selection, inadequate control of competing vegetation and significantly uneven density. These will compromise future forest fibre harvest volume and value, as well as ecosystem functions and related productivity.

Regulatory Requirement & Agency of Authorization

The *Forests Act (2000)* regulates harvest on Crown land and the Timber Management Regulation (1973) regulates forest regeneration. *The Act* establishes the authority to set rules for reforestation operations. The Timber Management Regulation, Part 6 establishes the reforestation requirement.

Private land is defined as “*tracts of private land of any size and shape containing area of natural or planted trees*” (AWE Society 2012). Owners are not required to provide a management plan but may be required to meet municipal standards for reforesting tree removal areas under the *Municipal Governments Act*.

Mechanism & Supporting Evidence

Conversion of forest to non-forest due to forestry activities is guided by the Forests Act and is generally confined to the construction of permanent roads and/or infrastructure required for operations (i.e. gravel pits, etc) which is not included within the calculations of deforestation (as described in context).

In AB, conversion to non-forest is primarily the result of activities in sectors other than forestry (i.e. agriculture, energy, mining, transport, urban expansion, etc.). These changes in land use caused by the oil and gas, mining and hydro sectors generally occur on Crown land as a result of provincial government policies and are regulated as defined above. It should be noted that obtaining revenue from timber, including biomass procurement, is not an economic driver for any of the forest-clearing activities of other sectors.

However, if the fibre from forest-clearing activities is unavailable for biomass producers to procure, it is either burned or left to decay. Either have an outcome that results in the emission of greenhouse gases, especially since the intensity of outdoor burns of piled timber is usually relatively low. Most conversion on other private land is related to urban development and clearing for agriculture purposes. Due to the relatively small size of the individual parcels cleared and non-commercial nature of the resulting fibre, leaving the piles to decay or burning them are the common practices.

On Alberta Crown land, the intent is to facilitate sustainable forest management. Holders of a timber disposition (Forest Management Agreement (FMA), quota, license or permit) on Crown land are required to meet reforestation standards within two years of harvest. The standards are described in the Alberta Reforestation Standard (2000). Timber disposition holders are required to submit a reforestation plan for government approval as part of an Annual Operating Plan (AOP). Licensees conduct regeneration stocking surveys post-harvest on clearcuts and partial cuts. The intent is to capture natural regeneration, if possible, but the requirement is for adequate stocking within two years of harvest. Decisions for fill or full planting are made based on these surveys.

On private land there is no requirement to reforest except if stipulated in a voluntary management plan.

Oversight Framework

On Crown land, the Alberta Ministry of Forests, Parks, and Tourism (MFPT) has oversight of the implementation of the *Forests Act* and the Timber Management Regulation. This is administered through the Ministry’s Forestry Branch. Reforestation in Alberta is the legal responsibility of timber disposition holders harvesting trees on Crown land. FMA and quota holders plan and conduct reforestation and are required to report the results of reforestation activities to the government annually. Timber licence and permit holders are charged a reforestation levy and the reforestation activity is conducted by MFPT.

To ensure forestry activities are conducted in a sustainable manner and in compliance with legislation, reforestation activities and associated results are audited annually by MFPT.

On private land there is no specific oversight body assessing reforestation standards.

Results

Canada is among the nations with the lowest rate of deforestation in the world. The Food and Agriculture Organization's (FAO) most recent Global Forest Resources Assessment (2015) reported a 0% rate of change to forest cover (2010 – 2015) in Canada. (Note that this means that any deforestation was balanced by afforestation, not necessarily that there was no deforestation. However, the result is suggestive of a low rate of deforestation.)

For Canada, NRCan (2018) reported an annual rate of 0.02% deforestation from all sources and states that the rate has been declining over the last 26 years, falling from 64,000 ha/yr in 1990 to 37,000 ha/yr in 2016. Annual deforestation caused by forestry declined from 3,682 ha in 1990 to 1,368 ha in 2016. In 2016 (current available data), forestry accounted for less than 4% of deforestation. Major contributors were agriculture (33%), mining and oil and gas (33%), urbanization (18%) and hydro-electric developments (12%).

NRCan's 2018 State of Canada's Forests Report states that:

- Canada's overall deforestation rate is expected to decline further over time.
- Deforestation resulting from activity in Canada's oil and gas sector has increased since 1990, but conversion of forest to agricultural land uses will likely remain the largest cause of deforestation in Canada.

The National Forest Database indicates from 2016 to 2020 Alberta planted 103 to 123 million seedlings annually on Crown land. The planted species were split evenly between pine and spruce. The most current Alberta Annual Reforestation Status (2019-20) reports on the harvest years 2005 and 2006. The Status assesses if reforestation efforts achieve the Reforestation Standard of Alberta. For the 2005 and 06, the re-growth rate, on average, was 97.6%. This means regenerating forests in areas reported for both those timber years (some 74,000 ha) are close to achieving full reforestation.

Private land does not require regeneration surveys and reporting unless stipulated in voluntary management plans. The National Forest Database has no planting statistics for private land. The Agroforestry and Woodlot Extension Society 2012 survey indicated most woodland owners do not actively manage woodlots. The survey show 82% of 106 respondents had no management plan and 60% planted 0 to 1,000 seedlings between 2003 and 2012.

Harvest on private land is low. In 2020 the National Forestry Database reported a private land harvest of 1.4 million m³ hardwood and 780,000 m³ softwood logs and bolts as well as 1.1 million m³ hardwood pulpwood, but reported the private land wood supply to be 0 m³.

Rationale for Risk Designation

Data on the rate and causes of deforestation revealed that forest operations were a minor contributor to deforestation. Deforestation was found to be relatively low and because it is ecologically, socially, and economically preferable for utilization of fibre that has been felled by land clearing operations than to have it piled and either left to rot or burned, **Crown land are assessed as low risk.**

On private land, specifically on treed lands being converted for agricultural purpose, the downed fibre is often left to decompose or burned. Both these actions result in increased GHG emission, as well as poor utilization of a resource. Conversion to non-forest lands is more likely to occur on 'private land' due to changes in land use. The indicator requires no sourcing from converted stands.

Forest regeneration on Crown land is a mix of natural and planted seedlings. Full planting is conducted on most harvested areas or under conditions where natural regeneration is likely to be insufficient. The two-year establishment requirement leads to significant planting. Regeneration surveys are conducted to determine adequate stocking of appropriate species. Fill planting decisions are based on these surveys. Planting records and plantation reports are available annually and indicate sufficient regeneration.

On private land most reforestation is natural with little planting. There are no management plans or obligations to reforest on private land. Private land harvest is erratic and low.

There is no legislation restricting conversion, or Best Management Practices at the local level, or data on conversion to non-forest lands nor readily available conformance data. Based on this, **the designation for 'private land' is specified risk.**

Mitigation Measures

To mitigate the specified risk identified with other private lands in this indicator, the BP will utilize a combination of the Education & Outreach approach with Monitoring Forest Feedstock sources to ensure that risk on procured feedstock is mitigated appropriately.

The BP monitors fibre deliveries & forest sites received monthly using a combination of contracts, installed scaling systems, government reporting software, GIS software, & other best available data.

Forest Feedstock (low grade roundwood & in-woods chips)

Prior to contract signing or purchase of forest feedstock from private land sources, the BP will require the landowner / supplier to complete a questionnaire probing various questions about the specified risk indicators affiliated with their harvesting operation that are identified in the REDII Supply Base Evaluation. This will count as a pre-delivery risk assessment on the private land parcel. The questionnaire will be reviewed by the biomass producer and compliance will be determined based on the answers provided. Specifically relating to this indicator, the questionnaire will target questions around forest management & regeneration plans for the source.

- If the BP deems that the specified risks outlined in the SBE are being satisfactorily addressed, the feedstock will be considered SBP REDII compliant.
- If the BP deems that the specified risks outlined in the SBE are not being satisfactorily addressed, the feedstock will be considered SBP controlled.
- The following year, the BP will then conduct an onsite inspection of a sample of forest sites that were categorized as SBP REDII compliant according to the questionnaire to verify answers provided in the questionnaire.
- If the inspection results corroborate the questionnaire, the BP will consider the specified risks mitigated for that feedstock source.
- If the inspection results do not corroborate the questionnaire, the supplier will be subject to the procurement policy mitigation (see below)

In addition to the questionnaire, the BP will provide the landowner / supplier of feedstock from private lands with a wood procurement information package document that highlights best practices for management against each of the specified risk indicators on the private lands that they operate on. The intent of this document is to provide additional Education & Outreach to our suppliers and ensure that fibre received by the BP on private lands is from sustainably managed sources.

Effectiveness Monitoring – Forest Feedstock

- The biomass producer will maintain records of questionnaires, field site inspection forms, and correspondence with the supplier for each applicable private land forest site.
- All non-conformities will be documented by the BP in the onsite risk assessment form and communicated with the supplier
- Records of non-conformities will be recorded and documented
- If a supplier is found to have non-conformities two years in a row, they will be subject to the procurement policy

- Effectiveness will be met by monitoring how suppliers change over time and whether identification of non-conformities lead to changes on the ground.

Processing Residues & Post-Consumer Feedstock (wood industry residuals & waste)

Although the scale and intensity of material used by processing residue & post-consumer suppliers from private land is low across Alberta's Forest Industry, the BP is committed to mitigating risk where applicable & contributing to positive / sustainable forestry outcomes in all regions with active operations. To address the potential of specified risk on processing residue & post-consumer feedstock, the BP will develop a detailed information package that includes maps of publicly available data called the "Supplier Mapping Package". Within this document the BP will address all specified risk that is highlighted in the REDII Supply Base Evaluation of AB.

Where data is available, the BP will create maps that highlight the location of private lands that interact with the applicable specified risk indicators. If overlap is identified between any of the specified risk layers and private lands for the applicable year, the BP will provide suppliers that do not provide 100% certified claims with a supplier mapping package relating to each applicable specified risk. The supplier mapping package will be reviewed with each supplier and documented accordingly. For indicators with a specified risk designation that cannot be spatially verified, detailed information on the specified risk will be provided within the package.

The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of the HCV, and thereby mitigate the risk of sourcing materials from sites where the HCV in the specified risk area is threatened by forest management activities. The mitigation measure is part of the FSC's guidance including "Education & Outreach" central theme.

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	<p>Means of Verification</p> <ul style="list-style-type: none"> - FMP annual reforestation reports - Licensee regeneration surveys - Seedling purchase records - Planting contracts - Post-harvest stocking survey reports <p>Evidence Reviewed</p> <ul style="list-style-type: none"> - Forests Act - Timber Management Regulation - Alberta Ministry of Forestry, Parks & Tourism, Forestry Branch - Agroforestry and Woodlot Extension Society 2012 – Profile of Private Forestland Sector in Alberta - Towards Sustainable Private Woodlots in Alberta, 1997 - 2022 Annual Status of Reforestation in Alberta - Deforestation in Canada—What are the facts? 2016. Natural Resources Canada, Canadian Forest Service, Ottawa. 2 pg. – http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/36710.pdf - Natural Resources Canada (NRCan) – State of Canada’s Forests 2018 – s://www.nrcan.gc.ca/our-natural-resources/forests-forestry/state-canadasforests-report/16496 - FAO Global Forest Resources Assessment (2015) – http://www.fao.org/3/ai4808e.pdf
<p>(iii) That areas designated by international or national law or by the relevant competent authority for nature protection purposes, including in wetlands and peatlands, are protected unless evidence is provided that the harvesting of that raw material does not interfere with those nature protection purposes</p>	
<p>Type of Risk Assessment used</p>	<p><input type="checkbox"/> Level A – proof at national or sub-national level</p> <p><input checked="" type="checkbox"/> Level B – management system at forest sourcing area level</p>
<p>Level A risk assessment description</p>	<p>N/A</p>
<p>Level B management system at the level of the forest sourcing area</p>	<p>Potential Threats</p> <p>Forest operations activities, as well as the activities by other sectors, may pose a threat to key ecosystems and habitats through fragmentation, the direct and indirect effects associated with access, and loss or degradation of key ecological attributes for ecosystems and habitats sensitive to logging disturbance.</p> <p>With respect to wetlands, peatlands, & riparian areas, forest management activities may negatively affect water resources directly and indirectly. Impacts include sedimentation, disturbance of site’s hydrology above and underground, modification of the site’s capacity to control seasonal precipitation fluctuations (i.e. flooding), spawning habitat, hinder fishes’ capability to move up or downstream, water temperature, water quality (i.e. turbidity) and/or quantity, loss of riparian habitat and function.</p>

Regulatory Requirement & Agency of Authorization

As of December 2023, 9.1 million ha (13.7%) of AB is protected in parks and other types of protected areas. This area includes 76 provincial parks and five national parks. Additional protection is provided through wilderness areas, ecological reserves, wildland parks, natural areas, heritage rangelands and provincial recreation areas. In addition to the national parks, the federal government also has a role in conserving key ecosystems and habitats under specific circumstances:

- Fisheries, through the Department of Fisheries & Oceans and the Federal Fisheries Act, section 35(1)
- Species at Risk through the Species at Risk Act
- Migratory Birds through the Migratory Birds Convention Act, 1994

With regards relevant legislation and regulations for forestry operations on Crown land, conservation of key ecosystems and habitats is largely the responsibility of the provincial government & monitored through FOMP.

There is minimal legislation specific to forest management practices on other private land for key ecosystems and habitats. Landowners are subject to federal and provincial acts such as the Species at Risk Act, Federal Fisheries Act, Water Sustainability Act, and the Wildlife Act.

Wetlands and peatlands are protected on Crown land through comprehensive legislation. For both Crown & private land, the following legislation applies to water:

- Federal Fisheries Act
- Canadian Environmental Protection Act (CEPA)
- Alberta Forests Act
- Alberta Water Act
- Alberta Environmental Protection & Enhancement Act (EPEA)

The federal Fisheries Act and the provincial Water Act provide protection to fish-bearing wetlands and the AB Water Act applies on all ownerships.

Mechanism & Supporting Evidence

The federal legislation provides protection for fish from contaminants and pollution related to forest harvesting. This is administered through Fisheries and Oceans Canada. In addition, Environment and Climate Change Canada (ECCC) implements water quality protection through the Canadian Environmental Quality Guidelines. Fisheries and Oceans Canada has an approval process and management requirements for projects near water ensuring no deleterious impacts associated with the activity while working within or near water courses or water bodies.

In Alberta, maintenance and enhancement of water quantity and quality for both Crown and private land is managed through the *Water Act*.

For forest harvesting and road building on Crown land, water quality / quantity & ecosystem maintenance and enhancement is implemented through the

Forests Act's Timber Management Regulation which enables the Timber Harvest Planning and Operational Ground Rules (THPOGR). In addition, the Alberta Forest Management Planning Standard (AFMPS) requires forest management plans include spatial harvest sequencing that consider watershed and riparian values as well as prediction of harvest impacts on water yield.

The guidelines for water quality and quantity maintenance on private land are adherence to the *Water Act* and associated Water Regulation. Adherence to *EPEA* is also required in consideration of delivery of any deleterious substance to a water body. Crown and private land guidance for managing forest harvesting around wetlands is provided through the implementation of the Alberta Wetland Policy. The policy is administered under the *Water Act* and has separate approval mechanisms for temporary and permanent wetlands.

Ducks Unlimited and partner Alberta Forest companies have developed the Forest Management Wetland Stewardship Initiative (FMWSI) which provides operating ground rules and Best Management Practices (BMPs) for Forest Management Plans (FMPs) related to wetlands and wetland ecosystem mosaic conservation. It is unclear if these are applied voluntarily and uniformly on Crown or private land.

On other private land, there are few mechanisms for ensuring that key habitat and ecosystems are conserved. The federal and provincial requirements that apply to other private land are generally enforced only when a public complaint is made.

Oversight Framework

Alberta Forestry, Parks and Tourism (FPT) monitors compliance with the THPOGR and the General Development Plan (GDP) and through the Forest Operations Monitoring Program (FOMP) which has had ISO 9001 certification since 2009. Compliance reports are provided annually. In addition, MFPT encourages self-reporting by companies and individuals.

On Crown land forest managers are responsible for inclusion of water quality and quality related Operating Ground Rules (OGRs) in GDPs. Forest managers are also responsible for annual harvest block compliance monitoring. Licensee managers are responsible for five-year stewardship reporting including water related OGR compliance. These reports include incidence of pollutant sills or erosion entering water bodies and adherence to their values, objectives, indicators and targets (VOITs) which include Regional Water Conservation guidelines and OGR related to water quality.

Alberta Ministry of Environment and Protected Areas (MEPA) monitors compliance to the *Waters Act* and spill or pollutant incidents related to water courses or water bodies. MEPA also provides water licencing and temporary diversion approvals and monitoring.

Results

Logging is not permitted in the areas protected by statute described above. On Crown land, through a combination of routine resource stewardship monitoring

and intensive effectiveness evaluations, the ministry evaluates key ecosystem conservation at both stand-level and landscape-level.

The fRI Research program conducts research on a variety of areas, including hydrological response to disturbance, culvert impacts on fish and modelling forest harvest on flow regimes. This research has assisted in the development of provincial watershed assessments and operational harvesting guidelines.

MEPA conducts compliance and enforcement for water quality infractions under the *Waters Act* and FPT does the same for the *Forests Act*.

Unfortunately, the public reporting for both is insufficiently detailed to determine any infractions related to forest harvesting on Crown or private land related to water quality and/or quantity. Through FOIP requests, the BP was able to gather data that suggested monitoring for water & wildlife are monitored through FOMP.

Rationale for Risk Designation

For Crown and private land, the federal and provincial legislation related to the maintenance and enhancement of water quality and quantity is comprehensive and robust. On Crown land there are harvesting guidelines to reduce water quality impact from harvest operations. In addition, planning standards ensure management plans consider watershed and riparian values as well as prediction of harvest impacts on water yield.

An extensive legal and policy framework exists on Crown land for key ecosystems and habitats to be conserved or set aside in their natural state. In addition, there are other regulatory measures in place that contribute towards the conservation of key habitat and ecosystems.

On private land there are no requisite planning standards or requirements to evaluate water quantity impacts from forest harvesting. Private landowners are required to adhere to protection of water quality under the *Water Act* and manage land around wetlands consistent with the Alberta Wetland Policy. However, these actions are not independently monitored.

There are currently few required forest management practices on private land; for example, there is no formal requirement for wildlife or habitat protection. There is minimal direction surrounding working within riparian areas other than what may be present in applicable official community plans and bylaws. As a result of the absence of legislation, best management practices, monitoring and/or data a specified risk designation is assigned to other private land in AB.

With the lack of legal framework enforceable on private lands, the designations for this indicator are as follows:

- **Low Risk for Crown lands**
- **Specified Risk for Private lands**

Mitigation Measures

To mitigate the specified risk identified with other private lands in this indicator, the BP will utilize a combination of the Education & Outreach

approach with Monitoring Forest Feedstock sources to ensure that risk on procured feedstock is mitigated appropriately.

The BP monitors fibre deliveries & forest sites received monthly using a combination of contracts, installed scaling systems, government reporting software, GIS software, & other best available data.

Forest Feedstock (low grade roundwood & in-woods chips)

Prior to contract signing or purchase of forest feedstock from private land sources, the BP will require the landowner / supplier to complete a questionnaire probing various questions about the specified risk indicators affiliated with their harvesting operation that are identified in the REDII Supply Base Evaluation. This will count as a pre-delivery risk assessment on the private land parcel. The questionnaire will be reviewed by the biomass producer and compliance will be determined based on the answers provided. Specifically relating to this indicator, the questionnaire will target questions around forest management & regeneration plans for the source.

- If the BP deems that the specified risks outlined in the SBE are being satisfactorily addressed, the feedstock will be considered SBP REDII compliant.
- If the BP deems that the specified risks outlined in the SBE are not being satisfactorily addressed, the feedstock will be considered SBP controlled.
- The following year, the BP will then conduct an onsite inspection of a sample of forest sites that were categorized as SBP REDII compliant according to the questionnaire to verify answers provided in the questionnaire.
- If the inspection results corroborate the questionnaire, the BP will consider the specified risks mitigated for that feedstock source.
- If the inspection results do not corroborate the questionnaire, the supplier will be subject to the procurement policy mitigation (see below)

In addition to the questionnaire, the BP will provide the landowner / supplier of feedstock from private lands with a wood procurement information package document that highlights best practices for management against each of the specified risk indicators on the private lands that they operate on. The intent of this document is to provide additional Education & Outreach to our suppliers and ensure that fibre received by the BP on private lands is from sustainably managed sources.

Effectiveness Monitoring – Forest Feedstock

- The biomass producer will maintain records of questionnaires, field site inspection forms, and correspondence with the supplier for each applicable private land forest site.
- All non-conformities will be documented by the BP in the onsite risk assessment form and communicated with the supplier
- Records of non-conformities will be recorded and documented
- If a supplier is found to have non-conformities two years in a row, they will be subject to the procurement policy
- Effectiveness will be met by monitoring how suppliers change over time and whether identification of non-conformities lead to changes on the ground.

Processing Residues & Post-Consumer Feedstock (wood industry residuals & waste)

Although the scale and intensity of material used by processing residue & post-consumer suppliers from private land is low across Alberta’s Forest Industry, the BP is committed to mitigating risk where applicable & contributing to positive / sustainable forestry outcomes in all regions with active operations. To address the potential of specified risk on processing residue & post-consumer feedstock, the BP will develop a detailed information package that includes maps of publicly available data called the “Supplier Mapping Package”. Within this document the BP will address all specified risk that is highlighted in the REDII Supply Base Evaluation of AB.

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	<ul style="list-style-type: none"> - Withhold the supplier’s deliveries to the BP’s facilities - Non-renewal of purchase agreements upon expiry - Termination of the purchase agreement - Removal from consideration on future purchases <p>The information provided by the secondary suppliers are reviewed annually and verified by third party auditors to ensure they are complete and correct. The annual information collection and verification exercise reviews the mitigations effectiveness. Any deficiencies are uncovered, and new methodologies are developed to close any uncovered gaps.</p> <p>Means of Verification</p> <ul style="list-style-type: none"> - FOMP Monitoring - Existing legislation - Fiber contracts & annual supplier correspondence - Records of BP’s field inspections - Records of BP’s pre-delivery questionnaires <p>Evidence Reviewed</p> <ul style="list-style-type: none"> - Federal Fisheries Act - Canadian Environmental Protection Act - Alberta Water Act - Alberta Forests Act - Alberta Forest Management Planning Standard – Version 4.1 - Alberta Timber Harvest Planning & Operating Ground Rules - Alberta Environmental Protection & Enhancement Act - Alberta Wetland Policy - Ducks Unlimited Forest Management Wetland Stewardship Initiative
(iv) That harvesting is carried out considering the maintenance of soil quality and biodiversity with the aim of minimising negative impacts	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input checked="" type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	<p>Context</p> <p>In the context of this Indicator, soil quality & biodiversity is equivalent to soil productivity which is defined as the ability for a forest soil to allow forests to grow, produce crops and function with minimal human intervention. This Indicator evaluates soil quality on an individual site level; cumulative impacts to</p>

soil quality on the landscape from harvesting and road construction is beyond the scope of this Indicator.

Potential Threats

Potential impacts from forest management activities (i.e. harvesting and roadbuilding) can include on and off-site negative impacts to soil productivity, hydrology, watersheds and ecological values. Disturbances such as landslides, erosion and sedimentation can result in public safety and/or infrastructure damage.

Regulatory Requirement & Agency of Authorization

On Crown land, relevant provincial legislation includes:

- *Forests Act*
- *Timber Management Regulation*
- *Public Lands Act*

On private land the relevant legislation includes:

- *Soil Conservation Act*
- *Water Act*

In both instances, legislation is directed at soil conservation and the maintenance and enhancement of soil quality through sustainable forest and land management practices.

Mechanism & Supporting Evidence

On Crown land, the primary mechanisms for implementation of *Forests Act* legislation and regulation are the Forest Management Plan (FMP) and the General Development Plan (GDP). The Forest Operations Guide to soil productivity and protection comes from the Timber Harvest Planning and Operational Ground Rules framework (THPOGR). The most current version (2022) covers soil erosion, compaction and rutting associated with harvesting. In addition, it covers soil impacts from road construction, maintenance and reclamation and aquatic and riparian area protection from soil erosion. Soil conservation activities are specified in the General Development Plan (GDP) which is approved and monitored by Alberta Forests, Parks and Tourism (FPT) and by licensees.

On private land there is no specific implementation mechanism other than landowner recognisance and understanding of appropriate legislation (*Water Act* and *Soil Conservation Act*) as it relates to private land forest harvest activities.

Oversight Framework

Alberta Forestry, Parks and Tourism (FPT) monitors compliance with the THPOGR and the GDP and through the Forest Operations Monitoring Program (FOMP) which has had ISO 9001 certification since 2009. Compliance reports are provided annually. In addition, FPT encourages self-reporting by companies and individuals.

On Crown land forest managers are responsible for inclusion of soil related Operating Ground Rules (OGRs) in GDPs. Forest managers are also responsible for annual harvest block compliance monitoring. Licensee managers are responsible for five-year Stewardship reporting including soil related OGR compliance. The Stewardship reports include incidence of compaction, rutting and erosion and adherence to their values, objectives, indicators and targets (VOITs) which include Regional Soil Conservation guidelines and OGRs.

An additional indirect assessment of forest soil productivity maintenance or enhancement is through assessments of forest growth. In Alberta this is conducted through reforestation surveys and growth and yield monitoring.

There is no oversight of soil quality maintenance or enhancement on private land.

Results

The most current FOMP results available on-line is 2015/16. There were 20 enforcement actions under the Forests Act and Timber Management Regulation over the seven Land Use Framework Planning Regions. Penalties totalled \$72,500. Forests Act contraventions are reported annually and over the last five years contraventions have ranged from five to 15 with penalties ranging from \$300 to \$17,000. Neither of the above listed reports provides sufficient detail to determine if any contraventions were related to soil impacts. A FOIPA request was made to collect data on contraventions relating to soil impacts. There were no contraventions levied within the report, but data points were available to suggest that soil impacts are being monitored.

A review of two publicly available stewardship reports for the 2014 to 2020 period indicate assessments of block level soil productivity impacts. Results indicate all blocks audited have soil disturbance levels within target levels and in compliance with OGRs.

There is no compliance reporting for private land.

Rationale for Risk Designation

Alberta has comprehensive legislation for the maintenance and enhancement of soil productivity for both Crown and private land. On Crown land there are well described operational guidelines for harvesting related to soil erosion, compaction and rutting. The government monitors harvest blocks annually for compliance with FOMP. Crown licensees provide a stewardship assessment every five years with review of adherence to soil OGRs, soil disturbance targets and erosion on cut blocks as well as road construction and stream crossings.

There is no monitoring or reporting of compliance with the *Waters Act* and *Soil Conservation Act* related to forest harvesting on private land.

Based on the above assessment, a low risk for Crown land & specified risk for Private land is determined.

Mitigation Measures

To mitigate the specified risk identified with other private lands in this indicator, the BP will utilize a combination of the Education & Outreach approach with Monitoring Forest Feedstock sources to ensure that risk on procured feedstock is mitigated appropriately.

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Means of Verification

- FMP criteria and monitoring – VOITS
- Timber supply analysis (AAC & Landbase Netdowns)
- Reforestation MAI linkage into FMP (AAC & MAI Verification)
- Stewardship reporting – tenure holder
- OGR – Monitoring & Reporting – Tenure Holder
- FOMP Monitoring

Evidence Reviewed

- Reforestation Standard of Alberta
- Alberta Timber Harvest Planning & Operating Ground Rules
- Alberta Forest Management Planning Standard – Version 4.1
- Association of Alberta Forest Management Professionals (AAFMP) Study Guide – Forest Management Planning Alberta
- Sustainable Forests Management, 2015 Facts & Statistics, Enforcing Forestry Standards

	<ul style="list-style-type: none"> - Timber Management Regulation, Alberta Regulation 60/1973 with amendments up to & including Alberta Regulation 75/2021 - Forests Act - Alberta Water Act - Alberta Soil Conservation Act - Alberta Public Lands Act - Forests Act Contraventions - FOIP Data Requests on Forest Operations Monitoring Program results
(v) That harvesting maintains or improves the long-term production capacity of the forest.	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input checked="" type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	<p>Context</p> <p>The risk relating to maintaining long term production capacity of the forest can be measured by a combination of other indicators relevant to sustainable forest management, including</p> <ul style="list-style-type: none"> - Protection from Illegal Activities - Land Conversion - Soil Quality - Water Quality - Regeneration - Harvest Levels <p>Forest productivity can be reduced if harvesting causes levels of site disturbance that reduce future growth capacity or if excessive amounts of biomass are removed from the site.</p> <p>Potential Threats</p> <p>Feedstock harvesting that leads to overharvesting of the forest, damages the soil, or removes excessive amounts of biomass from the harvest block will erode the sustainability of the forest and the timber supply it produces. Management for the values stated within the context section should ensure that the viability of the forest for long-term productivity is maintained.</p> <p>Regulatory Requirement & Agency of Authorization</p> <p>Under the Forests Act, the right to harvest Crown timber is allocated to companies and individuals through forest tenures. The Timber Management Regulation under the FA describes how Alberta’s public forested lands are</p>

managed, the combination of these documents provides the legal framework for disposal of timber grown on public land in the province.

Different types of forest tenures managed under the Forests Act & regulations include:

- Forest Management Agreement (FMA)
- Timber Quotas
- Commercial Timber Permits
- Community Timber Permits
- Local Timber permits
- Forest Products Tags

Each tenure type has different requirements by the licensee as it relates to forest management.

Private land is unregulated with respect to harvest sustainability.

Results

The result of this assessment is covered by a combination of the above indicators as it relates to legality, conversion, soil & water quality, forest regeneration, & harvest levels.

- Harvest Legality – the assessment in indicator (i) resulted in a low-risk designation across all ownership types
- Conversion to Non-Forest & Regeneration – the assessment in indicator (ii) resulted in a low-risk designation for Crown land & specified risk for Private lands
- Soil – the assessment in indicator (iv) resulted in a low-risk designation for Crown land & specified risk for Private land
- Water – the assessment for indicator (iii) as it relates to wetlands & areas considered for nature protection result in a low-risk designation for Crown land & specified risk for Private land.
- Harvest Levels – the annual allowable cut is monitored for all forestry activity on Crown lands. Harvest is virtually unregulated as it relates to Private land

Rationale for Risk Designation

Based on the results of each assessment, a low-risk designation was derived for Crown land & a specified risk designation was derived for Private land.

Forest management on Crown land has extensive legislation with penalties for non-compliance levied to the cutting authority as monitored by the Alberta government. With the absence of monitoring for legislation as it relates to forest management on Private lands, a specified risk was justified.

Mitigation Measures

To mitigate the specified risk identified with other private lands in this indicator, the BP will utilize a combination of the Education & Outreach

approach with Monitoring Forest Feedstock sources to ensure that risk on procured feedstock is mitigated appropriately.

The BP monitors fibre deliveries & forest sites received monthly using a combination of contracts, installed scaling systems, government reporting software, GIS software, & other best available data.

Forest Feedstock (low grade roundwood & in-woods chips)

Prior to contract signing or purchase of forest feedstock from private land sources, the BP will require the landowner / supplier to complete a questionnaire probing various questions about the specified risk indicators affiliated with their harvesting operation that are identified in the REDII Supply Base Evaluation. This will count as a pre-delivery risk assessment on the private land parcel. The questionnaire will be reviewed by the biomass producer and compliance will be determined based on the answers provided. Specifically relating to this indicator, the questionnaire will target questions around forest management & regeneration plans for the source.

- If the BP deems that the specified risks outlined in the SBE are being satisfactorily addressed, the feedstock will be considered SBP REDII compliant.
- If the BP deems that the specified risks outlined in the SBE are not being satisfactorily addressed, the feedstock will be considered SBP controlled.
- The following year, the BP will then conduct an onsite inspection of a sample of forest sites that were categorized as SBP REDII compliant according to the questionnaire to verify answers provided in the questionnaire.
- If the inspection results corroborate the questionnaire, the BP will consider the specified risks mitigated for that feedstock source.
- If the inspection results do not corroborate the questionnaire, the supplier will be subject to the procurement policy mitigation (see below)

In addition to the questionnaire, the BP will provide the landowner / supplier of feedstock from private lands with a wood procurement information package document that highlights best practices for management against each of the specified risk indicators on the private lands that they operate on. The intent of this document is to provide additional Education & Outreach to our suppliers and ensure that fibre received by the BP on private lands is from sustainably managed sources.

Effectiveness Monitoring – Forest Feedstock

- The biomass producer will maintain records of questionnaires, field site inspection forms, and correspondence with the supplier for each applicable private land forest site.
- All non-conformities will be documented by the BP in the onsite risk assessment form and communicated with the supplier
- Records of non-conformities will be recorded and documented
- If a supplier is found to have non-conformities two years in a row, they will be subject to the procurement policy
- Effectiveness will be met by monitoring how suppliers change over time and whether identification of non-conformities lead to changes on the ground.

Processing Residues & Post-Consumer Feedstock (wood industry residuals & waste)

Although the scale and intensity of material used by processing residue & post-consumer suppliers from private land is low across Alberta’s Forest Industry, the BP is committed to mitigating risk where applicable & contributing to positive / sustainable forestry outcomes in all regions with active operations. To address the potential of specified risk on processing residue & post-consumer feedstock, the BP will develop a detailed information package that includes maps of publicly available data called the “Supplier Mapping Package”. Within this document the BP will address all specified risk that is highlighted in the REDII Supply Base Evaluation of AB.

Where data is available, the BP will create maps that highlight the location of private lands that interact with the applicable specified risk indicators. If overlap is identified between any of the specified risk layers and private lands for the applicable year, the BP will provide suppliers that do not provide 100% certified claims with a supplier mapping package relating to each applicable specified risk. The supplier mapping package will be reviewed with each supplier and documented accordingly. For indicators with a specified risk designation that cannot be spatially verified, detailed information on the specified risk will be provided within the package.

The intent of this mitigation option is to implement education and outreach-related actions that will result in changes to on-the-ground forest management activities that improve maintenance or enhancement of the HCV, and thereby mitigate the risk of sourcing materials from sites where the HCV in the specified risk area is threatened by forest management activities. The mitigation measure is part of the FSC’s guidance including “Education & Outreach” central theme.

The biomass producer will annually prepare supplier mapping packages for education and outreach activities. The BP will maintain a registrar of all

documented conversations with suppliers and follow the below process to measure how the mitigation measure performs over time.

A sample of suppliers will be selected annually from who received a supplier mapping package and review the data contained within the map package.

- The biomass producer will use a mitigation effectiveness review questionnaire for the interview which focuses on how the mapping package was used by the supplier.
- The desired outcome of these communications is engaging with the supplier, educating suppliers about the importance of the communication package to the BP's procurement systems, investigating how the supplier used the supplier mapping package, and whether it encourages on the ground changes in the supplier's management approach.
- Effectiveness of this process will be reviewed annually and adjusted to ensure the process remains effective for all feedstock supplies originating in Alberta.
- Once the effectiveness monitoring process has been implemented, the biomass producer can begin to formulate a reasonable assessment as to whether the mitigation measures are effective and if any modifications are required.

Procurement Policy

The BP expects that all suppliers contribute to the attainment of information required to carry out mitigation measures.

The procurement policy is in place to address suppliers who do not provide the necessary information for the BP to carry out effective mitigation or to address consecutive identifications of non-conformities. Any feedstock from a supplier who does not provide enough information to the BP will be considered SBP controlled feedstock until the proper information can be collected. SBP Compliant or SBP Controlled determinations are made monthly therefore either status will apply for a minimum of one month or until the required information is collected. In cases where information cannot be obtained, or the supplier has demonstrated multiple nonconformities that are unreasonable the BP will:

- Determine the root cause of the supplier's unwillingness to cooperate
- Determine if there is a way to obtain information that protects the suppliers' sensitivities but still achieves the BP's information requirements
- If the supplier and the BP cannot come to a mutual agreement on required information the BP may:

	<ul style="list-style-type: none"> - Withhold the supplier’s deliveries to the BP’s facilities - Non-renewal of purchase agreements upon expiry - Termination of the purchase agreement - Removal from consideration on future purchases <p>The information provided by the secondary suppliers are reviewed annually and verified by third party auditors to ensure they are complete and correct. The annual information collection and verification exercise reviews the mitigations effectiveness. Any deficiencies are uncovered, and new methodologies are developed to close any uncovered gaps.</p> <p>Means of Verification</p> <ul style="list-style-type: none"> - Existing legislation - Fiber contracts & annual supplier correspondence - Records of BP’s field inspections - Records of BP’s pre-delivery questionnaires
LULUCF criteria 29(7)	
Type of Risk Assessment used	<input checked="" type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	SBP-endorsed REDII Level A risk assessment for Article 29(7) LULUCF
Level B management system at the level of the forest sourcing area	N/A



Annex 3: SBP Processing residues and/or Post-consumer feedstock requirements

Not Applicable (Processing Residues and/or post-consumer feedstock not used)

Verification and monitoring of suppliers

Prior to receiving fiber from a Residual Fiber (processing residues & tertiary feedstock) source, the Fiber Team will submit an approval request to the Sustainability Team via MS Forms. Included in the approval request will be a “Residual Fiber Questionnaire” that the Sustainability Team will use to collect information from the supplier, including but not limited to:

- i. Name and address of the supplier
- ii. Type of Supplier (e.g. purchaser, saw/pulp mill, broker/trader, remanufacturer)
- iii. Categories of feedstock to be supplied (including relevant SBP product groups)
- iv. Level of control required for the supplier to assure correct fiber is being sent to the BP
- v. Self-declaration that the feedstock qualifies as processing residue or waste according to the REDII b)

The BP will monitor the compliance of its suppliers with SBP definitions and purchase specifications by using the answers provided in the Residual Fiber Questionnaire & corroborate the submissions in the Supplier Audit process. Suppliers that are found to have non-conformities with the verification process or have been found to be misleading the BP in the questionnaire, the Procurement Policy Mitigation Measure will be implemented as follows:

Mitigation Measure: Procurement Policy

Any feedstock from a supplier who either does not provide enough information or is found to have purposefully mislead the BP in questionnaires will be considered SBP controlled feedstock until the proper information can be collected. SBP Compliant or SBP Controlled determinations are made monthly therefore either status will apply for a minimum of one month or until the required information is collected. In cases where information cannot be obtained, or the supplier has demonstrated multiple nonconformities that are unreasonable the BP will:

- Determine the root cause of the supplier’s unwillingness to cooperate
- Determine if there is a way to obtain information that protects the suppliers’ sensitivities but still achieves the BP’s information requirements
- If the supplier and the BP cannot come to a mutual agreement on required information the BP may:
 - o Determine the feedstock is non-eligible input for SBP products
 - o Withhold the supplier’s deliveries to the BP’s facilities
 - o Non-renewal of purchase agreements upon expiry
 - o Termination of the purchase agreement
 - o Removal from consideration on future purchases

The information provided by the secondary suppliers are reviewed annually and verified by third party auditors to ensure they are complete and correct. The annual information collection and verification exercise reviews the



mitigations effectiveness. Any deficiencies are uncovered, and new methodologies are developed to close any uncovered gaps.

Feedstock inspection and classification upon receipt

All loads of fiber received by the BP are tracked within the company's LIMS tracking system. For a delivery to be entered into the LIMS system & accepted by the BP, the contract for fiber purchased needs to be agreed upon and set up.

Upon receipt of fiber deliveries to the BP, the supplier will be accompanied by documentation relating to the fiber that they are delivering. This fiber is visually inspected upon receipt for accuracy with the accompanied delivery documentation with a sample of loads from each supplier being selected for sample testing of the product.

Once a supplier is approved for delivery to the BP through the Residual Fiber Questionnaire process, the Sustainability Team will classify which SBP feedstock category the fiber will belong to. All Residual Fiber suppliers to the BP will be included in the sample for the Supplier Audit process to ensure that REDII compliance is ensured.

Supplier audit for processing residues and post-consumer feedstock

The BP will annually review the list of Residual Fiber suppliers to each site included in its SBP Certification Program & a sample of these suppliers will be selected for the Supplier Audit process. The annual audit will entail the following:

- A review of the answers provided in Residual Fiber Questionnaire that was supplied to the BP by the supplier, with the supplier
- A review of the Supplier Mapping Package provided (if applicable)
- An onsite visit of the supplier's facility by the Sustainability Team, which will consist of the following verification:
 - o Raw material procured by the supplier
 - o Preparation of feedstock for the BP from the supplier (confirmation that fiber is a processing waste or post-consumer feedstock)
 - o How fiber is loaded for transport to the BP

To select the sample of supplier sites to be visited the BP will consider the following classifications:

- Suppliers that are under common ownership & supply the same SBP feedstock category will be considered as one for the audit selection
 - o In this scenario, the BP will target an audit of different sites under the classification in subsequent audit periods
- Suppliers that are under different ownership, but are managed under the same certification certificate scope & supply the same SBP feedstock category will be considered as one for the audit selection
 - o In this scenario, the BP will target an audit of different sites under the classification in subsequent audit periods
- For each SBP Certificate held by the BP, the sample will be calculated as the following:

Audit Sample Size = $\sqrt{(x)*0.6}$



Where X is equal to the number of suppliers classified with the above considerations.

The BP will maintain documentation in the form of pictures, spatial location, & an internal assessment form for each supplier audit. This documentation will be made available to auditors during the external audit. If any non-conformities with the procedure are found through the Supplier Audit process, they will be subjected to the Procurement Policy mitigation measure as described above.