



Supply Base Report: Skeena Bioenergy Ltd

Third Surveillance Audit

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Completed in accordance with the Supply Base Report Template Version 1.4

For further information on the SBP Framework and to view the full set of documentation see www.sbp-cert.org

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019; re-published 3 April 2020

Version 1.4 published 22 October 2020

Contents

1 Overview

2 Description of the Supply Base

2.1 General description

2.2 Description of countries included in the Supply Base

2.3 Actions taken to promote certification amongst feedstock supplier

2.4 Quantification of the Supply Base

3 Requirement for a Supply Base Evaluation

4 Supply Base Evaluation

4.1 Scope

4.2 Justification

4.3 Results of risk assessment and Supplier Verification Programme

4.4 Conclusion

5 Supply Base Evaluation process

6 Stakeholder consultation

6.1 Response to stakeholder comments

7 Mitigation measures

7.1 Mitigation measures

7.2 Monitoring and outcomes

8 Detailed findings for indicators

9 Review of report

9.1 Peer review

9.2 Public or additional reviews

10 Approval of report

Annex 1: Detailed findings for Supply Base Evaluation indicators

1 Overview

Producer name: Skeena Bioenergy Ltd

Producer address: Suite 1518 – 1030 W. Georgia St, V6E 2Y3 Vancouver, Canada

SBP Certificate Code: SBP-07-21

Geographic position: 54.519533, -128.637576

Primary contact: Roger Keery, +1 604 800 5990, roger.keery@skeenasawmills.com

Company website: <http://skeenasawmills.com/>

Date report finalised: 20 Jan 2022

Close of last CB audit: 14 Mar 2022

Name of CB: Preferred by Nature OÜ

SBP Standard(s) used: SBP Standard 1: Feedstock Compliance Standard, SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: British Columbia, Canada

Weblink to SBR on Company website: N/A

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	Re-assessment
☐	☐	☐	☒	☐	☐

2 Description of the Supply Base

2.1 General description

Feedstock types: Primary, Secondary

Includes Supply Base evaluation (SBE): Yes

Feedstock origin (countries): Canada

2.2 Description of countries included in the Supply Base

Country:Canada

Area/Region: British Columbia

Exclusions: No

Skeena Bioenergy produces wood pellets at its facility located in Terrace, British Columbia. Skeena Bioenergy's Fibre Procurement operations currently include the purchase and transport of residual fibre. Majority of Skeena Bioenergy's wood fibre is from suppliers that maintain Chain of Custody certification that includes fibre from certified forest management landbase, however, a portion of the fibre is controlled.

95-100% of the fibre procured by Skeena Bioenergy is secondary fibre, which is residual material or bi-products from Skeena Sawmills' lumber sawmill in the form of bark, sawdust, shavings, hog and chips. Secondary fibre procured by certificates and therefore is classified by Skeena Bioenergy as SBP-compliant secondary feedstock. The remaining fibre procured by Skeena Bioenergy is primary feedstock, from bush grind operations. The primary feedstock is sourced from within the supply base area, but is from non-certified suppliers. Primary or secondary fibre is either purchased with a Programme for the Endorsement of Forest Certification (PEFC) controlled sourced claim from certified suppliers, or purchased through Skeena Bioenergy's own certified Chain of Custody/Due Diligence System through risk assessments prepared to verify that the risk of the non-certified fibre being from non-controversial sources.

Overview of Supply Base – Skeena Bioenergy

Skeena Bioenergy Supply Base Map

Certified Supply Base		Uncertified Supply Base
Timber Supply Area: Bulkley, Cascadia, GBR North, Kalum, Kispiox, Nass	SF I	Timber Supply Area: Bulkley, Cascadia, GBR North, Kalum, Kispiox, Nass
Forest Licence: FL A16882, FL A16885	SF I	Forest Licence: not identified

All forests are classified within the Temperate Conifer Forest region and none of the forest types include classified CITES or IUCN species. Certain fauna and plant species are listed as either endangered or threatened in the supply base by federal and provincial sources. Forest operations are bound by provincial and federal legislation associated with forestry practices including listed species at risk. This legal framework is enforced to prevent and deter illegal harvesting within protected areas and unadapted practices associated with species at risk habitat.

Skeena Bioenergy's suppliers provide wood fibre from the Supply Base Area, all from the North/Central Coast and Interior of British Columbia.

On public lands (Crown – CAD) Natural resources, Clean Water and Endangered Species legislation, specific to the forest industry includes, but is not limited to Forest Act and Forest and Range Practices Act (FRPA) in BC and associated regulations regarding the granting and regulation of harvesting rights and the marking, scaling and transportation of timber/fibre, as well as the planning, harvesting, reforestation, and environmental protection on Crown and State Lands. In addition to legislation, regional land use plans with legally established objectives must be followed within Forest Stewardship Plans (BC) and Woodlot Licence Plans and subsequent cutting permits and/or transport documents.

Enforcement of natural resources legislation is supported by the Province's Compliance & Enforcement Agency, under the Ministry of Forests Lands and Natural Resource Operations and Rural Development (FLNRORD). In addition, the Provincial Forest Practices Board conducts independent audits and investigations.

For Federal Lands, Natural resources legislation through federal Species at Risk Act (BC and Canada), CITES, the provincial Timber Marking and Transport Regulations, provincial labour and health legislation, and applicable enforcement agencies address forest activities.

On private lands, harvesting on is legislated through the Private Managed Forest Land Act (PMFLA) in BC. Further legislation is provided through the federal Species at Risk Act (BC), CITES (CAD, BC), the provincial Timber Marking and Transport Regulations, provincial labour and health legislation. Forest activities are regulated/monitored for conformance and alleged non-compliance via the Managed Forest Council in BC.

2.3 Actions taken to promote certification amongst feedstock supplier

Forest certification is a fundamental part of the forestry industry in BC due to customer demand for certified wood products. Majority of Skeena Bioenergy's input is from secondary feedstock from suppliers that hold forest management (SFI®-FM) certification and PEFC™ chain of custody certification to either SFI or PEFC. When entering into a purchase agreement with minor suppliers who are non-certified, Skeena

Bioenergy provides a Wood Producer Information package, which contains information promoting certification and Best Management Practices.

2.4 Quantification of the Supply Base

Supply Base

- a. **Total Supply Base area (million ha):** 8,13
- b. **Tenure by type (million ha):** 7.76 (Public), 0.31 (Privately owned)
- c. **Forest by type (million ha):** 7.13 (Temperate)
- d. **Forest by management type (million ha):** 8.13 (Managed natural)
- e. **Certified forest by scheme (million ha):** 2.31 (SFI)

Describe the harvesting type which best describes how your material is sourced: Mix of the above

Explanation: Majority of material sourced from sawmills, secondary feedstock.

Was the forest in the Supply Base managed for a purpose other than for energy markets? Yes - Majority

Explanation: The Supply Base Area is managed for lumber markets.

For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling? Yes - Majority

Explanation: Crown land has a legislative requirement for regeneration of harvested areas within a specified timeframe.

Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation? No

Explanation: No salvage wood in supply currently.

Feedstock

Reporting period from: 01 Jan 2021

Reporting period to: 31 Dec 2021

- a. **Total volume of Feedstock:** 1-200,000 tonnes
- b. **Volume of primary feedstock:** 0 N/A
- c. **List percentage of primary feedstock, by the following categories.**
 - Certified to an SBP-approved Forest Management Scheme: N/A
 - Not certified to an SBP-approved Forest Management Scheme: N/A
- d. **List of all the species in primary feedstock, including scientific name:** *Tsuga heterophylla* (Western Hemlock); *Tsuga mertensiana* (Mountain Hemlock); *Abies amabilis* (Amabilis Fir); *Abies lasiocarpa* (Subalpine Fir); *Picea glauca* (Hybrid White Spruce); *Picea engelmannii* (Engelmann Spruce); *Picea sitchensis* (Sitka Spruce); *Picea glauca* (White Spruce); *Pinus contorta* (Lodgepole Pine); *Thuja plicata* (Western Red Cedar); *Chamaecyparis nootkatensis* (Yellow Cedar);
- e. **Is any of the feedstock used likely to have come from protected or threatened species?** N/A
 - Name of species: N/A
 - Biomass proportion, by weight, that is likely to be composed of that species (%): N/A
- f. **Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):** N/A
- g. **Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** N/A
- h. **Proportion of biomass composed of or derived from saw logs (%):** N/A

- i. **Specify the local regulations or industry standards that define saw logs:** N/A
- j. **Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** N/A
- k. **Volume of primary feedstock from primary forest:** N/A N/A
- l. **List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
- m. **Volume of secondary feedstock:** 1-200,000 tonnes
 - Physical form of the feedstock: Chips, Sawdust, Offcuts, Other (specify)
- n. **Volume of tertiary feedstock:** 0 N/A
 - Physical form of the feedstock: N/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %
Primary	0,00	0,00	0,00	0,00
Secondary	32,44	0,00	67,56	0,00
Tertiary	0,00	0,00	0,00	0,00
Other	0,00	0,00	0,00	0,00

3 Requirement for a Supply Base Evaluation

Is Supply Base Evaluation (SBE) is completed? Yes

The Supply Base Evaluation was developed in the Winter of 2021. Skeena Bioenergy is pursuing a Supply Base Evaluation due to the British Columbia Regional Risk Assessment being approved August 11th, 2021.

4 Supply Base Evaluation

4.1 Scope

Feedstock types included in SBE: Primary, Secondary, Tertiary

SBP-endorsed Regional Risk Assessments used: British Columbia, Canada

List of countries and regions included in the SBE:

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.1 The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation value in the Supply Base are identified and mapped.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest management activities may pose a threat or impact HCVs. HCVs can best be conserved/managed if their location is known. Provincially this indicator was determined to be specified risk due to the absence of legislation governing or the implementation of forest management planning or best management practices that would result in the identification and mapping of HCVs on other private land in BC.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for HCV1 – HCV6 values, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Other Private Land	☒ Low Risk

Finding

Provincially Indicator 2.1.2 - HCV1 was determined to be specified risk because depending on when and/or where cutting permits were being approved, the plans and implementation of practices were varied and the effectiveness on caribou and caribou habitat was questioned. Caribou is a Federally listed species at risk, and therefore legislative requirements affects all ownership types (sub-scopes). Harvesting is allowed when the practices meet or exceed Federal Recovery Plan and/or provincial GAR order.

Within Skeena Bioenergy's SBA, provincially approved Caribou habitat polygon data and Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land (SBV: Critical Habitat Map - THLB). The analysis has provided a listing of the organizations that may be harvesting in or overlapping with caribou habitat (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land harvesting – no proposed harvesting

- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – proposed harvesting (0 ha)

Based on this analysis, it is determined that this is negligible opportunity for supply of feedstock from caribou habitat as the potential feedstock from the OPL harvesting is a significant haul distance for Skeena Bioenergy and other producers are closer to that area. However, following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Specified Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

Provincially this Indicator 2.1.2 - HCV2 was determined to be specified risk because Intact Forest Landscapes (IFLs) are not provincially recognized, and there are not requirements to conserve them. IFL mapping has been completed under the FSC National Risk Assessment (NRA) and is nationally accepted to be credible.

Skeena Bioenergy has used the publicly available logic, data and polygons for the identification of all IFLs within the SBA (SBV: Skeena IFLs - THLB Map) from the FSC NRA. Provincial Timber Harvesting Land Base (THLB) polygons were over laid on the IFL polygons to determine the maximum potential hectares that could impact an IFL, if in fact the entire THLB was harvested over time (SBV: see the table provided on the Skeena IFLs - THLB Map). Based on this mapping exercise and adopting the logic for risk designation by FSC NRA, it has resulted in only one IFL being specified risk (SBV: NAM_233). Further, the Skeena

Bioenergy mapping exercise confirmed that IFLs did not intersect any private land (both other private land and PMFL sub-scopes).

Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with NAM_233 (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land harvesting
- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – no IFLs intersect with this sub-scope – n/a

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from IFL NAM_233 on uncertified crown land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest management activities may pose a threat or impact HCVs. HCVs can best be conserved/managed if potential threats are identified and addressed with appropriate implementation. Specifically, Indicator 2.1.2 - HCV3 is the management of rare, threatened, endangered species and ecosystems. Due to limited legislation and lack of best management practices, monitoring and/or data for Indicator 2.1.2 - HCV3 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.2.3.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped any provincially available data sets for rare, threatened, and endangered species and ecosystems.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas that provide basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. Indicator 2.1.2 - HCV4 include critical resource or landscape features that provide important ecological services, such as water flow regulation and control of erosion. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes, but there are no consistent verifiable implementation mechanisms and/or monitoring in place. As a result, for Indicator 2.1.2 - HCV4 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.2.6.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for critical ecosystem services.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas fundamental to meeting basic needs of local communities or indigenous peoples (e.g. for livelihoods, health, nutrition, water, etc.) identified through engagement with these communities or Indigenous Peoples is the principle of Indicator 2.1.2 - HCV5. Following the results of the RRA, subsistence water is the focus of Indicator 2.1.2 - HCV5. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes. Due to limited legislation and lack of best management practices, monitoring and/or data for Indicator 2.1.2 - HCV5 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.5.2.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for community watersheds and water licences.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.3 The BP has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Conversion of natural forest may reduce or eliminate 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. The intent of this indicator is to reduce incentives for extensive conversion of natural forest to non-forest use. Treed areas that are predominantly under agricultural or urban land use are not forest. Area of forest, therefore, is not the same as area of tree cover. Consequently, area of forest is not easily mapped using satellite imagery. Because the scale and rate of conversion in a region depends on local factors, the assessment of this indicator considers the provincial rate of deforestation, the economic drivers of deforestation and the cumulative impacts of deforestation caused by activities of all sectors.

The BC Regional Risk Assessment deemed uncertified Crown land as "low risk," however, due to the amount of industrial activity in a limited portion of Skeena Bioenergy's Supply Base Area, a due diligence system will be applied to uncertified Crown land areas.

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 other private land due to land use change as the driver by the private landowner. 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 other private land is specified risk.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land - <0.05% of Crown landbase
- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land and uncertified crown land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.1 The BP has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk

Uncertified Private Land

☒ Specified
Risk

Finding

The requirements, mechanisms, and process for completing assessment of impacts of forest management, as well as the planning, implementation and monitoring to minimize those impacts was described in the RRA for applicable indicators within Criterion 2.2 – Ecosystem Function (see individual indicators for more details), as well as for Indicator 2.1.1 and 2.1.2 (identification, mapping, and impact assessments). Due to the limited legislation governing forest management planning, and lack of best management practices and monitoring on other private land, as well as the range of variance in local bylaws surrounding development, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for planning needs, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.2 The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b)

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk

Uncertified Private Land

☒ Specified
Risk

Finding

Potential threats 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. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.3 The BP has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

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 disturbance. Due to limited legislation and lack of best management practices, monitoring and/or data for this indicator on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.1.2 – HCV3.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped any provincially available data sets for rare, threatened, and endangered species and ecosystems.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.4 The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Specified Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

On crown land, the province requires Old Growth Management Areas (OGMAs) to be spatially identified in Forest Stewardship Plans (FSPs) where old growth orders are in effect. However, where there is not an old growth order in force, plan authors have the option of including “non-legal” OGMAs in their FSPs.

Provincially this indicator was determined to be specified risk on crown land because of the variability in management of old growth, the uncertainty to the amount of old growth remaining and the lack of province's ability to track implementation and compliance especially for aspatial old growth management. On private land, both PMFL or other private land old growth is not required to be managed.

Within Skeena Bioenergy's SBA, spatial OGMAs allocated by the Government have been in place for several years. The provincially approved OGMA polygons have been mapped on crown land (SBV: Old Growth Management Areas Map). Additionally, Skeena Bioenergy has mapped/identified all forested private land parcels within 100 metres of provincially approved OGMAs.

OGMA polygon data and Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land. The analysis has provided a listing of the organizations that may be harvesting in/or overlapping with OGMA (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

Recent maps, requirements and guidance following the completion of the Government led Old Growth Strategic Review are currently being rolled out. At this time, the implementation of the recommendations is unclear/uncertain. However, Skeena Bioenergy has incorporated the appropriate government maps in to the GIS Analysis.

2021 Analysis indicates:

- uncertified Crown Land harvesting – proposed harvesting
- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – potential overlap/adjacency with old growth areas

Based on this analysis, it is determined that there is opportunity for the supply of feedstock from old growth stands. Skeena Bioenergy will implement a consistent due diligence system and has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.5 The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.

Specific risk description:

Land Type

Risk

Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

The SBP Standard states that 'residue' includes treetops and branches. The normal practice in BC is for tops, branches, and cull material to be left at the roadside where the trees are processed, while other types of biomass, such as standing dead trees and unmerchantable species, as well as downed woody debris, are left within the cutblock. Stumps are not removed but left in situ. Fibre left 'in-block' to address ecological values is assessed under Indicator 2.2.4 – Biodiversity and Indicator 2.2.2 – Soil Quality (see those indicators for more details). Following the guidance of the RRA, post-harvest post-processing 'waste' and 'residue' produced because of primary harvesting, and left at roadside, is 'residue available for removal' in the context of this indicator and does not appear to be any threats/impacts to the ecosystem.

As required by legislation all industrial activities (regardless of ownership type) must assess and abate fire hazard, resulting in removal of waste and residue typically through pile burning (for more details see Indicator 2.2.7 – air quality and Indicator 2.4.2 – managing for natural processes, such as wildfire). Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.2.6 The BP has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest management activities may negatively affect water quality and/or quantity through increased sedimentation, loss of riparian habitat and function, loss/degradation of fish habitat, loss of water quality for domestic use and alteration of peak flows that may result in increased flooding. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated. NOTE: this indicator is similar to Indicator 2.1.2 – HCV4 - Critical Ecosystem Services.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for community watersheds and water licences.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.3.1 Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

The requirement of this indicator is for an analysis to demonstrate feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data. The intent of this indicator is more applicable to industrial/commercial operations, of which harvesting on other private land does not fall into that level of intensity.

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. Indicator 2.2.2 covers the impacts of forest management activities on soils and Indicator 2.2.5 discusses residue removal. The assessment of this indicator will confine itself to the impact of feedstock harvesting on the long-term timber production capacity of the forest.

Other private land sub-scope is not regulated or managed with respect to harvest sustainability as defined by this indicator. As other private land is often either agricultural or intended for development (approx. 1.2m hectares provincially), there is little information available regarding the timber land base and/or forest management on other private land. Due to the lack of legislation, best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.3.2 Adequate training is provided for all personnel, including employees and contractors (CPET S6d).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

In a sector such as forestry, where the occupational injury rate is well above the average for all occupations, operator training goes together with health and safety, since as much of the training involves learning safe practices as learning how to operate a piece of equipment or carry out a certain task. There is a wide range of training that takes place in a modern workplace, covering everything from Occupational Health and Safety, WHIMIS, and employee behaviour to training required to use equipment, work with Company information, and understand legislative requirements. Training is a requirement under the Workers Compensation Act. Indicator 2.8.1 reviewed the health and safety framework in the BC forestry sector.

The assessment of that indicator covered health and safety training – this assessment of Indicator 2.3.2 covers the BC infrastructure for forest planning and operations training. For this indicator forest activities on Crown land and PMFL are considered within ‘industry standards’ and likely receive a more comprehensive training system than for smaller ‘non-industry-operations’ occurring on other private land. Inadequate training not only puts employees at risk of being involved in accidents that may cause injury or worse, it also may lead to spills and other environmental damage, as well as non-compliance with operational plans /regulations.

Based on these considerations, a comprehensive training system is considered to exist throughout the industry and this indicator is assessed as low risk for crown and PMFL sub-scopes. However it is unlikely that a comprehensive training system exist for smaller ‘non-industry-operations’ such as those on other private land resulting in specified risk.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.4.1 The BP has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

The SBP standard states that health and vitality relate to a forest ecosystem's ability to withstand change. Suggested indicators include the level of disturbance, changes in biodiversity, and /or the presence or absence of key indicator species. The requirement of this indicator is to maintain or improve the health, vitality and other services provided by the forest ecosystems which is related to several indicators already discussed (i.e., 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.3.1, 2.9.2).

The assessment of this indicator will focus on the sustainability of forest management and how resilience is supported. Management that reduces the resilience of forests or impedes, alters, or disrupts ecological functions makes forests more susceptible to degradation and irreversible losses or damage.

On other private land, there are few regulatory requirements, and these are specific in nature, hence there is no overall direction or requirement that other private forest land should be managed to create a resilient forest. In addition, many of the related indicators mentioned in the first paragraph were designated as specified risk. By default, other private land sub-scope is also assessed as specified risk for this indicator.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.5.1 The BP has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest, are identified, documented and respected (CPET S9).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

The primary threat occurs when insufficient identification and/or documentation of the legal, customary, and traditional tenure and use rights of Indigenous People does not ensure these rights are respected. Currently legislation is specific to crown land. However, the Heritage Conservation Act (HCA) is applicable on private managed forest lands. The HCA protects archaeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data for this indicator, a specified risk designation is determined for other private land. NOTE: this indicator is similar to Indicator 2.1.2 – HCV6 - Cultural Identity.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.5.2 The BP has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfillment of basic needs.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Resource based activities can potentially have a negative impact on the maintenance of basic needs of local communities or indigenous peoples. Following the results of the RRA, the quality of the local water supply is the focus of this Indicator. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.1.2 – HCV5 - Community Basic Needs.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for basic needs, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.9.2 Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

This indicator 2.9.2 references the capability of the forest to store carbon, and while forest carbon budget models are available for assessing carbon budgets over time, the level of the annual allowable cut (AAC) also serves as a reasonable surrogate for forest carbon balance. (The long-term sustainability of the harvest is assessed in Indicator 2.3.1.). If the AAC is stable or increasing over time, that suggests that this indicator is being met for the entire forest estate. As stated in Indicator 2.3.1, AAC is more applicable to industrial/commercial operations, of which harvesting on other private land does not fall into that level of intensity. NOTE: this indicator is similar to Indicator 2.3.1 – Long-term production capacity.

Regardless, the threat implicit in this indicator is that overharvesting or conducting harvest and related operations in such a manner that the productivity of the site is damaged, or renewal is delayed has the potential to reduce the productivity of the forest and its capacity to sequester carbon.

Forest management is very lightly regulated on other private land and there is no set allowable harvest limit. Due to the lack of legislation, best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Country: Canada

Indicator with specified risk in the risk assessment used:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas critical to local communities' traditional cultural identity is the principle of Indicator 2.1.2 - HCV6. 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.

The Heritage Conservation Act (HCA) is the applicable measure on private managed forest lands. The HCA protects archaeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data for HCV6, a specified risk designation is determined for other private land. NOTE: this indicator is similar to Indicator 2.5.1.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations.

The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

4.2 Justification

The Supply Base Evaluation was developed from an indicator to sub-scope to feedstock type approach. All potential input types of material were considered in the SBE process. The SBE ensures coverage of all current and potential harvesting areas within Skeena Bioenergy's Supply Base Area. Although majority of feedstock received is categorized as secondary, there is potential to receive other feedstock types in the future.

4.3 Results of risk assessment and Supplier Verification Programme

Refer to the SBP Endorsed British Columbia Regional Risk Assessment - Specified Indicators Only, which was endorsed by the Sustainable Biomass Program on August 11th, 2021. After the evaluation of the Skeena Bioenergy's Supply Base Area, no indicator risks have changed, with the exception of HCV#1. HCV #1 has been downgraded to Low Risk due to: no proposed harvesting in the HCV area within uncertified crown land areas, no Private Managed Forest Land in the Supply Base Area, and no acceptance of uncertified private land area within the HCV area, however, Skeena Bioenergy still has mitigation measures in place for this Indicator.

There is no Uncertified Private Managed Forest Lands within Skeena Bioenergy's Supply Base Area, therefore no mitigation measures were developed during the SBE process.

4.4 Conclusion

Skeena Bioenergy is able to meet SBP requirements for all indicators deemed specified risk from the BC Regional Risk Assessment. The main strengths include an assortment of risk mitigation options for each indicator and sub-scope, depending on the feedstock type. Skeena Bioenergy is committed to verifying procurement of any specified risk feedstock through the Risk Mitigation Monitoring Plan.

5 Supply Base Evaluation process

Skeena Bioenergy conducted the Supply Base Evaluation over the course of the winter in 2021/2022. The SBE was performed by both 'in house' staff and an external party contracted to perform the SBE. The contracted external party (Hopkin Forest Management Ltd.) was appointed to assist with the analysis of the Supply Base Area (spatially), and the write-up of findings and mitigation strategies. The SBR and SBE was developed in conjunction with the external party who has many years of experience with certification schemes and processes, but reviewed, updated and entered into the SBP portal by the EMS Coordinator for Skeena Bioenergy. The EMS Coordinator also provided significant input into the write-up of findings and mitigation measures.

In order to monitor suppliers within the Supply Base, Skeena Bioenergy has created a monitoring program specific to receiving feedstock from Uncertified Private Lands within the Supply Base Area. This program consists of providing information such as Skeena Bioenergy's Procurement Policy, Best Management Practices, and in-field inspections of feedstock which has the potential to come from Specified Risk Areas.

6 Stakeholder consultation

Skeena Bioenergy began the Stakeholder Consultation process with a Notification of Consultation Letter to affected stakeholders in the Supply Base Area on January 6th, 2022 via email. The letter requested for stakeholders to contact Skeena Bioenergy if they were interested in attending a workshop about the Supply Base Evaluation and the process. 2 responses were received from the list of stakeholders indicating interest.

A follow-up email was sent on January 31st, 2022 indicating that Skeena Bioenergy would host a virtual workshop on February 8th, 2022 via Microsoft Teams. Skeena Bioenergy's Supply Base Report and Supply Base map were included in the email for stakeholder reference. Any interested stakeholders were requested to contact Skeena Bioenergy. An additional 3 responses were received between February 1st and 7th. Comments from stakeholders will be uploaded to Section 6.1 when Skeena Bioenergy receives feedback from the workshop to be hosted in February 2022.

A final follow-up email was sent on February 7th, 2022 with a reminder of the workshop scheduled for February 8th 2022. Preliminary information for the workshop was provided as an attachment. 1 additional response was received on February 8th.

On February 8th, the virtual workshop was conducted via Microsoft Teams.

The workshop consisted of the following information:

1. Review of the Sustainable Biomass Program, Supply Base Evaluation process and Skeena Bioenergy.
2. Review of Specified risks within the Supply Base Area - both textually and spatially.
3. Review of Mitigation Measures.
4. Feedback Form, in the form of a fillable PDF.

For stakeholders who were unable to attend the workshop, Skeena Bioenergy had reached out the individuals, providing the workshop content and a fillable PDF form to provide any feedback, and an opportunity to meet one-on-one to review content and respond to any inquiries or comments.

As of March 7th, 2022 (beginning of external audit), no comments or feedback forms have been provided to Skeena Bioenergy.

6.1 Response to stakeholder comments

N/A

7 Mitigation measures

7.1 Mitigation measures

Country: Canada

Specified risk indicator: 2.1.1 The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation value in the Supply Base are identified and mapped.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest management activities may pose a threat or impact HCVs. HCVs can best be conserved/managed if their location is known. Provincially this indicator was determined to be specified risk due to the absence of legislation governing or the implementation of forest management planning or best management practices that would result in the identification and mapping of HCVs on other private land in BC.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for HCV1 – HCV6 values, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with

private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator:

2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Other Private Land	☒ Low Risk

Finding

Provincially Indicator 2.1.2 - HCV1 was determined to be specified risk because depending on when and/or where cutting permits were being approved, the plans and implementation of practices were varied and the effectiveness on caribou and caribou habitat was questioned. Caribou is a Federally listed species at risk, and therefore legislative requirements affects all ownership types (sub-scopes). Harvesting is allowed when the practices meet or exceed Federal Recovery Plan and/or provincial GAR order.

Within Skeena Bioenergy's SBA, provincially approved Caribou habitat polygon data and Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land (SBV: Critical Habitat Map - THLB). The analysis has provided a listing of the organizations that may be harvesting in or overlapping with caribou habitat (SBV: HBS Client list).

From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land harvesting – no proposed harvesting
- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – proposed harvesting (0 ha)

Based on this analysis, it is determined that this is negligible opportunity for supply of feedstock from caribou habitat as the potential feedstock from the OPL harvesting is a significant haul distance for Skeena Bioenergy and other producers are closer to that area. However, following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

☐ Risk Mitigation

The potential for feedstock to be sourced from uncertified crown land and other private land sub-scopes is negligible. The sub-scope PMFL is not applicable and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk for each sub-scope (i.e. Crown, PMFL, OPL), as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**). In addition, Skeena Bioenergy's Certification Forester will request the applicable plan information to verify conformance with the Federal Recovery Plan &/or Provincial GAR Order that has been approved (**RM#2**). If/when harvesting is complete, forest management practices will be confirmed as conformance via provincial government C&E database.

If the suppliers' practices do not conform to required regulatory framework, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to accommodate the deficiency (**RM#3**). Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (**RM#9**).

- uncertified Crown Land – RM#1, RM#2, RM#9
- uncertified Private Managed Forest Land (PMFL) – n/a
- uncertified Other Private Land – RM#1, RM#2, RM#3, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**). Skeena Bioenergy acknowledges that some sawmills may or may not be forest managers and can control the forest management practices, however, based on the Skeena Bioenergy's GIS Analysis they are able to pre-determine potential specified risk polygons, and identify the organization that is the licensee. For this reason, Skeena Bioenergy may be able to request/review applicable plans to verify conformance with applicable to the Federal Recovery Plan &/or Provincial GAR Order that has been approved (**RM#2**). If/when harvesting is complete, forest management practices will be confirmed as conformance via provincial government C&E database.

- uncertified Crown Land – RM#1, RM#2
- uncertified Private Managed Forest Land (PMFL) – n/a
- uncertified Other Private Land – RM#1, RM#2

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (**RM#5**). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (**RM#8**).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in **RM#5**) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (**RM#9**).

- uncertified Crown Land – RM#1, RM#5, RM#8, RM#9
- uncertified Private Managed Forest Land (PMFL) – n/a
- uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:	Canada
Specified risk indicator:	2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Specific risk description:	

Land Type	Risk
Uncertified Crown Land	☒ Specified Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

Provincially this Indicator 2.1.2 - HCV2 was determined to be specified risk because Intact Forest Landscapes (IFLs) are not provincially recognized, and there are not requirements to conserve them. IFL mapping has been

completed under the FSC National Risk Assessment (NRA) and is nationally accepted to be credible.

Skeena Bioenergy has used the publicly available logic, data and polygons for the identification of all IFLs within the SBA (SBV: Skeena IFLs - THLB Map) from the FSC NRA. Provincial Timber Harvesting Land Base (THLB) polygons were overlaid on the IFL polygons to determine the maximum potential hectares that could impact an IFL, if in fact the entire THLB was harvested over time (SBV: see the table provided on the Skeena IFLs - THLB Map). Based on this mapping exercise and adopting the logic for risk designation by FSC NRA, it has resulted in only one IFL being specified risk (SBV: NAM_233). Further, the Skeena Bioenergy mapping exercise confirmed that IFLs did not intersect any private land (both other private land and PMFL sub-scopes).

Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with NAM_233 (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land harvesting
- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – no IFLs intersect with this sub-scope – n/a

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from IFL NAM_233 on uncertified crown land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

☐ Risk Mitigation

The potential for feedstock to be sourced from uncertified crown land is probable. The sub-scope PMFL is not applicable and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk

mitigations maybe appropriate to address the specified risk for each sub-scope (i.e. Crown, PMFL, OPL), as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**).

Since there are no provincial regulations on IFLs, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (**RM#3**). Skeena Bioenergy will maintain volume estimates of the primary feedstock received from IFLs. Skeena Bioenergy will adopt the thresholds from FSC NRA (2019) and will phase-out the procurement of this specified risk (**RM#4**) over the next 5 years. A related risk mitigation is the verification of 'best/better use' (**RM#5**) of the primary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (**RM#9**).

-

- uncertified Crown Land – RM#1, RM#3, RM#4, RM#5, RM#9

- - uncertified Private Managed Forest Land (PMFL) – n/a

- - uncertified Other Private Land – n/a

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**). Skeena Bioenergy acknowledges that some sawmills may or may not be forest managers and can control the forest management practices, however, based on the Skeena Bioenergy's GIS Analysis they are able to pre-determine potential specified risk polygons, and identify the organization that is the licensee. Sawmills that produce secondary feedstock may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the specified risk area will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that specific specified risk feedstock from secondary feedstock deliveries, the volume of specified risk over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of this specified risk for secondary feedstock received. Skeena Bioenergy will adopt the thresholds from FSC NRA (2019) and will phase-out the procurement of this specified risk (**RM#4**) over the next 5 years. A related risk mitigation is the verification of 'best/better use' (**RM#5**) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

-
- uncertified Crown Land – RM#1, RM#4, RM#5
- - uncertified Private Managed Forest Land (PMFL) – n/a
- - uncertified Other Private Land – n/a

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (**RM#1**).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (**RM#5**). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (**RM#8**).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (**RM#9**).

-
- uncertified Crown Land – RM#1, RM#5, RM#8, RM#9
- - uncertified Private Managed Forest Land (PMFL) – n/a
- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest management activities may pose a threat or impact HCVs. HCVs can best be conserved/managed if potential threats are identified and addressed with appropriate implementation. Specifically, Indicator 2.1.2 - HCV3 is the management of rare, threatened, endangered species and ecosystems. Due to limited legislation and lack of best management practices, monitoring and/or data for Indicator 2.1.2 - HCV3 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.2.3.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped any provincially available data sets for rare, threatened, and endangered species and ecosystems.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that

sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will attempt to verify the district of origin for tertiary feedstock but acknowledges that it may be extremely difficult/impossible to verify for some tertiary feedstock, especially if it comes from another region/country. For example, dunnage may be produced in a country outside the SBA or the scope of the Regional Risk Assessment for BC. In this situation, not only can the district of origin not be verified, but the actual specified risk indicators of that area will be unknown. For this reason, for tertiary feedstock Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the

most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas that provide basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. Indicator 2.1.2 - HCV4 include critical resource or landscape features that provide important ecological services, such as water flow regulation and control of erosion. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes, but there are no consistent verifiable implementation mechanisms and/or monitoring in place. As a result, for Indicator 2.1.2 - HCV4 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.2.6.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for critical ecosystem services.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest

operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas fundamental to meeting basic needs of local communities or indigenous peoples (e.g. for livelihoods, health, nutrition, water, etc.) identified through engagement with these communities or Indigenous Peoples is the principle of Indicator 2.1.2 - HCV5. Following the results of the RRA, subsistence water is the focus of Indicator 2.1.2 - HCV5. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes. Due to limited legislation and lack of best management practices, monitoring and/or data for Indicator 2.1.2 - HCV5 on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.5.2.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for community watersheds and water licences.

All private land roundwood is identified by a timbermark and is traceably via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left

to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of

the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.1.3 The BP has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Conversion of natural forest may reduce or eliminate 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. The intent of this indicator is to reduce incentives for extensive conversion of natural forest to non-forest use. Treed areas that are predominantly under agricultural or urban land use are not forest. Area of forest, therefore, is not the same as area of tree cover. Consequently, area of forest is not easily mapped using satellite imagery. Because the scale and rate of conversion in a region depends on local factors, the assessment of this indicator considers the provincial rate of deforestation, the economic drivers of deforestation and the cumulative impacts of deforestation caused by activities of all sectors.

The BC Regional Risk Assessment deemed uncertified Crown land as "low risk," however, due to the amount of industrial activity in a limited portion of Skeena Bioenergy's Supply Base Area, a due diligence system will be applied to uncertified Crown land areas.

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 other private land due to land use change as the driver by the private landowner. 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 other private land is specified risk.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Crown Land - <0.05% of Crown landbase
- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land and uncertified crown land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable and with the potential of a very limited portion of uncertified crown land. The sub-scope PMFL is not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk

mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Crown Land - RM#1, RM#5

- uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better

use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Crown Land - RM#1, RM#4, RM#5, RM#8

- uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Crown Land - RM#1, RM#5, RM#8, RM#9

- uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator:

2.2.1 The BP has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate

assessment of impacts, and planning, implementation and monitoring to minimise them.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

The requirements, mechanisms, and process for completing assessment of impacts of forest management, as well as the planning, implementation and monitoring to minimize those impacts was described in the RRA for applicable indicators within Criterion 2.2 – Ecosystem Function (see individual indicators for more details), as well as for Indicator 2.1.1 and 2.1.2 (identification, mapping, and impact assessments). Due to the limited legislation governing forest management planning, and lack of best management practices and monitoring on other private land, as well as the range of variance in local bylaws surrounding development, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for planning needs, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:**Risk Mitigation**

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during

processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.2.2 The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b)

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Potential threats 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. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure: Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it

would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.2.3 The BP has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

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 disturbance. Due to limited legislation and lack of best management practices, monitoring and/or data for this indicator on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.1.2 – HCV3.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped any provincially available data sets for rare, threatened, and endangered species and ecosystems.

All private land roundwood is identified by a timbermark and is traceably via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:**Risk Mitigation**

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during

processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

-

uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

-

uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.2.4 The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Specified Risk
Uncertified Private Managed Forest Land	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

On crown land, the province requires Old Growth Management Areas (OGMAs) to be spatially identified in Forest Stewardship Plans (FSPs) where old growth orders are in effect. However, where there is not an old growth order in force, plan authors have the option of including “non-legal” OGMAs in their FSPs.

Provincially this indicator was determined to be specified risk on crown land because of the variability in management of old growth, the uncertainty to the amount of old growth remaining and the lack of province’s ability to track implementation and compliance especially for aspatial old growth management. On private land, both PMFL or other private land old growth is not required to be managed.

Within Skeena Bioenergy’s SBA, spatial OGMAs allocated by the Government have been in place for several years. The provincially approved OGMA polygons have been mapped on crown land (SBV: Old Growth Management Areas Map). Additionally, Skeena Bioenergy has mapped/identified all forested private land parcels within 100 metres of provincially approved OGMAs.

OGMA polygon data and Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations on Crown land and private land. The analysis has provided a listing of the organizations that may be harvesting in/or overlapping with

OGMA (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

Recent maps, requirements and guidance following the completion of the Government led Old Growth Strategic Review are currently being rolled out. At this time, the implementation of the recommendations is unclear/uncertain. However, Skeena Bioenergy has incorporated the appropriate government maps in to the GIS Analysis.

2021 Analysis indicates:

- uncertified Crown Land harvesting – proposed harvesting
- uncertified Private Managed Forest Land (PMFL) – does not exist in SBA – n/a
- uncertified Other Private Land – potential overlap/adjacency with old growth areas

Based on this analysis, it is determined that there is opportunity for the supply of feedstock from old growth stands. Skeena Bioenergy will implement a consistent due diligence system and has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the

specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities

will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.2.5 The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Specified Risk
Uncertified Private Land	☒ Specified Risk

Finding

The SBP Standard states that 'residue' includes treetops and branches. The normal practice in BC is for tops, branches, and cull material to be left at the roadside where the trees are processed, while other types of biomass, such as standing dead trees and unmerchantable species, as well as downed woody debris, are left within the cutblock. Stumps are not removed but left in situ. Fibre left 'in-block' to address ecological values is

assessed under Indicator 2.2.4 – Biodiversity and Indicator 2.2.2 – Soil Quality (see those indicators for more details). Following the guidance of the RRA, post-harvest post-processing ‘waste’ and ‘residue’ produced because of primary harvesting, and left at roadside, is ‘residue available for removal’ in the context of this indicator and does not appear to be any threats/impacts to the ecosystem.

As required by legislation all industrial activities (regardless of ownership type) must assess and abate fire hazard, resulting in removal of waste and residue typically through pile burning (for more details see Indicator 2.2.7 – air quality and Indicator 2.4.2 – managing for natural processes, such as wildfire). Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.2.6 The BP has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk

Uncertified Private Land

☒ Specified
Risk

Finding

Forest management activities may negatively affect water quality and/or quantity through increased sedimentation, loss of riparian habitat and function, loss/degradation of fish habitat, loss of water quality for domestic use and alteration of peak flows that may result in increased flooding. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk is designated. NOTE: this indicator is similar to Indicator 2.1.2 – HCV4 - Critical Ecosystem Services.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for community watersheds and water licences.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations may be appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since

2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator:

2.3.1 Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk

Uncertified Private Land

☒ Specified
Risk

Finding

The requirement of this indicator is for an analysis to demonstrate feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data. The intent of this indicator is more applicable to industrial/commercial operations, of which harvesting on other private land does not fall into that level of intensity.

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. Indicator 2.2.2 covers the impacts of forest management activities on soils and Indicator 2.2.5 discusses residue removal. The assessment of this indicator will confine itself to the impact of feedstock harvesting on the long-term timber production capacity of the forest.

Other private land sub-scope is not regulated or managed with respect to harvest sustainability as defined by this indicator. As other private land is often either agricultural or intended for development (approx. 1.2m hectares provincially), there is little information available regarding the timber land base and/or forest management on other private land. Due to the lack of legislation, best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent

due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that

sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.3.2 Adequate training is provided for all personnel, including employees and contractors (CPET S6d).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Lands	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

In a sector such as forestry, where the occupational injury rate is well above the average for all occupations, operator training goes together with health and safety, since as much of the training involves learning safe practices as learning how to operate a piece of equipment or carry out a certain task. There is a wide range of training that takes place in a modern workplace, covering everything from Occupational Health and Safety, WHIMIS, and employee behaviour to training required to use equipment, work with Company information, and understand legislative requirements. Training is a requirement under the Workers Compensation Act. Indicator 2.8.1 reviewed the health and safety framework in the BC forestry sector.

The assessment of that indicator covered health and safety training – this assessment of Indicator 2.3.2 covers the BC infrastructure for forest planning and operations training. For this indicator forest activities on Crown land and PMFL are considered within ‘industry standards’ and likely receive a more comprehensive training system than for smaller ‘non-industry-operations’ occurring on other private land. Inadequate training not only puts employees at risk of being involved in accidents that may cause injury or worse, it also may lead to spills and other environmental damage, as well as non-compliance with operational plans /regulations.

Based on these considerations, a comprehensive training system is considered to exist throughout the industry and this indicator is assessed as low risk for crown and PMFL sub-scopes. However it is unlikely that a comprehensive training system exist for smaller ‘non-industry-operations’ such as those on other private land resulting in specified risk.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator:

2.4.1 The BP has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

The SBP standard states that health and vitality relate to a forest ecosystem's ability to withstand change. Suggested indicators include the level of disturbance, changes in biodiversity, and /or the presence or absence of key indicator species. The requirement of this indicator is to maintain or improve the health, vitality and other services provided by the forest ecosystems which is related to several indicators already discussed (i.e., 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.3.1, 2.9.2).

The assessment of this indicator will focus on the sustainability of forest management and how resilience is supported. Management that reduces the resilience of forests or impedes, alters, or disrupts ecological functions makes forests more susceptible to degradation and irreversible losses or damage.

On other private land, there are few regulatory requirements, and these are specific in nature, hence there is no overall direction or requirement that other private forest land should be managed to create a resilient forest. In addition, many of the related indicators mentioned in the first paragraph were designated as specified risk. By default, other private land sub-scope is also assessed as specified risk for this indicator.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their

Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.5.1 The BP has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest, are identified, documented and respected (CPET S9).

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Specified Risk

Uncertified Private Land

☒ Specified
Risk

Finding

The primary threat occurs when insufficient identification and/or documentation of the legal, customary, and traditional tenure and use rights of Indigenous People does not ensure these rights are respected. Currently legislation is specific to crown land. However, the Heritage Conservation Act (HCA) is applicable on private managed forest lands. The HCA protects archaeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data for this indicator, a specified risk designation is determined for other private land. NOTE: this indicator is similar to Indicator 2.1.2 – HCV6 - Cultural Identity.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena

Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better

use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator:

2.5.2 The BP has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfillment of basic needs.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Resource based activities can potentially have a negative impact on the maintenance of basic needs of local communities or indigenous peoples. Following the results of the RRA, the quality of the local water supply is the focus of this Indicator. On other private lands, owners are required to comply with the provincial Water Sustainability Act which protects water catchments and prevents erosion of vulnerable soils and slopes. Due to limited legislation and lack of best management practices, monitoring and/or data on other private land, a specified risk designation is determined. NOTE: this indicator is similar to Indicator 2.1.2 – HCV5 - Community Basic Needs.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). In addition, Skeena Bioenergy has mapped applicable provincially available data sets for basic needs, where confidentiality is not a concern.

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:**Risk Mitigation**

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land

and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a

period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:

Canada

Specified risk indicator: 2.9.2 Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

This indicator 2.9.2 references the capability of the forest to store carbon, and while forest carbon budget models are available for assessing carbon budgets over time, the level of the annual allowable cut (AAC) also serves as a reasonable surrogate for forest carbon balance. (The long-term sustainability of the harvest is assessed in Indicator 2.3.1.). If the AAC is stable or increasing over time, that suggests that this indicator is being met for the entire forest estate. As stated in Indicator 2.3.1, AAC is more applicable to industrial/commercial operations, of which harvesting on other private land does not fall into that level of intensity. NOTE: this indicator is similar to Indicator 2.3.1 – Long-term production capacity.

Regardless, the threat implicit in this indicator is that overharvesting or conducting harvest and related operations in such a manner that the productivity of the site is damaged, or renewal is delayed has the potential to reduce the productivity of the forest and its capacity to sequester carbon.

Forest management is very lightly regulated on other private land and there is no set allowable harvest limit. Due to the lack of legislation, best management practices, monitoring and/or data on other private land, a specified risk is designated.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4).

All private land roundwood is identified by a timbermark and is traceable via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations. The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- - uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the

most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country: Canada

Specified risk indicator: 2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.

Specific risk description:

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas critical to local communities' traditional cultural identity is the principle of Indicator 2.1.2 - HCV6. 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.

The Heritage Conservation Act (HCA) is the applicable measure on private managed forest lands. The HCA protects archaeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data for HCV6, a specified risk designation is determined for other private land. NOTE: this indicator is similar to Indicator 2.5.1.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceably via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations.

The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left

to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of

the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:	Canada
Specified risk indicator:	2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Specific risk description:	

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas critical to local communities traditional cultural identity is the principle of HCV6. 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.

The Heritage Conservation Act (HCA) is the applicable measure on private managed forest lands. The HCA protects archeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data

for HCV6, a specified risk designation is determined for other private land.
NOTE: this indicator is similar to Indicator 2.5.1.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceably via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations.

The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

As indicated above, the potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the

specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

- - uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities

will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

Country:	Canada
Specified risk indicator:	2.1.2 The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Specific risk description:	

Land Type	Risk
Uncertified Crown Land	☒ Low Risk
Uncertified Private Managed Forest Land	☒ Low Risk
Uncertified Private Land	☒ Specified Risk

Finding

Forest areas critical to local communities traditional cultural identity is the principle of HCV5. 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.

The Heritage Conservation Act (HCA) is the applicable measure on private managed forest lands. The HCA protects archeological sites and requires that all sites (including potential sites) be reported, however there are no consistent verifiable monitoring and/or reporting in place. Due to limited legislation and lack of best management practices, monitoring and/or data for HCV6, a specified risk designation is determined for other private land. NOTE: this indicator is similar to Indicator 2.5.1.

Skeena Bioenergy has mapped all forested and non-forested private land parcels within the SBA (SBV: Private Property Maps 1-4). Due to confidentiality, no maps or data is publicly available for cultural identity.

All private land roundwood is identified by a timbermark and is traceably via HBS. The Provincial government cutblock data (HBS) was used to complete a GIS analysis to determine current and future harvest operations.

The analysis has provided a listing of the organizations that may be harvesting in or overlapping with private land (SBV: HBS Client list). From this list, Skeena Bioenergy has identified potential suppliers by sub-scope.

2021 Analysis indicates:

- uncertified Other Private Land – potential harvesting exists

Based on this analysis, it is determined that there is an opportunity for the supply of feedstock from uncertified private land. Following a consistent due diligence system, Skeena Bioenergy has provided risk mitigation for this indicator.

Mitigation measure:

Risk Mitigation

The potential for feedstock to be sourced from uncertified other private land is probable. The sub-scopes crown land and PMFL are not applicable for this indicator and will not be further discussed.

Skeena Bioenergy receives feedstock from suppliers by one of three feedstock types: primary, secondary, or tertiary. For this reason, Skeena Bioenergy will provide risk control by feedstock type and identify which risk mitigations maybe appropriate to address the specified risk applicable to other private land, as listed below.

Primary Feedstock

Skeena Bioenergy will provide all suppliers of primary feedstock (i.e. pulpwood, low grade roundwood &/or bush grind) with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Prior to procurement, Skeena Bioenergy will provide a set of BMPs &/or direct the suppliers to address the deficiency (RM#3) of all specified risks. Additionally, Skeena Bioenergy will complete a field checklist verification (RM#7) which depending on the scale and intensity of the specified risk will be completed pre-procurement and/or post-harvest, or possibly a GIS/desk exercise.

Verification of 'best/better use' (RM#5) of the primary feedstock from private land, as opposed to ending in debris piles to be open-burned or left to decompose may be appropriate. Alternatively, Skeena Bioenergy may avoid purchasing the primary feedstock (RM#9).

- uncertified Other Private Land – RM#1, RM#3, RM#5, RM#7, RM#9

Secondary Feedstock

Skeena Bioenergy will provide all suppliers of secondary feedstock (i.e. sawmill residues, as well as offcuts & trim), with their Procurement Policy that informs the supplier of the specified risks associated with private lands within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Skeena Bioenergy acknowledges that sawmills which produce secondary feedstock may procure roundwood from private lands. All private land roundwood is identified by a timbermark and is traceably via HBS for that sawmill scale. Further it is acknowledged that sawmills may not subscribe to the same certification requirements as Skeena Bioenergy and for this reason the roundwood from the private land will not be segregated during processing resulting in a mix within the sawmill residue pile. Although it would not be possible to remove that private land specified risk feedstock from secondary feedstock deliveries, the volume of private land over a period could be estimated. Skeena Bioenergy's will maintain volume estimates of private land for secondary feedstock received. Depending on the scale and intensity of the specified risk for the private land, Skeena Bioenergy will establish a threshold using 2021 as a baseline and either phase-out the procurement (RM#4) or set as an annual threshold (RM#8). A related risk mitigation is the verification of 'best/better use' (RM#5) of the secondary feedstock, as opposed to ending in debris piles to be open-burned or left to decompose.

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- uncertified Other Private Land – RM#1, RM#4, RM#5, RM#8

Tertiary Feedstock

Skeena Bioenergy will provide all suppliers of tertiary feedstock (i.e. pre- and post-consumer) with their Procurement Policy that informs the supplier

of the specified risks within Skeena Bioenergy's SBA and the need to mitigate any risk prior to procurement (RM#1).

Historically (2019-2021), Skeena Bioenergy has not procured tertiary feedstock, although they have had potential opportunities. This can be verified by reviewing Skeena Bioenergy's CoC Certification publicly available reports since 2019. It is anticipated that any future opportunities will be sporadic, short-term, and not a consistent feedstock type within Skeena Bioenergy's procurement program.

Skeena Bioenergy will implement an approach to assess the 'best/better use' of the feedstock (RM#5). This approach requires the comparison of the use of the feedstock by Skeena Bioenergy, as opposed to ending in debris piles to be open-burned or left to decompose. Based on this Skeena Bioenergy will establish a justifiable maximum annual percentage (i.e. 5%) of tertiary feedstock to procure and track/report the amounts (RM#8).

Alternatively, Skeena Bioenergy may consider that the uncertainty in verifying both the district of origin and applicable specified risks may be too great and the alternative use of the feedstock (as identified in RM#5) is the most responsible, therefore they will avoid purchasing the tertiary feedstock (RM#9).

- - uncertified Other Private Land – RM#1, RM#5, RM#8, RM#9

Risk Mitigation Verification

For all sub-scopes and for primary and secondary feedstock, Skeena Bioenergy will verify procurement of the specified risk via the HBS database on a periodic basis set in the Risk Mitigation Monitoring Plan.

7.2 Monitoring and outcomes

Indicators will be monitored through Skeena Bioenergy's Risk Mitigation Monitoring Plan. The monitoring plan will be reviewed on an annual basis with Senior Management.

8 Detailed findings for indicators

Detailed findings for each Indicator are given in Annex 1 in case the Regional Risk Assessment (RRA) is not used.

Is RRA used? Yes

9 Review of report

9.1 Peer review

Consultant Hopkin Forest Management completed the peer review of the final draft of the Supply Base Report, including the Supply Base Evaluation and Stakeholder Consultation. Comments received were incorporated into the final version of the SBR.

9.2 Public or additional reviews

The SBR and SBE was shared with stakeholders during the consultation process with the opportunity to provide feedback to Skeena Bioenergy. To date, no feedback has been received from stakeholders or the public.

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Jessica Hochins	EMS Coordinator	20 Jan 2022
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	Roger Keery	President	20 Jan 2022
	Name	Title	Date

Annex 1: Detailed findings for Supply Base Evaluation indicators

N/A