



Ministry of
Forests

Timber Supply Area Operating Area Adjustment Guide

August 24th, 2023

Forest Tenures Branch

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Document Change Control

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DEFINITIONS

CMM: current mature merchantable saw log volume.

Have-Not Licensees: licensees with insufficient CMM volume in their current operating areas to achieve their Target Volume.

Have Licensees: licensees with equal to or surplus CMM volume in their current operating areas to achieve their Target Volumes.

Licensees: generally, includes parties/companies who hold replaceable forest licenses. It does not include BC Timber Sales.

Mediation: intervention between conflicting parties to promote reconciliation, settlement, or compromise.

Technical Working Group: representatives designated by each licensee and BCTS to be part of the group to define the process and data set to be used in operating area analysis.

TSA Committee: representatives from each of the licensees whose responsibility it is to approve the process, the data package, and the negotiated results for the operating area adjustment process.

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1 INTRODUCTION

1.1 PURPOSE

The purpose of this guidance is to provide information and direction to *Forest Act* tenure holders on how to adjust licensee and BC Timber Sales (BCTS) operating areas in timber supply areas (TSA). The document includes a summary of best practices and suggestions that have proven successful.

The guide outlines the recommended process for most TSAs, where operating areas have traditionally been defined and adhered to by licensees.

The information provided is not legally binding and it is expected that participants in the operating adjustment process will alter the recommended procedures to suit their local operating situation.

This guidance is intended to help to streamline the operating area adjustment process, lead to greater consistency between TSAs, and help to achieve a fair and accepted outcome for all parties.

1.2 BACKGROUND

Most of the Provincial allowable annual cut (AAC) is allocated to volume-based tenures where holders of Crown tenure are apportioned a share of the cut within a Timber Supply Area (TSA). Forest Licences account for the majority of these tenures and most provide harvest rights anywhere in the available TSAs Crown land base. To facilitate efficient land management and forestry activities, most TSAs are divided into discrete operating areas for each forest tenure holder and for BC Timber Sales (BCTS).

Operating areas are not specified in the *Forest Act* and are considered non-legal “agreements,” where each licensee agrees to plan and conduct forest operations only within their assigned operating areas to facilitate efficient land management and forestry activities. The exception is BCTS operating areas, which are primarily defined in the Refusal of Cutting Permit or Road Permit Regulation. More details are provided in Part 2 (BCTS).

In recent years, the management of the Provincial AAC has increased in complexity. Partitions have become more common and AACs have been declining in many areas due to fire and insect impacts, and land removals. In addition, the Province [introduced](#) new landscape-level planning and operational processes through changes to the [Forest and Range Practices Act](#). These changes will require more coordinated planning of forest operations between licensees within defined landscape areas. The changes will require more government and licensee collaboration with First Nations to ensure Indigenous land use and traditional and local knowledge is incorporated into forest operations.

This increased level of complexity and change requires an efficient operating area allocation process that:

1. Provides each licensee with a fair share of the timber harvesting land base relative to their AAC.
2. Meets BCTS needs for market pricing.
3. Provides for efficiency in land management planning and forestry operations.

4. Ensures that the areas harvested match the timber profile used by the Chief Forester in setting the TSAs AAC.
5. Prepares licensees for increased change to the forest sector as the Province works to align its laws with the [United Nations Declaration on the Rights of Indigenous Peoples](#) (UN Declaration) as per s3 of B.C.'s [Declaration on the Rights of Indigenous Peoples Act](#).

1.3 OPERATING AREA AGREEMENTS

A key component of successful operating area adjustment processes is the negotiation of a Terms of Reference (ToR) for the adjustment processes that leads to an operating area agreement (OAA) for the TSA. The template included in this Guide (Appendix A) contains many details on the components that should be included in an operating area adjustment process. The template will be referred to throughout this guide.

An OAA is a map that shows licensees operating areas in the TSA. It is often accompanied by tables that show each licensee's available volume in their allocated operating areas relative to their AAC in the TSA. An OAA is usually valid for 20 years; however, terms vary depending on the conditions in the TSA.

1.4 GENERAL APPROACH

Best Practice:

- Operating area agreements and adjustment processes will typically be led by licensees and forest sector consultants through formations of a TSA committee.
- All major tenure holders in a TSA should participate in the negotiation of a ToR and be signatories to an OAA.
- All First Nations including those that hold tenure in the TSA whose rights could be affected by changes in operating areas should be informed of the operating area adjustment process. First Nations should be engaged as early as possible according to their desired level of engagement. See step #2 in section 3 for more information.
 - A goal of the engagement should be to ensure that operating area allocation considers First Nations' inherent, treaty (if applicable), and constitutionally protected rights and interests and where applicable provides opportunities for partnerships and relationship-building. This might look like obtaining the free, prior and informed consent of affected First Nations, or seeking consensus through the dispute resolution processes identified in the ToR.
 - Treaties, agreements and other constructive arrangements between First Nations and the BC Government should be referenced as they can specify how and when First Nations need to be involved in certain processes and decision-making.
 - Since operating area agreements are voluntary arrangements led by licensees and forest sector consultants, engagement with First Nations at operating area agreement tables is not considered "consultation." For more information on the Province's duty to consult with First Nations, [see here](#).
- Licensees participating in the operating area process should discuss each step and document the agreed upon approach in the ToR. It is recommended that those licensees, First Nations, and local Ministry of Forests (FOR) staff that are not participating in the TSA adjustment committee be advised of the adjustment process being undertaken and, where appropriate, how their comments, concerns or recommendations can be considered in the ToR.

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- The ToR should include a clear statement of objectives, clear process and roles for licensees, an operating area selection process, a dispute resolution process, data collection criteria, funding arrangements, and specify process products. See Appendix A for details.
- Establish a **core TSA committee** that will negotiate the ToR and be responsible for operating area negotiations, and a **technical working group** that is responsible for data collection, analysis, and production of various reports. Both the committee and the technical working group should aim to have representation from interested First Nations whose traditional territories overlap with the TSA so that their unique rights and interests can be considered.
- Usually, BCTS should be an Observer on the TSA committee and contribute information and proposal(s) and be a participant on the technical working group. BCTS status as an observer is due to its unique responsibility to have operating areas that are sufficient for the operation of the market-based pricing system.

2 BC TIMBER SALES

BCTS has a goal of providing credible representative price and cost benchmark data for the market pricing system (MPS) through auctions of public timber. BCTS objectives include:

1. Selling the full BCTS apportionment over the business cycle, consistent with safe practices and sustainable forest management.
2. Generating net direct revenue and indirect provincial government revenue over the business cycle.
3. Pursue continuous business improvement across government and with third party customers.

In addition, it is expected that BCTS's work aligns with the province's reconciliation commitments, including those forged through the *Declaration Act*.

2.1 REPRESENTATIVENESS

For BCTS timber sale licence auctions to provide a statistically robust foundation for pricing non-BCTS stands, they need to cover a similar range of timber types and operating conditions to what non-BCTS forest tenure holders experience. This requirement of the BCTS auction dataset is termed 'representativeness.'

This does not mean that BCTS is required to have the same timber profile or operating areas as the other licensees. Rather, it means that the types of stands harvested by non-BCTS licensees need to be represented in the dataset by enough data samples to be able to generate statistically credible estimates of those stand values.

BCTS designs its timber sale licence program to maintain representativeness of the auction data. Both BCTS and Timber Pricing Branch monitor changing harvest patterns for gaps in the dataset.

In evaluating the sufficiency of BCTS operating areas during an operating area adjustment process, BCTS will use the following measures:

1. Do the BCTS operating areas provide a proportional share of the CMM volume relative to BCTS's share of the total AAC across the range of operating conditions, timber, and land base profiles in the broader TSA? The Provincial Timber Management Goals, Objectives & Targets reports developed by Resource Practices Branch and associated data are often used to compare licensees' harvest profiles with BCTS timber sale licences.
2. Do the BCTS operating areas provide the required net timber harvest land base relative to BCTS's share of the total AAC across the range of representative attributes? The attributes required for BCTS representation for the Coast and Interior can be found in Appendix B.

2.2 BCTS OPERATING AREAS

In 2019, with the introduction of the Refusal of Cutting Permit or Road Permit Regulation, BCTS operating areas were formalized. The regulation requires that District Managers deny cutting permits or roads permits that are applied for within a BCTS operating area if their issuance would not be consistent with the stated government objective — i.e., *ensuring that BCTS generates adequate cost and price information and data respecting the harvest of representative timber from Crown land through the planning, development, and auction of the authority to harvest timber in BCTS operating areas is a government objective.*

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The formalization of BCTS operating areas by the Provincial Cabinet means that FOR/BCTS staff do not have the legal authority to change BCTS operating areas and **therefore enter into an OAA**; however, BCTS still has a role to play in the operating area adjustment process, outlined as follows:

1. BCTS will contribute to the TSA committee and usually sit at the table as an Observer.
2. BCTS will be an active participant in the technical working group to ensure there is an understanding of BCTS' role in market pricing, to set standards for data collection and required products, and to contribute to funding their production.
3. BCTS will complete an analysis of the available BCTS operating areas (those identified in the Refusal of Cutting Permit or Road Permit Regulation) using the CMM dataset and BCTS representation attributes to identify BCTS' current position in the TSA.
4. Where BCTS has insufficient operating areas, one or more scenarios will be developed that identify the operating areas BCTS requires to support the MPS. Where BCTS has excess operating areas, one or more scenarios will be developed that identify the operating areas that BCTS does not require to support MPS. BCTS will provide the proposal to the TSA Committee, non-participating TSA tenure holders, and First Nations whose rights could be affected for review and comment.
5. BCTS will review all comments received and consider adjustments to the BCTS operating area proposal(s).
6. BCTS, in co-ordination with FOR staff will consult with First Nations whose rights could be affected with the aim of securing their free, prior and informed consent on adjustments to BCTS' operating areas. The tiered approach, where greater change in area requires a greater depth of consultation, will be applied.
7. BCTS, in coordination with FOR district staff will engage tenure holders in the TSA on any desired adjustments to BCTS operating areas for review and comment.
8. Upon completion of consultation and cooperation with affected First Nations, and industry referral, BCTS will update all relevant operational plans and will request Cabinet's approval for amendments to the BCTS operating areas identified in the Refusal of Cutting Permit and Road Permit Regulation.
9. Any amendments to the BCTS operating areas identified in the Refusal of Cutting Permit or Road Permit Regulation will be forwarded to TSA adjustment committee for updating of the TSA's operating area maps and to affected First Nations

3 RECOMMENDED OPERATING AREA ADJUSTMENT APPROACH

Below is a summary of the steps involved in the operating area adjustment process. Best practices are highlighted for each section that should be considered by each TSA adjustment committee.

Step #1 - Process Initiation - “Trigger”

The “trigger” is the event that necessitates an analysis and possible adjustment of licensees’ and BCTS operating areas. The “trigger” can include such things as a lower AAC, large land base impacts (fire, insect infestations, treaty settlement land deletions, areas required for new tenures, new Part 13 areas set aside for old growth protection, etc.), or a new landscape plan, where the triggers have resulted in one or more tenure holders in the TSA being unable to find sufficient volumes to meet their AAC requirements within their existing operating areas. The trigger can also include the issuance of new tenures that requires the identification of suitable and unavailable operating areas.

Best Practice:

Ideally, the last ToR for an operating area adjustment process defines the “trigger.” This would usually be defined as an event that has resulted in an unacceptable loss of a licensee’s available volume. See step #12 for details. As an example, BCTS could trigger an operating area adjustment if representativeness requirements are no longer available within their existing operating areas.

Step #2 - TSA Committee Formation, Communication, and Leadership

TSA operating area adjustments usually require the formation of a TSA committee. Experience has shown that successful committees should, at a minimum, have representation from all replaceable tenure holders to establish a good working relationship based on trust and common objectives. Ideally, a TSA committee would also have representation from local First Nations whose rights could be affected.

The following assumes that an “event” has occurred, and that current licensees, BCTS, FOR, or new tenure holders have requested a change to the current operating areas.

Participation best practices:

- Ideally, all replaceable forest license holders should participate in the operating area adjustment process. Where replaceable AAC is small (less than 10,000 m³) it is common practice that the holder will enter into an arrangement with a major licensee to represent their operating area interests.
- All First Nations whose rights could be affected should be informed of the operating area adjustment process, including First Nations that hold tenure in the TSA. First Nations should be engaged with as early as possible according to their desired level of engagement. Ideally, First Nations will choose to participate, especially those with significant (AAC greater than 10,000 m³) replaceable tenure.
- Government (usually district FOR staff) should be involved in the initial ToR discussions to set government expectations and to inform participants of any agreements the Province has established with First Nations but should not usually be an active ongoing participant in the operating area adjustment process.
- Consultants representing First Nations should have decision-making authority authorized by the appropriate First Nation’s leadership authority.

Committee leadership best practices:

- Third parties should facilitate the ToR negotiation and overall operating area adjustment process. This could include forest industry consultants or government staff that are not directly involved in the approval of licensee strategic or operational plans.
- FOR staff should state expectations for market pricing and inform participants of any treaties, agreements or other constructive arrangements between the Province and First Nations as well as key legislation (e.g., s3 of the *Declaration Act*) that may impact the allocation of operating areas (e.g., tenure commitments, First Nation consultation agreements, etc.).
- The FOR Economic Hub papers titled “BC Pricing Papers,” October 2018, provide useful information for FOR staff on BCTS requirements to support market pricing.

Communication best practices:

- Advise all current and imminent tenure holders and First Nations whose rights could be affected, such as those with traditional territory in the TSA, of the intention to make operating area adjustment changes and invite them to participate in the negotiation of a ToR for the process. Again, affected First Nations should be invited to participate as early as possible and engaged with according to their desired level of engagement. The goal of engagement should be to obtain the free, prior and informed consent of affected First Nations on operating area adjustments.
- BCTS should inform participants of the unique role of BCTS to support the market pricing of timber, the independent role BCTS will play in the adjustment process, and how their process will ensure that there is fairness in the allocation of operating areas.

Step #3 - Terms of Reference Development

Note - Steps #3 to # 15 are key components of the ToR process. Refer to Appendix A for a standard ToR template and for details on the considerations for each component of the ToR process.

As mentioned previously, experience has shown that the most important element that leads to successful operating area adjustments was the negotiation of a ToR that led to an OAA that was agreed to by all major TSA tenure holders and affected First Nations. ToR best practices:

- The ToR must include a clear statement of objectives, operating selection process, dispute resolution process, adjustment process, data collection criteria, and desired products.
- Each TSA committee should adapt the ToR to suit their local situation; each TSA is different in terms of land base, timber supply, infrastructure, milling, tenure holders, First Nations, and public priorities.
- Try to expedite the adjustment process by setting milestones for the completion of key tasks.

Licensee interest statements:

ToR usually include each licensee’s interest statement or objectives. Ideally, many of these objectives are common between licensees, which can then be used to help set the principles for the operating area selection process. First Nation that have engaged in the process should ideally provide interest statements. Example interests include:

- Requiring relatively geographically appurtenant operating areas with a proportionate share of the TSA’s green mature available volume that contains a fair and equitable mix of attributes and non-timber constraints that impact economic outcomes (i.e., species, haul distance, harvest system, log products, etc.).

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- Consider First Nations' territories and how they align with licensees' operating areas to help foster existing and potential partnership arrangements with First Nations.
- Enhance industry certainty through awareness and respect of Indigenous inherent, treaty and constitutionally protected rights to their lands, territories and resources as reinforced by B.C.'s *Declaration Act* and the UN Declaration. For more information about benefits to industry, reference the Province's [Consulting with First Nations](#) page.
- Consider existing unamortized investments in road development and infrastructure.
- Operating areas as contiguous as possible to reflect economies of scale.
- Ensure adequate future fibre supply in consideration of forest health issues and land-based stewardship constraints in the TSA;
- Balance economic haul distance consistent with other tenure holders.
- Balance seasonal operability.
- Allow licensees to fully exercise timber harvesting rights and support manufacturing operations.
- Maintain or enhance an adequate representation of tree species and age classes.
- Maintain acceptable delivered log costs.
- Provides quality fibre consistent with mill design at acceptable delivered log costs.
- Contain a process to enable all licensees access to fibre within the TSA to address forest damage when levels of damage exceed the ability of a licensee to address the damage within their operating areas in a timely manner.
- Secure an equitable proportion of available merchantable mature coniferous volume, in terms of species, age, volume per tree, and fibre quality.
- Ensure adequate future fibre supply in consideration of economic shelf life and other known forest health issues.
- Account for known or "imminent" area-based tenures and other areas where timber development is disallowed by government.
- Ensure that a licensee is not disadvantaged through recent operating area deletions that have occurred from within a licensee's core operating areas for initiates such as awarding new area-based woodland tenures, recent wildfires, or new management strategies such as those included in landscape plans.
- Account for the impact on available sawlog volumes associated with existing and "imminent" non-replaceable volume-based tenures. Ensure log profile matches existing primary breakdown equipment within the TSA, to the extent possible..
- Ensuring the company has equal ability to comply with any partition that is established within TSA.

Step #4 - Funding Arrangements

The ToR should include details on each licensee's and BCTS' contribution to fund the operating area adjustment process. This should include the costs for meetings, facilitation, technical analysis, and interim and final products. See Appendix A for information.

Step #5 - Operating Area Adjustment Process

Based on the TSA participants' interests' statements (step #3), there should be a clear and concise objective negotiated for the operating area adjustment process.

Operating Area Adjustment Considerations and Best Practices:

- Keep the adjustment process as simple as possible by only focusing on a few technical measures. In most cases, the objective should be for each licensee's operating areas to have a proportionate amount of current mature merchantable (CMM) volume relative to their AAC in the TSA based on

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certain agreed upon attributes such as volume per hectare, age class, piece size, harvest system, lead species, live/dead composition, and slope class. For BCTS, there should also be a statement regarding the program's requirements for representative areas based on the net timber harvesting land base (see Appendix B).

- Use the currently allocated licensee and BCTS operating areas as a starting point for analyzing the objective outlined in the bullet above. The goal should be to minimize disruptions to existing operating areas as much as possible; however, it is possible that in some TSAs that have had significant disruptions (large fires, large land base removals), more significant operation area adjustments may be required.
- In larger TSAs, consider breaking the TSA into smaller components for analysis (i.e., this could be geographically separate areas that have significantly different timber species or qualities, timber transportation methods [e.g., road vs. lake tow]).
- Consider First Nations' traditional territories. Aligning licensees operating areas with First Nations' traditional territories can support the development and furthering of business arrangements, trust, and aid in consultation and cooperation.
- Consider the impacts of land use plans. Once forest landscape plans (FLPs) and modernized landscape use plans (MLUPs) are developed they will set spatial targets for land management. In many cases, it will be advantageous if licensees' operating areas align with these spatial targets.
- Consider the location and control of critical access, log dumps and foreshore areas.
- When tenure holders are not participating at the TSA table, their tenure operating areas should be identified and, where appropriate, factored into the data and operating area analysis. This can include tenures that are in the process of being developed but have not yet been issued.

Operating Area Sufficiency

Best Practice:

- The participants should agree on the threshold to determine when a licensee's operating areas are sufficient. See Appendix A for an example.
- State the agreed upon process for those licensees above and below the threshold. (i.e., participants above the tolerance are to provide operating area to participants below the tolerance and agree to make reasonable efforts to help facilitate the addition of new operating areas for those outside of the threshold).

Step #6 – Data

The TSA committee must agree on the data to be used for operating area analysis, the analysis products to be produced, and the content of the final reports.

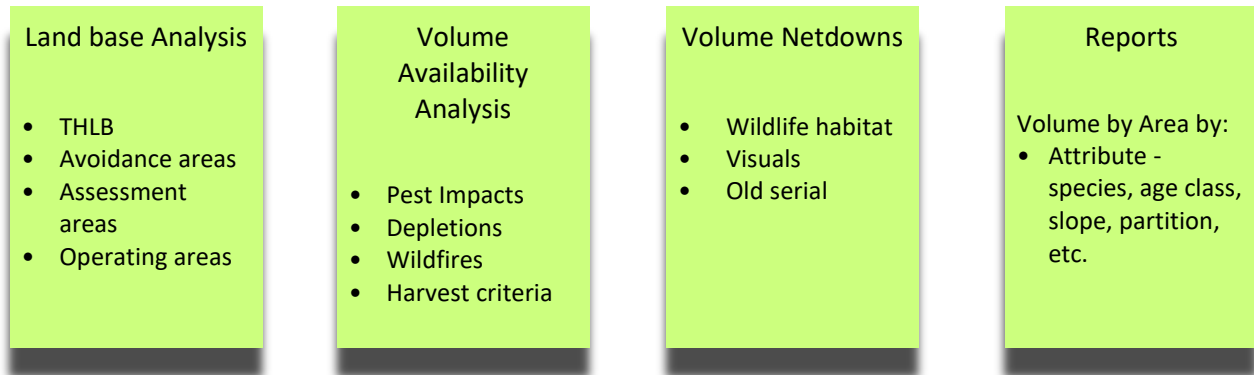
The technical working group is usually responsible to set the standards for the data, and forestry contractors are usually hired to complete the analysis and produce products. Data components that need to be determined include:

- Inventory and data layers.
- Forest Inventory data.
- Timber harvesting land base definition.
- Mature stand definition.
- Volume Adjustments.
- Operating area net land base definition.

The TSA committee should agree on the process to determine the net available volume for each operating area. This should include a review of the spatial and aspatial netdowns using the approved

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timber supply review and, where agreeable, local knowledge. The following diagram outlines the general process to analyze the CMM – moving from land base analysis, to volume analysis and finally to the production of reports to aid in operating area analysis.



TSA committees should seek advice and support from FOR Forest Analysis and Information Branch for information on the last approved timber supply review. Usually, the technical committee is responsible for detailed review and agreement on the netdowns, the production of datasets, and products that will be used for operating area analysis.

Best Practices netdown considerations:

- Volumes with defined area netdowns — non-replaceable Forest Licences, imminent area-based tenures such as First Nation Woodland Licences and Woodlots that have defined areas.
- Volumes with no defined area — non-replaceable NRFLs, Forest Service Reserve, etc.
- Operating areas where the volume is unlikely to be harvested (e.g., haul distance, barriers).
- BCTS operating areas defined in the Refusal of Cutting Permit or Road Permit Regulation and any proposal to adjust these areas (i.e., subject to Cabinet approval). See section below for details.

Reports

Reports should be produced that summarize the current position of each licensee relative to the key attributes identified by the TSA committee (i.e., CMM by leading species, harvest system, piece size, etc.).

To compare operating area equity, the most common report calculates the CMM volume and percentage for each focus indicator within each operating area relative to the licensee's targets. Simplified example:

Licensee	Attribute	Licensee Target (ha)	Actual Achievement based on current operating areas (ha)	Position	Target %
A	CMM	10000	8000	Deficit	-20%

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B	CMM	5000	5200	Surplus	4%
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In addition, as stated earlier BCTS operating areas will also be analyzed on their representativeness to support the MPS.

Best Practices:

- Set up a webpage to disseminate the information produced (datasets, reports, maps, etc.).

Prior to completing data analysis, the TSA technical committee should reach agreement on:

- The data to be used, the assumptions, and net downs.
- The attributes that will be measured and reported.
- The tolerance for each attribute to vary from the target before operating additions or deletions need to be considered.
- The numbers of years of CMM that is required for each licensee. In most cases, 10 years should be a minimum and 20 years is more common.
- The reporting by sub-components of the TSA (see Step #5).

Step #7 - BCTS Operating Area Proposal

To adequately support MPS, BCTS operating areas should contain the correct proportion of the CMM relative to their AAC for the representation criteria outlined in Appendix B. In addition, in areas with significant changes to BCTS operating areas, BCTS should examine the BCTS operating areas net THLB relative to the TSA - Appendix B.

In TSAs where BCTS does not have sufficient operating areas (i.e., is below the volume threshold discussed in step #4), to meet their share of the AAC or have inadequate areas for representation, BCTS will produce one or more proposals for the TSA that shows the operating areas required by BCTS. The proposal(s) will be sent to the TSA Committee, non-participating licensees, FOR District office, and affected First Nations for review and comment. In the case of First Nations, BCTS will attempt to establish a process for consultation and cooperation around the finalization of BCTS' operating area proposal with the aim of securing their free, prior and informed consent (see Part 2, BCTS for more detail).

See Part 2 BCTS for further details on BCTS requirements for operating areas to support BCTS and their role in operating area adjustments.

Best Practices:

- BCTS operating areas identified in the Refusal of Cutting Permit or Road Permit Regulation should be used as the starting point for BCTS proposals net any land base losses or impacts to available volume (i.e., new tenures, Treaty lands, Caribou agreements, etc.).
- BCTS should outline in their proposal(s) how the selection of BCTS operating areas constitutes a fair and equitable allocation of operating areas (i.e., BCTS areas constitute the full range of species, operating conditions, and geography for the TSA) and how it aligns with the CMM targets for BCTS. BCTS should also outline how the rights and interests of affected First Nations were considered, in alignment with B.C.'s *Declaration Act* and the rights and principles of the UN Declaration.

Licence and First Nation Review

BCTS will address any concerns with their proposal, consider adjustments, and provide the updated location of current and planned BCTS operating areas to the TSA Committee.

Step #8 - Licensee Operating Area Negotiation

This step is where licensees who are above the agreed upon thresholds by attribute (“have licensees”) and licensees who are below the agreed upon thresholds by attribute (“have not licensees”) negotiate changes in operating areas. The goal is to have consensus on the final agreement(s). Consensus should be defined in the ToR. Where consensus cannot be achieved, decision making will follow the dispute processes detailed below in step #9.

Best Practices:

- The “have licensees” identify their core operating areas that they wish to hold and those areas that they no longer want that could be made available. The retention of the core operating areas should bring the “have licensee” to within the acceptable tolerance for the attributes being measured. The list of available operating areas should be provided to all participating licensees.
- Agree to an operating selection approach for “have not” licensees. This could include a process where the licensees that are furthest below their target CMM goal have first choice to select available operating areas until they are no longer the licensee furthest from their target. The next licensee furthest from their target then chooses available operating areas, and so on. Negotiations can then proceed between “have” and “have not” licensees as outlined in the ToR. This could occur independently between licensees or at the TSA committee level with all participants.
- Set a timeframe for operating area negotiations to be conducted and finalized.
- When operating areas are split, a clear delineation of boundaries must be provided to the TSA committee.
- All operating area trades should be in writing and presented to the facilitator for presentation at future TSA committee meetings.
- Operating area changes should make sense operationally — they should not be scattered and isolated. Ideally, they should be located with discreet watersheds and land use planning areas.

Step #9 - Dispute Resolution

The ToR should establish a dispute resolution process where consensus cannot be reached on operating areas (see Appendix A for details). This dispute resolution process does not apply to BCTS operating areas.

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Successful dispute resolution processes generally involve either an escalating series of steps; from a non-binding process led by mediator or facilitator who is usually an experienced forest industry expert to a binding process lead by an arbitrator, or a binding arbitration process. The TSA committee should agree on the approach that will apply.

Best Practices:

- The TSA committee should establish a ranked list of acceptable mediators and, if applicable, arbitrators.
- The mediation and arbitration process should have timelines established to ensure resolution of operating area disputes in a timely manner.
- Mediation or arbitration cannot result in a “have licensee” moving to a deficit situation that is below the tolerance level.
- The dispute resolution process should detail the expenses to be covered by each licensee in the dispute process.
- Use baseball arbitration, where the arbitrator must pick one of the proposals submitted to settle disputes. Doing so will result in companies submitting more realistic proposals.

Step #10 - BCTS Operating Area First Nations Consultation

BCTS will conduct consultation with First Nations in the TSA as per government policy if changes to the operating areas identified in the Refusal of Cutting Permit or Road Permit Regulation are required. For more information refer to BCTS’s most recent policy on First Nations consultation regarding BCTS operating area changes. See section 2.2 for more details.

Step #11 - Transition and Compensation

The ToR should specify the transition details and compensation payable for the transfer of operating areas between licences. Although BCTS is not a signatory to the ToR, they will work out transition and compensation issues with licensees who are impacted by changes to BCTS operating areas.

Best Practice:

The transition plan should:

- Include the timing of transition and how approved and unapproved operational permits will be dealt with.
- Identify those items that are compensable. This could include soft assets like cutting permits and road permits and hard assets that are not fully amortized like road and bridge investments.
- Identify liabilities that must be addressed by the exiting licensee (i.e., road liabilities), or that will be transferred to the new licensee.
- The ownership and control of logs dumps and foreshore areas should be determined to ensure that licensees have access to tidewater.
- Identify when the transfer of permits will occur.

Step #12 - Term of the Agreement and Amendments (Trigger)

The ToR should specify the term of the agreement and the conditions/events that would necessitate an amendment to the OAA.

Best Practices:

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- Specify when the OAA can be re-opened. This could be if a licensee's proportionate share of the CMM is decreased by a certain percentage. The affected licensee should present evidence that the "trigger" has been met.
- Licensees can renegotiate operating areas within their respective assigned operating areas without triggering an amendment to the OAA.
- When new tenures need to be issued in the TSA and operating areas are required, the TSA committee and BCTS should be notified by the local District office. Upon consensus, the TSA committee members should meet to negotiate operating areas for the new tenure. If changes are small this process does not need to follow the detailed process outlined in this guide.

Step #13 - Operating Area and Product Finalization

Upon the completion and agreement of licensees' operating areas and ideally approval of any changes to BCTS operating areas by Cabinet, the following products should be produced:

- A map of the licensee's and BCTS operating areas.
- A list of the operating areas by licensee and BCTS.
- An operating area analysis summary showing the CMM by licensee and BCTS; and
- A final resultant database.

If BCTS have not yet been approved by Cabinet, it may be appropriate to use the draft BCTS operating areas. Draft will be where First Nation consultation and industry referrals have been completed.

Step #14 - Operating Area Agreement

The key products identified in step #13; map and analysis summary should be signed off by all TSA committee members and, ideally, affected First Nations within the TSA. The operating area map should be sent to the local FLNRORD office for inclusion in the BC data warehouse.

Step #15 - Communication Plan

A communication plan should be developed to communicate the outcome of the operating area negotiations and any changes approved by Cabinet for the BCTS operating areas to potentially impacted parties. The communications should include the new operating area map and its effective date.

Best Practice:

- The communications should be sent to any individual or party that could be affected by changes in the operating area (i.e. public, other land base and resource users, etc.).
- Through early engagement by licensees and consultation and cooperation by BCTS, First Nations will be informed of and ideally have consented to the details of the changes in operating areas including what licensees are leaving, who is taking their place, transition details (change in liabilities, holders of permits, etc.).

4 APPENDIX A – OPERATING AREA AGREEMENT

XXXX TIMBER SUPPLY AREA OPERATING AREA NEGOTIATIONS YEAR

PROCESS GUIDANCE DOCUMENT

FINAL

DATE

Participants:

Analytical Support:

XXXXX TSA Operating Area Adjustment Agreement

The undersigned parties agree to the protocol, principles and technical assumptions contained within this document for the purposes of renegotiation of operating areas in the XXXX TSA.

IN WITNESS WHEREOF, the parties have executed this agreement on the day and year _____.

<hr/> Authorized signature <hr/> (print name)	<hr/> Authorized signature <hr/> (print name)
<hr/> Authorized signature <hr/> (print name)	<hr/> Authorized signature <hr/> (print name)
<hr/> Authorized signature <hr/> (print name)	<hr/> Authorized signature <hr/> (print name)

Attachments:

- TSA Operating Area Map
- Table of operating area allocation by licensee
- Metrics detailing the current mature merchantable volume allocated to each licensee

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INTRODUCTION

Include a description of the timber supply area (TSA), the current status of the allocation of operating areas, history of the last operating area adjustment process, the current annual allowable cut, information on partitions, and information on grade 4 credit orders.

Operating areas are a commercial arrangement between the participants. Once operating areas are agreed upon, the participants will plan and conduct their operations within their operating areas.

BC Timber Sales (BCTS) operating areas are identified in the *Refusal of Cutting Permit or Road Permit Regulation*. As a result, BCTS's operating areas required to support the market pricing system (MPS) are determined through a unique process (see the Provincial Operating Guide for information). **As a result, this template is not intended to apply to BCTS.**

This document sets out the agreed upon process for adjusting operating areas in the TSA.

This document is entered in without prejudice to Aboriginal rights, including Aboriginal title and interests of Indigenous and First Nations who have interests recognized under the *Constitution Act*, 1985. All participants acknowledge and agree that separate processes are in place to address Aboriginal rights, which may further inform the guidelines set out in this document. First Nations participation in this process in no way acknowledges support for the current Allowable Annual Cut (AAC) Determination and Apportionment process. First Nations will continue negotiations with the Province to address AAC issues.

OBJECTIVE

State the objective of the process. This should usually include information on allocating a proportionate share of the TSAs current mature merchantable (CMM) volume from operating areas.

Ideally, the Ministry of Forests, (FOR) should state their objectives for the process. This could include the requirements for market pricing, any tenures, and related conditions agreed to with First Nations that may affect the location of operating areas.

PROPORTIONATE SHARE OF THE CURRENT MATURE MERCHANTABLE AVAILABLE VOLUME

- The proportionate share of the mature available volume will determine the amount of operating areas for each participant and is determined by dividing the total mature available volume by the current AAC in Table 1 PARTICIPANTS.

$$\begin{array}{l} \text{This was} \\ \\ \text{total mature available} \\ \text{volume m}^3 \\ \\ \text{current AAC m}^3 \end{array} = \quad \text{XX} \quad \text{Years}$$

Acceptable Tolerance (Amount of Operating Area)

- The participants should agree on a tolerance (percentage) for meeting each tenure holders target for the average years of mature available volume relative to the holders share of the TSAs AAC.
- State the agreed upon process for those licensees above and below the threshold (i.e., participants above the tolerance are to provide area/volume to participants below the tolerance and agree to make reasonable efforts to help facilitate geographically reasonable operating areas for those outside of the tolerance).

PARTICIPANTS

Participants usually include most replaceable forest licence holders. BCTS and FOR staff can play a role in the process (see the BCTS section and the Provincial Operating Guide for information). This should be discussed as a component of the adjustment process. FOR should talk to First Nations that are engaged in the forest sector to determine their interest in participating. A table should be developed (see Table 1) that describes current AAC proportions and designated representatives of participants. The representative of each participant should have the authority to negotiate and confirm their intent to reach an agreement.

Table 1 XXXX TSA Participants

Participant	Current AAC (m ³ /yr)	Additional Commitments (m ³ /yr)	Total AAC (m ³ /yr)	% Share of AAC	Representatives
Total Negotiation AAC					

Other Volumes

Information should be provided on the AAC that is not included in Table 1. This could include:

- Forest Licence holders that are not participating in the process who will not have defined operating areas.
- Current and imminent Forest Licence holders who have defined operating areas.
- Forest Licence holders who have entered into partnership with other Forest Licence holders whose combined AAC will be added in Table 1 to determine the appropriate “percentage share of AAC”.

- AAC without defined operating areas such as the Forest Service Reserve.
- Imminent area-based tenures such as Community Forests, First Nation Woodland Licenses, Woodlot Licenses.
- Partitions and grade 4 orders that may apply to the TSA.

FUNDING AGREEMENT

Details should be provided on the participants' funding contribution for meeting incidentals, facilitation, data preparation, process arbitration (not preparation of cases to present to arbitrator), analysis to determine the initial statistics, and the final statistics summary. In most cases, BCTS and the forest district can provide funding for parts for the adjustment process and should be contacted to determine their support.

Any planning cell specific analysis, splits, operating area arbitration, etc., necessary to finalize trading are funded by the specific participant(s) requiring the information.

PRINCIPLES

A. ASSESSMENT OF EQUITY CALCULATIONS

This section should include information on the agreed upon information and data to be used in the process and the principles and calculation criteria that will be developed prior to undertaking any calculations that indicate operating area equity.

B. DECISION MAKING

b.1. Decision-Making Principles

Include the committee's agreement on the data package assumptions. Include any "known issues" (see example in Appendix). If "known issue" areas spatially defined (mappable), legally defined or unanimously recognized by the committee, then determine how the areas will be dealt with. Example:

1. Merchantable volume is 100% unavailable to participants over time (i.e., cannot get Cutting Permit),
the area / volume is removed from the negotiation land base.
or
2. Merchantable volume is significantly reduced due to forest management constraints,
3. The mature volume is reduced to reflect an estimate of what would be available to any participant working in the area.

Attribute Information

The parties must agree on the important attributes that are associated with each tenure holder's share of the CCM. Example:

- Volume by leading species.
- Harvest system

- Live/dead ratio

C. PROCESS MEDIATION AND/OR ARBITRATION

The parties should agree on a mediation and/or arbitration process when operating areas cannot be mutually agreed to. Example:

- Where a process arbitrator is required, a mutually agreed upon arbitrator will be selected as soon as possible by determining a ranked short list of candidates and then using the highest ranked candidate that is available to complete the process in the timelines agreed to by the TSA committee.
- If an impasse is reached in developing the agreement document, a note is to be recorded in the official minutes of the meeting. At that time there is 21 calendar days from the date of the meeting for this issue to be resolved with the arbitrator. The 21-day timeline can be extended by the facilitator only if no arbitrators are available to work within this timeline. If the time frame is longer than 21 days, all participants are to be informed by the facilitator.
- Participants are to prepare a written presentation for each position on the impasse and exchange them with the committee and the arbitrator no later than 14 calendar days after the impasse is documented. The arbitrator will convene a meeting and notify the participants and the facilitator. The parties will then give oral presentations to the arbitrator.
- The cost of Process Arbitration is shared equally among all participants. Costs to prepare the cases for the arbitrator are borne by individual parties making the case.
- Decisions must choose one party's position and ignore all others (baseball arbitration).

D. OPERATING AREA ARBITRATION PRINCIPLES

Develop operating arbitration principles when participants are unable to reach agreements around planning cell trades. Example: Where the services of an arbitrator are required, the parties agree to select a mutually acceptable arbitrator within 10 days of informing the facilitator they wish to go to arbitration. Example:

d.1. Example:

- The parties in dispute are to inform the facilitator in writing that an impasse has been reached, at which time an arbitrator is to be selected and then there will be 21 calendar days from the date of arbitrator selection, to resolve the issue with an arbitrator. The 21 day timeline can be extended by:
 - the facilitator if no arbitrators is available to work within this timeline, or
 - by the disputing parties, to a maximum of 14 additional days, if all parties are in agreement.If the time frame is to be longer than 21 days, all affected parties are to be informed by the facilitator.
- Parties involved in arbitration agree that best efforts will be made to reach a resolution as quickly as possible.

- Parties in dispute will prepare a written presentation and exchange them with each other and the arbitrator no later than 14 calendar days after notification to the facilitator that an impasse was reached. The arbitrator will then convene a meeting and notified the parties and any observers. The parties will then give oral presentations to the arbitrator.
- All parties' positions must align with the Operating Area Agreement document and the statistics produced using the documented process.
- Arbitration cannot result in a surplus participant moving to a deficit situation.
- Decisions must choose one party's position and ignore all others (baseball arbitration).
- The cost of arbitration is shared equally among parties in dispute.

5.d.2.Arbitrator's Guidelines - Example:

The arbitrator shall use, but is not limited to the following considerations in his or her decision:

- Position aligned with interest statement(s).
- Minimize disruption of historical operating areas, with the understanding that some disruption will occur as some participants begin the process with no existing operating areas.
- Traded areas are meant to be a reasonable cross section of the harvesting opportunities available to the "have" participant considering stand types, terrain profiles, haul distances, delivered log costs, etc. (not simply the worst opportunities).
- Existing participant liabilities and/or assets (i.e., roads and log dumps).
- Past harvest system profile performance of participants.
- Volume impacted by protected blocks and roads.

E. TERM OF AGREEMENT

State the term of the agreement, when and under what circumstances the Operating Area Committee will reconvene for an update, and when and how the agreement can be extended.

a. Amendments

State the conditions that apply for amendments to be made to the agreement. For example:

- When a participants proportionate share of volume is reduced or increased by 10% or greater.
- The affected participant(s) will present evidence the trigger has been activated. Other members of the operating committee will verify the acceptability of assumptions in writing within a month of the presentation of evidence. Absence of a response will be deemed acceptance.
- Where a new replaceable license is issued in the TSA the operating area committee shall reconvene. Upon consensus of the committee members, the agreement will be reopened and renegotiated with the input of the new tenures holder to identify an operating area for the new entrant(s).

G. PHASE IN-PHASE OUT

Where changes to established operating areas are being made, the committee should negotiate the conditions that apply. Example:

- The investments in operations that will not be affected (i.e., Cruised blocks).
- When any affected permits must be transferred to the new operating area licensee.
- Any compensation payable for unamortized costs (i.e., roads and bridges).

AREA ASSIGNMENT

A. NEGOTIATION PROCESS

- Data are agreed upon and provided to all members prior to negotiations:
- Agreement on principles/process and technical data.
- Tolerance around the TSA target years of mature volume.
- Map of planning cells and operating area boundaries.
- The basic unit of negotiation is a participant's portion of a planning cell, which can be subdivided if needed.
- The TSA mature available volume is to be calculated and then the mature available volume of each participant's existing operating area is to be determined. A ledger showing each participant's position and surplus/deficit relative to the objective is to then be prepared. All trades will be entered into the ledger, with the ledger being maintained by the facilitator.
- All significant forest management issues and commitments that may restrict harvest opportunities are to be made known to the "have-not" participant prior to trade.
- Prior to the initial negotiation meeting, each "have" participant is to circulate a list of planning cells (or partial planning cells) to other participants that could be made available. The list of planning cells will have brought the "have" participants operating area within the accepted tolerance.
- Participants are to work toward addressing the deficits within 2 months of pushing the button.
- All trades are to be in writing and presented to the facilitator and brought forward by the facilitator to the OAC through meetings and/or e-mail correspondence.
- Where negotiations further split a planning cell, a clear delineation of boundaries must be provided.
- Negotiations can occur when the OAC is convened or conducted independently at the discretion of the parties.
- All negotiations must involve at least one deficit participant until deficits have been addressed. Once deficits are addressed (everyone within tolerances) than any additional voluntary trades would be allowed within 30 days.
- The agreed upon operating area dispute resolution process is only to be used where necessary.

DATA

This section should include all of the data that is agreed to be provided to the participants. This can include:

- CCM data for each participant (summary and by operating cell) for each of the agreed upon timber and land base attributes.
- TSA report of each participant relative to TSA average years of mature volume.
- Spatial file of the negotiation land base.
- Database of the information on the spatial file.

COMMUNICATION PLAN

Agreement should be reached on how the results of the adjustment process will be communicated. Ideally, this should include the involvement of FLNRORD local staff. The communication should include a new operating area map and the effective date of the adjusted operating areas.

First Nations Communications and Stakeholders:

FOR and licensees should develop a plan to notify First Nations and stakeholders of any operating changes. Regarding BCTS, they have a unique role in consulting First Nations on any changes being contemplated to BCTS operating areas identified in the Refusal of Cutting Permit or Road Permit Regulation.

Mapping:

The final map will should be signed off by participating licensees and the final operating area boundaries posted to the BC Data Warehouse by FLNRORD.

FINAL REPORT

The contents of a final report should be agreed to. Example:

- brief description of the operating area negotiation process,
- signatory page for all participants (does not include BCTS),
- effective date of the agreement,
- map of the participant operating areas,
- list of planning cells by participant,
- Final resultant database.

APPENDIX FOR THE TEMPLATE

KNOWN ISSUES

Details should be provided on factors that affect the CMM volume available. Examples:

Areas removed from the land base – Parks and Reserves, Ecological Reserve, Recreation Reserves, Protected Areas, Environmentally Sensitive Areas, Unstable Terrain, Inoperable Areas, Non Merchantable types, Problem Forest Types / Low Productivity Sites, Riparian Management Areas, Archaeological Sites, Cultural Heritage Sites, Heritage Trails, UWR Thermal Cover Areas, Non Crown / Non TSA Ownership, Non Forest / Non Productive, Roads and Transmission Line Reductions, etc.

TECHNICAL INFORMATION

Inventory and Data Layers

This section should describe the data inputs for the analysis. For each layer, the current dataset should be defined. This dataset will be used to create the resultant dataset used in the operating area negotiation process.

Forest Inventory Data

Provide details on the forest inventory data used. Pertinent details:

- RESULTS / FTA depletion information.
- All CP approved blocks from NRFL's as of Aug 1, 2017 were treated as logged (depleted).
- Historical fires not represented in the VRI dataset.

Mature Stand Definition

Provide details on the THLB that met acceptable criteria and were assumed to be merchantable during the term of this agreement.

Volume Adjustments

List any volume adjustments. Examples:

Deciduous species, management constraints - VQOs, Dry Belt Fd, etc.

INTEREST STATEMENTS

Include each participating licensee's interest statement regarding required/desired outcome of the operating area adjustment process.

5 APPENDIX B - BC TIMBER SALES REPRESENTATION CRITERIA

BCTS Representation analysis should be based on the net timber harvesting land base (THLB). The netdowns should reflect the latest approved timber supply review as much as possible.

Interior Representation Attributes

Attributes		Description
BEC	AT/MH/other ESF ICH SBS	Biogeoclimatic ecosystem classification zone. Derived from the Provincial biogeoclimatic map.
Slope	< 20% 20–40% > 40%	Rate of change in elevation over a 150 m by 1M gridded DEM.
Age	< 80 yrs 80–250 yrs > 250 yrs	The age (or projected age) of the rank #1 forest layer within a forested stand.
Species	hem & bal cedar & spruce other_spp	Leading commercial species in the forest inventory. The species with the highest percent composition (i.e., by gross volume or if a young stand, the relative number of stems per hectare) is identified as the leading species.
Volume m ³ /ha	< 250 250–500 > 500	Total net volume per hectare across all commercial species at the primary utilization level. Net volume per hectare is determined from gross volume less decay, waste and breakage. Depending on the magnitude of the species decay, waste and breakage, the net volume of the leading species may be lower than volumes for other species in the stand. Net volumes are calculated for the rank #1 layer (next forest layer to be harvested).
Site index	< 15 m 15–20 m > 20 m	An expression of the forest site quality based on stand age and height. Site index is determined using stand age, stand height, and site index equations. These equations are based on a reference age of 50 years taken at breast height (1.3 m).
Mill proximity	< 50 km 50–100 km > 100 km	Haul distance to a major mill.

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Road density	< 0.02 rpw 0.02–0.04 rpw > 0.04 rpw	Road density is calculated as the proportion of the raster grid cells with a tract (defined BCTS pricing area) that are occupied by road. A grid cell represents a 50 m × 50 m area. Sources of information are TRIM roads, tenure roads and licensee supplied roads.
Pulp content	sawlog marginal sawlog pulp other_types	A determination of the “log” content of stands within the tract based on the utilization specifications. The logs with the highest percent composition are identified as the primary log content.

Coast Representation Attributes

Attributes		Description
BEC	CWH MH Other	Biogeoclimatic ecosystem classification zone. Derived from the provincial biogeoclimatic map.
Slope	< 35% 35–60% > 60%	Rate of change in elevation over a 150 m by 1M gridded DEM.
Age	< 80 yrs 80–250 yrs > 250 yrs	The age (or projected age) of the rank #1 forest layer within a forested stand.
Species	Cedar Douglas Fir other	Leading commercial species in the forest inventory. The species with the highest percent composition (i.e., by gross volume or if a young stand, the relative number of stems per hectare) is identified as the leading species.
Volume m ³ /ha	< 400 400–750 > 500	Total net volume per hectare across all commercial species at the primary utilization level. Net volume per hectare is determined from gross volume less decay, waste, and breakage. Depending on the magnitude of the species decay, waste and breakage, the net volume of the leading species may be lower than volumes for other species in the stand. Net volumes are calculated for the rank #1 layer (next forest layer to be harvested).
Site index	< 20 m 20–30 m > 30 m	An expression of the forest site quality based on stand age and height. Site index is determined using stand age, stand height, and site index equations. These equations are based on a reference age of 50 years taken at breast height (1.3 m).

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Mill proximity	< 10 km 10–50 km > 100 km	Haul distance to a major mill centre of tidewater along major transportation routes or valley bottoms.
Road density	< 0.02 rpw 0.02–0.04 rpw > 0.04 rpw	Road density is calculated as the proportion of the raster grid cells with a tract (defined BCTS pricing area) that are occupied by road. A grid cell represents a 50 m × 50 m area. Source of information are TRIM roads, tenure roads and licensee supplied roads.