



BC Timber Sales – 2022 SFI Surveillance Audit

From August to December 2022 an audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out a multi-site surveillance audit of BC Timber Sales' (BCTS) operations against the requirements of the Sustainable Forestry Initiative[®] (SFI) 2015-2019 Forest Management Standard, valid until December 31 2022. This Certification Summary Report provides an overview of the process and KPMG's findings.

Description of the BC Timber Sales SFI Certification

BC Timber Sales' woodlands operations are covered by a multisite SFI forest management certificate that includes a total of 12 sites. The Company was certified to the SFI standard in 2011. The BCTS current SFI forest management certificate is valid until March 31, 2027.

Description of the BC Timber Sales Woodlands Operations

BC Timber Sales is an autonomous organization within the Ministry of Forests (MoF), with financial and operational independence from Regional and District operations. The organization is comprised of 12 Business Areas with an operational presence in 33 locations across the province, and supports the Ministry's goal of providing British Columbians with sustainable benefits from the commercial use of public forests. BC Timber Sales provides these benefits by planning, developing and selling through auction a substantial and representative portion of the province's annual available timber volume. The bid prices received from auctioned timber drive the Market Pricing System for setting stumpage in coastal and interior operating areas of the province. The organization manages approximately 20% of the provincial allowable annual cut (AAC). BC Timber Sales does not operate any forest products manufacturing facilities, nor does it have a fibre sourcing program.

The BC Timber Sales multi-site SFI certificate applies to sustainable forest management planning and practices (roads, harvesting and silviculture) conducted by BC Timber Sales Corporate staff, Business Area staff, licensees/permittees and contractors (LPCs) in the following Business Areas:

- Babine Business Area (TBA)
- Cariboo-Chilcotin Business Area (TCC)
- Chinook Business Area (TCH)
- Kamloops Business Area (TKA)
- Kootenay Business Area (TKO)
- Okanagan-Columbia Business Area (TOC)
- Peace-Liard Business Area (TPL)
- Prince George Business Area (TPG)
- Seaward-tlasta Business Area (TST)
- Skeena Business Area (TSK)
- Strait of Georgia Business Area (TSG)
- Stuart-Nechako Business Area (TSN)

A detailed listing of applicable forest management units is included as Appendix B of the BC Timber Sales Provincial Sustainable Forest Management (SFM) plan at: bcts provincial sustainable forest management plan.pdf (gov.bc.ca)

At the time of the 2022 surveillance audit BC Timber Sales had a combined AAC apportionment of over 12.3 million $\rm m^3$ per year within the forest management units covered under its multi-site SFI forest management certificate. This equates to a prorated area under management of over 12.4 million hectares. The 2022 audit confirmed that BC Timber Sales had not exceeded its combined AAC apportionment for the 2021/22 BCTS fiscal year. The total volume sold for the 2021/22 BCTS fiscal year across all Business Areas was just over 10 million $\rm m^3$.















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All 12 of the BC Timber Sales Business Areas are covered by a multi-site SFM plan that addresses the Objectives of the SFI forest management standard and includes a variety of targets in relation to them. In addition, government-approved Forest Stewardship Plans (FSPs) that address both timber and non-timber values are also in place. Various higher level plans developed by government (e.g., Land and Resource Management Plans (LRMPs), etc.) also provide direction to forest management within the areas managed by the organization.

The areas covered by BC Timber Sales SFI certification fall within the following World Wildlife Fund (WWF) ecoregions: (1) Alberta-British Columbia Foothills Forests, (2) North Alberta Mountain Forests, (3) British Columbia Mainland Coastal Forests, (4) Cascade Mountains Leeward Forests, (5) Central British Columbia Mountain Forests, (6) Central Pacific Coastal Forests, (7) Fraser Plateau and Basin Complex, (8) Muskwa-Slave Lake Forests, (9) North Central Rockies Forests, (10) Northern Cordillera Forests, (11) Northern Pacific Coastal Forests, (12) Northern Transitional Alpine Forests, (13) Okanagan Dry Forests, (14) Pacific Coastal Mountains Icefields and Tundra, (15) Puget Lowlands Forests, and (16) Queen Charlotte Islands.

The forests managed by the BC Timber Sales are predominantly coniferous with the main commercial tree species being Douglas-fir, hemlock (western and mountain), western red cedar, yellow cedar, lodgepole pine, spruce (sitka, white, black, englemann and hybrids), grand fir, subalpine fir, balsam fir, western larch and trembling aspen.

The forest management approach employed by BC Timber Sales is based primarily on even-aged management, ground and overhead cable-based harvesting systems, clearcut harvesting with the retention of reserves of standing trees (either within or adjacent to harvest areas), replanting of harvest areas within a few years with a mix of ecologically suited tree species and control of competing vegetation through the use of government approved chemical herbicides or non-chemical means. Controls are in place to help reduce reliance on chemical brush control where feasible.

Audit Scope

The audit was conducted against the requirements of the SFI 2015-2019 forest management standard, and incorporated an assessment against the SFI program objectives for:

- Forest management planning
- Forest health and productivity
- Protection and maintenance of water resources;
- Conservation of biological diversity;
- Management of visual quality and recreational benefits
- Protection of special sites;
- Efficient use of forest resources
- Recognize and respect Indigenous Peoples' rights;
- Legal and regulatory compliance;
- Forestry research, science and technology
- Training and education,
- Community involvement and landowner outreach,
- Public land management responsibilities,
- Communications and public reporting, and
- Management review and continual improvement.

BC Timber Sales 2022 SFI Surveillance Audit Findings

Open non-conformities from previous audits	8
New major non-conformities	0
New minor non-conformities	5
New systemic opportunities for improvement	4

Types of audit findings

Major non-conformities:

Are pervasive or critical to the achievement of the SFM Objectives.

Minor non-conformities:

Are isolated incidents that are non-critical to the achievement of SFM Objectives.

All non-conformities require the development of a corrective action plan within 30 days of the audit.

Corrective action plans to address major non-conformities must be fully implemented by the operation within 3 months (or up to 6 months at the discretion of the KPMG PRI Business Leader) or certification cannot be achieved / maintained.

Corrective action plans to address minor non-conformities must be fully implemented within 12 months.

Opportunities for Improvement:

Are not non-conformities but are comments on specific areas of the SFM System where improvements can be made.





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The Audit

- Audit Team The project lead auditor was Bodo von Schilling, RPF, EP(EMSLA). Audit team members included Shawn Ellsworth RPF, Chris Ridley-Thomas RPBio, EP(EMSLA), Cindy Hutchison RPF, Sylvi Holmsen, and Mike Buell as well as Cynthia Lu, RPF (independent contractor). The members of the audit team have conducted numerous SFM audits under a variety of standards including ISO 14001, CSA Z809 and FSC and specifically the SFI FM standard.
- 2022 SFI Surveillance Audit The audit included an assessment of the Timber Sales' SFI program and the environmental management system (EMS) procedures that pertain to it. Site visits were made to 8 out of the 12 Business Areas. In addition, the audit included an assessment of the BC Timber Sales Corporate Office's implementation of the SFI program requirements that are applicable at the corporate level. The audit involved a review of selected forest management plans and records, interviews with a sample of staff, licensees and contractors, and visits to several field sites (66 roads, 61 cutblocks and 29 silviculture sites) to assess conformance with the requirements of the SFI 2015-2019 Forest Management Standard. The SFI audit took approximately 60 days to complete, of which approximately 40 were spent on-site. The balance of audit time was spent preparing the audit plan, completing off-site document reviews of records supporting SFI conformance, conducting telephone interviews with selected BCTS staff, completing audit checklists, and preparing the main and public summary audit reports.
- Multi-site Audit Sampling BC Timber Sales holds a multi-site SFI certificate covering a total of 12 Business Areas. The sites included within the scope of BC Timber Sales' certification are contained in two strata. 'Full scope' audits were conducted at 4 Business Areas (i.e. TCC, TST, TBA, TOC) and this sample size is consistent with IAF requirements regarding audit sampling for multi-site certifications with 12 sites. 'Limited scope' audits were conducted at 4 Business Areas (i.e. TPL, TSK, TPG, TSN) strengthening the sample.
- BC Timber Sales' SFI Program Representative Laura Chessor, RPF, Certification Officer served as the organization's corporate level SFI program representative for the audit. In addition, the various Certification Standards Officers (CSOs) located at each of the local Business Area offices included in the audit sample acted as the SFI program representatives at the Business Area level.

Audit Objectives

The objectives of the audit were to evaluate the sustainable forest management system at BC Timber Sales to:

- Determine its conformance with the requirements of the SFI 2015-2019 Forest Management Standard;
- Evaluate the ability of the system to ensure that BC Timber Sales operations meet applicable regulatory requirements;
- Evaluate the effectiveness of the system in ensuring that BC Timber Sales meets its specified SFM objectives; and
- Identify opportunities for improvement, where applicable.

Use of Substitute SFI Indicators

None of the SFI indicators included within the scope of the assessment were modified or substituted for the purpose of this audit.



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Evidence of Conformity with the SFI 2015-2019 Forest Management Standard

Primary sources of evidence assessed to determine conformity with the SFI 2015-2019 Forest Management Standard are presented in Table 1 below.

SFI Objective #	Key Evidence of Conformity
Forest Management Planning	Not a focus of the 2022 audit.
Forest Health and Productivity	Not a focus of the 2022 audit.
Protection and Maintenance of Water Resources	Sustainable Forest Management ("SFM") plans, Forest Stewardship Plans ("FSP"), Environmental Management System ("EMS") operational controls, conformance with the results of watershed assessments, review of site plans and harvest plans,
Conservation of Biological Diversity	Not a focus of the 2022 audit.
Management of Visual Quality and Recreational Benefits	SFM plan, FSPs, review of site plans and associated Visual Impact Assessment ("VIA") results, interviews with a sample of staff and LPCs, field inspections.
6. Protection of Special Sites	Not a focus of the 2022 audit.





The KPMG audit activities include reviews of active harvest operations at TBA. KPMG reviewed the implementation of the BCTS Environmental Management System and utilization of timber.





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SFI	Objective #	Key Evidence of Conformity
7.	Efficient Use of Fibre Resources	SFM plan, waste survey results, final block inspections, inspection of a sample of recently completed harvesting areas.
8.	Recognize and Respect Indigenous Peoples' Rights	Not a focus of the 2022 audit.
9.	Legal and Regulatory Compliance	SFM plan, BC Timber Sales environmental, social and health & safety policies, BA and Provincial level EMS and SFI management review records, BC MFLNRORD C&E (Compliance & Enforcement Branch) reports, Business Area ("BA") noncompliance records, field inspections.
10.	Forestry Research, Science & Technology	Not a focus of the 2022 audit
11.	Training and Education	Not a focus of the 2022 audit
12.	Community Involvement and Landowner Outreach	SFM plan and related monitoring results, Western Canada SFI Implementation Committee ("WCSIC") meeting minutes, correspondence related to community and school outreach programs, staff interviews.
13.	Public Land Management Responsibilities	SFM plan, FSPs and related agency and stakeholder referral correspondence, review of site plans, review of selected stakeholder consultation records, field inspections.
	Communication and Public Reporting	Certification summary report.
15.	Management Review and Continual Improvement	SFM plan, BA and Provincial level EMS and SFI management review records, internal audit reports and associated action plans, BA and Provincial level Environmental Management Programs ("EMPs"), interviews with a sample of corporate and BA staff.

Good Practices

A number of good practices were identified during the course of the 2022 BC Timber Sales SFI re-registration audit, including:

SFI Objective 2 (Silviculture): The field audit noted some good examples of retention of deciduous trees and immature conifers. (TPL and TPG)

SFI Objective 3 (Protection and Maintenance of Water Resources):

- Forest and Range Evaluation Program ("FREP") presentations emphasize small streams, compliance and best practices. (TBA, TKO)
- Recognizing the potential for changes in stream flow dynamics due to climate change, the BA is working on a framework for culvert sizing which considers increasing culvert sizes for cross drains as well as increasing the size of culverts prescribed for crossings of small streams. (TOC)
- The field audit noted a good example of the identification and protection of a wetland feature just outside a cutblock boundary, as well as stubbing around the 'wildlife tree retention areas' which encompassed a wetland. (TSN)



At TSN an engineered bridge has been installed over a watercourse.



At TSN a watercourse has been protected by 'stubbing' trees at the felling stage to create a visual barrier. This ensures that subsequent harvesting phases do not enter machine free zones prescribed to protect the stream and riparian areas.





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 The field audit noted several good examples of timely road deactivation activities including cross ditches and water bars. (TSK)

SFI Objective 3 (Protection and maintenance of water resources) and 4 (Conservation of Biological Diversity):

The BA continues to focus efforts on protecting smaller streams (S4-S6) during harvesting by prescribing RRZs in the FSPs and SPs that exceed the default requirements of the FPPR. In addition to annually monitoring and reporting on the effectiveness of the reserves, the program has been expanded to include assessing the ecological value of WTRAs, post-harvest 'coarse woody debris' levels and visual screening. The results of these assessments are reported internally on an annual basis. (TBA)

SFI Objective 8 (Recognize and Respect Indigenous Peoples Rights):

- BCTS staff arranged a 2 day training session on learning about cultural resources and CMTs which included a field day on 'Cultural Heritage Resource Evaluation' completion (per diem was provided to FN attendees). (TSK)
- Listening to elders regarding historical presence of white pine on Village Island and deciding to include white pine in recent planting activities. (TST)

SFI Objective 10 (Forestry Research Science and Technology):

 The audit observed silvicultural trials ongoing to understand options for planting fir in salvage areas. (TCC)

NB: The above list of good practices is not intended to be a comprehensive list of all the noteworthy or innovative forest practices that are taking place at the operations. Rather, they are observations made by the audit team as a means to highlight some of the positive aspects of the organization's forest management practices.

Follow-up on Findings from Previous Audits

For the period of the May 1, 2022-March 31, 2023 there were 8 open minor non-conformities from previous external SFI forest management audits. The audit team reviewed the implementation of the action plans developed by BC Timber Sales to address these findings and found that: (1) the required corrective/preventive actions had been implemented, and (2) the actions taken by BCTS were effective in preventing the recurrence of the issues that gave rise to these findings.

However, some open non-conformities were not closed:

- Regarding a water management issue at one Business Area, BC Timber Sales implemented actions at the corporate level and at the Business Area level; however, a corrective action to support topic-specific Forest Stewardship Plan results and strategies has not yet occurred and the finding remains open.
- At a Business Area at the last audit KPMG identified potential environmental damage resulting from harvesting activities and the audit found the timber sale licensee had not implemented required 'stop work' procedures. At the same Business Area KPMG found that while new procedures were being implemented a similar circumstance with a timber sales licensee and lack of 'stop work' response had occurred before the actions had been fully implemented. Implementation of the procedures at this Business Area will be tested by KPMG at the 2023-24 audit.
- The 2021-22 audit report considered BCTS re-certification to the SFI forest management standard. The audit report noted a pattern of water management issues identified at KPMG audits over the last 5-year certification cycle, particularly at Business Areas in the northern half of British Columbia. BCTS has undertaken higher level actions including training and system improvements, these have not yet been fully implemented and will be re-visited at the next audit.



includes consideration of visual quality objectives including visibility from the ocean as demonstrated in this photo. At the audit KPMG reviewed how BCTS is meeting the visual quality objectives through assessments and by field reviewing the sites to consider how TST was meeting the requirements in challenging coastal conditions.





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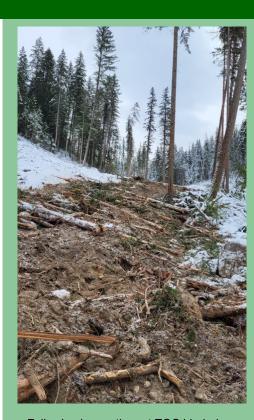
New Areas of Nonconformity

A total of 5 minor non-conformities were identified during the SFI surveillance audit of BC Timber Sales' woodlands operations. These included:

- The SFI FM Standard at element 3.2.1 requires BCTS to implement a program addressing the protection of watercourses during all phases of management. At Northern Business Areas over the past several years, KPMG audits have identified issues with watercourse crossings and the implementation of BCTS EFP 04, particularly related to winter crossings using log bundles as fill and capped with snow. While log bundle crossings now appear to be consistently deactivated at Northern Business Areas, other issues have emerged at TPL relating to crossings:
 - On two blocks, ATVs have crossed through S6 streams causing rutting of the stream beds, banks and road surface.
 - There were instances of road deactivation not adequately controlling water:
 - · Lack of functional cross ditches/waterbars.
 - Commonly harvest plans prescribed snow fills to cross NCDs and S6 streams to protect the integrity of the channel and streambanks. However, many of the S6 streams had high streambanks and deep channels and were located in steep-sided draws, making snow fills impractical. Snow fills had been substituted with culverts resulting in excavation of the streambanks and channels during installation and removal.
- The SFI FM Standard at element 3.2.2 requires mapping of water courses. Site
 plan maps show the location of water-related features and the Plan itself provides
 stream descriptions. The Harvest Plan map also shows the water-related features
 and adds mitigation measures. The following gaps were identified:
 - At TBA, instances of discrepancies in stream mapping between site plan documents, site plan maps, and harvest plan maps.
 - On one block, streams were not mapped on the SP map, but were mapped correctly on the HP map.
 - On one block, streams on the HP map were incorrectly classified and labeled, but stream data from the SP document was correct.
 - At TCC an S4 stream was mislabeled on an HP map.
- The SFI FM Standard at element 9.1.2 requires BCTS to implement a system to achieve compliance with regulations. BCTS has established an EMS with controls designed to facilitate compliance with the regulations and conformance to SFI requirements. At a 2021 KPMG audit of the BA, soil compaction was observed in a block and although below regulated limits, the operator did not stop work and notify BCTS. A similar issue was detected by KPMG at this year's audit of the same BA since a Timber Sales Licensee did not stop work to report soil compaction, as required by EFP 05; in the event of immediate environmental damage operations must cease and BCTS becomes involved.

NOTE: A significant mitigating factor was the same Licensee on the same opening previously demonstrated the stop work procedure where one SU was harvested outside of a restricted season. By stopping work and reporting the matter to BCTS there was an opportunity for the parties to consider best practices.

• The SFI FM Standard at element 9.1.2 requires BCTS to implement a system to achieve compliance with applicable regulations. BCTS has established an EMS with controls designed to facilitate conformance to SFI requirements. The BA-specific Road Deactivation SOP describes 'standard' and 'advanced road deactivation' techniques with a primary objective of protecting ungulates from easy access by hunters and prey animals by restricting access. However, the practices observed were inconsistent and the objective was not always met:



Following harvesting, at TOC bladed trails are rehabilitated including addressing minor ruts or small areas of soil compaction and also re-introducing organic debris onto the trail. The fresh snow allows the audit team to appreciate the full impact of the mitigation treatment.





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- Advanced techniques include placing stumps and logs on the deactivated road surface and is intended to create a physical barrier. However, the practice was typically limited to small sections or the beginning of the road and in some cases full ATV access was maintained rendering the practice ineffective.
- Advanced techniques include pull back of all strippings and in some cases (strippings were pulled back on only one side of the road resulting in a less effective access barrier.
- The SFI FM Standard at element 9.1.2 requires BCTS to implement a system to achieve compliance with applicable regulations. BCTS has established an EMS with controls designed to facilitate compliance with the regulations and conformance to SFI requirements. BCTS EFP 06 addresses fuel handling and related matters. The following weaknesses in fuel handling were noted at several BAs:
 - At TCC on one block one spill kit was missing goggles and gloves and a few fire extinguishers did not have any evidence of being inspected in the past year.
 - At TPG on one block one fire extinguisher on a piece of equipment was observed to have an inspection tag that was last updated in 2017.
 - At a TSN issues were noted at three cutblocks: There were instances of truck tidy tanks missing TDG labels, a skidder was experiencing a leak and was missing a spill kit and a fuel storage unit fire extinguisher was not recharged.
 - At TST at one block insufficient tidy tank tie downs were observed and TDG marks on 3 tanks were missing or were not visible and two tanks did not have the required spec plates.

New Opportunities for Improvement

A total of 4 new opportunities for improvement were also identified during the 2022 audit. The key opportunities noted during the audit included:

- The SFI FM Standard at element 2.1.1 requires prompt reforestation unless delayed for site-specific environmental or forest health considerations or legal requirements. Site Plans prescribe the reforestation plans of individual cutblocks. At TCC the audit noted that sowing requests may be delayed to complete all harvesting-related activities and as a result of the legal delays to tendering reforestation work, leaving room for improvement.
- The SFI FM Standard at element 3.2.4 requires plans to address wet-weather
 events in order to maintain water quality. While TBA has adopted the wet weather
 shutdown criteria developed for MFNRORD Southern Engineering Group, a review of the criteria indicated the criteria are intended to protect worker safety and
 the criteria can be improved to also address water quality.
- The SFI FM Standard at element 9.1.2 requires a system to achieve compliance with applicable regulations. BCTS has established an EMS with controls designed to facilitate conformance to SFI requirements. There is an opportunity to improve awareness of operators regarding values with a potential to be impacted by harvesting operations. In an isolated instance, one opening had two skidder operators who did not have maps on board and the block had values at risk (Wildlife Debris Piles and a NCD in-block crossing). In addition, one of the skidder operators did not attend the prework.
- The SFI FM Standard at element 9.1.2 requires a system to achieve compliance with applicable regulations. BCTS has established an EMS with controls designed



At the planning stages BCTS prescribes retention of trees and vegetation to meet various objectives including biodiversity. At TPG the KPMG audit observed a cutblock with a watercourse with trees and vegetation retained in the riparian zone. In the foreground of this photo is a retention clump with deciduous trees and conifer saplings.



Harvesting at TPG.





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to facilitate conformance to SFI requirements. The audit identified isolated instances of issues with inspections, a critical EMS operational control:

- There is an opportunity at TCC to re-enforce the value of noting items of exceptions in post-harvest inspections or other BCTS tools (e.g. LRM); for example, at one block under-utilized logs that could be used for grinding.
- At TST there is an opportunity to improve corrective action completion resulting from follow-up progress or final inspections.

Audit Conclusions

The audit found that the BC Timber Sales sustainable forest management system:

- Was in full conformance with the requirements of the requirements of the SFI 2015-2019 forest management standard included within the scope of the audit, including the requirement to complete internal audits and management reviews at planned intervals, except where noted otherwise in this report;
- Continues to be effectively implemented, and;
- Is sufficient to systematically meet applicable requirements and expected outcomes, provided that the system continues to be implemented and maintained as required.

As a result, the KPMG Lead Auditor has recommended that BC Timber Sales continue to be certified to the SFI forest management standard.

NB: Our assessment by its nature is a sample of available information and is not intended to be as comprehensive as your internal audit. It is possible for nonconforming issues to remain undetected. Our next assessment will verify that your internal audits have continued to operate as the primary mechanism to ensure that your management system remains effectively implemented and continues to improve.

Corrective Action Plans

Corrective action plans designed to address the root cause(s) of the findings identified during the 2022 BC Timber Sales SFI surveillance audit have been developed by BC Timber Sales and reviewed and approved by KPMG PRI. The next audit will include a follow-up assessment to assess whether the corrective action plans were: (1) implemented as required, and (2) effective in addressing the root cause(s) of the findings identified in this audit report.

Focus Areas for the Next Audit Visit

The following topics have been identified as focus areas for the next audit visit:

- Follow-up on open non-conformities at both the corporate and BA levels.
- Water-related planning and practices, particularly considering northern BAs.
- Implementation of SFI FM 2022 standard requirements.
- Allowable cuts considering old growth moratoria imposed by the Government of British Columbia and also considering partitions applied by the Chief Forester.



At TST the audit reviewed the condition of areas harvested more than 10-15 years ago. Bridges are inspected and maintained by BCTS. Roads might be deactivated or access controlled with gates. Regenerating forests are also reviewed as part of the audit.

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