

AUDIT OF FOREST PLANNING AND PRACTICES

Yucwmenlúcwu (“Caretakers of the Land”) 2007 LLP

Non-Replaceable Forest Licence A89359

Okanagan Shuswap Natural Resource District

MARCH 2023

FPB/ARC/257



**Forest
Practices
Board**

BC'S INDEPENDENT
WATCHDOG FOR
SOUND FOREST &
RANGE PRACTICES

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Audit Results

Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board's roles is to audit forest industry practices to ensure compliance with the Forest and Range Practices Act (FRPA) and the Wildfire Act.

As part of its 2022 compliance audit program, the Board randomly selected the Okanagan Shuswap Natural Resource District as the location for a full scope compliance audit. Within the district, the Board selected Yucwmenlúcwu ("Caretakers of the Land") 2007 LLP (referred to as Yucwmenlúcwu in this report) Non-Replaceable Forest Licence (NRFL) A89359 for audit.

This report explains what the Board audited and the results. Detailed information about the Board's compliance audit process is provided in Appendix 1.



Timber harvesting north of Mabel Lake with retention of western red cedar and western hemlock to meet biodiversity and coarse woody debris strategies.

Background

NRFL A89359 is a non-replaceable volume-based licence that permits Yucwmenlúcwu forestry operations in parts of the Okanagan Timber Supply Area (TSA), which covers about 2.25 million hectares of the Okanagan Shuswap Natural Resource District in south-central British Columbia. Operations under NRFL A89359 are located in the north Okanagan Shuswap area and are managed by Yucwmenlúcwu from their office in Enderby, where staff prepare operational plans and implement forestry activities including timber harvesting, road work, and silviculture. Activities subject to this audit are located in the Mabel, Shuswap, Sugar, and Mara Lake areas, near the communities of Salmon Arm, Enderby, and Sicamous (see the map of the audit area on page 2).

This audit took place within the territories of the Secwepemc and the Syilx Nations. The Forest Practices Board recognizes the importance of their historical relationship with the land that continues to this day.

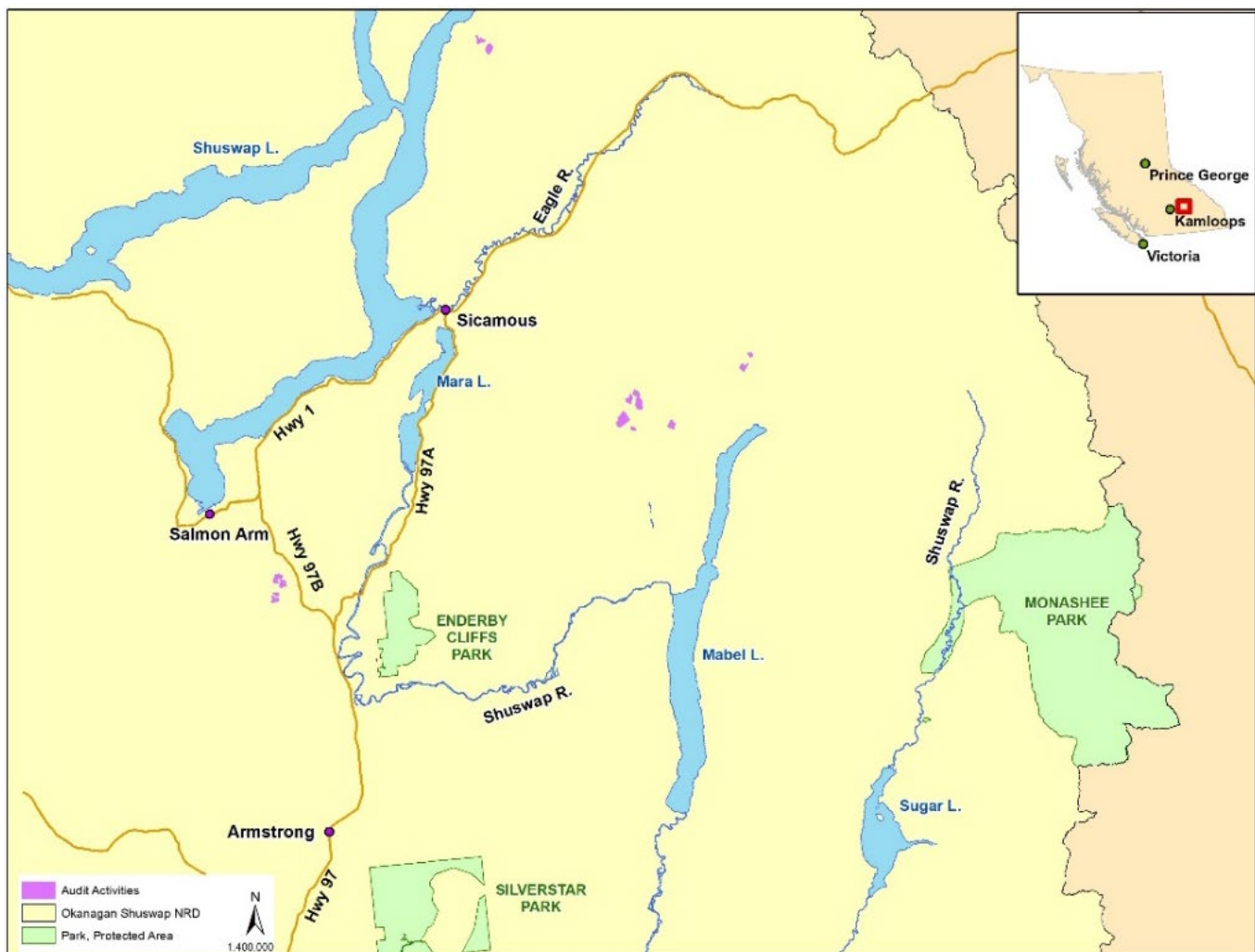
Yucwmenlúcwu's operations are located in low to mid-elevation areas within the TSA. The audit area has a relatively moist climate with distinct ecological features that contribute to high biodiversity values. The majority of low-elevation areas have frequent low-intensity stand-initiating events such as fires, wind, and insects that result in a natural mosaic of primarily uneven-aged stands. The moderate elevation stands extend upslope and consist primarily of lodgepole pine, balsam, Douglas-fir, and spruce.

The diverse forests of the Okanagan TSA provide habitat to a range of wildlife species, including species at risk threatened by human activities or natural events. Some of these are FRPA-listed species such as American badger, Williamson's sapsucker, and Great Basin Gophersnake in the lower elevation dry forests, and eastward at higher elevations in the moist forests, grizzly bear and mountain caribou can occur.

Recreation, tourism, ranching, timber, water, fish habitat, and scenic areas along travel corridors and lakeshores are some of the wide range of resources and values found in the Okanagan TSA. Provincial parks within the audit area include Enderby Cliffs, Silverstar, and Monashee Parks, as well as the Kingfisher Ecological Reserve.

The allowable annual cut for NRFL A89359 is 38 070 cubic metres, with a capped volume of 384 000 cubic metres over the term of the ten-year licence. During the two-year audit period, Yucwmenlúcwu harvested about 57 650 cubic metres.

Map of the Audit Area



Audit Approach and Scope

This was a full-scope compliance audit and all activities carried out between September 1, 2020, and September 22, 2022, were eligible for audit. These activities included forest stewardship planning (FSP),¹ site planning, timber harvesting, wildfire protection, silviculture, construction and deactivation of roads, and maintenance of roads and major structures.²

Auditors assessed these activities for compliance with FRPA, the Wildfire Act, and associated regulations. Audit work included interviewing Yucwmenlúcwu staff, reviewing plans and internal policies, examining records, and visiting sites to review field practices. One forest professional, one forest professional/geoscientist, and a professional agrologist made up the audit team, which was in the field with Yucwmenlúcwu representatives from September 19 to 22, 2022.

The standards and procedures used to carry out this audit are set out in the Board's Compliance Audit Reference Manual, Version 7.1, July 2016.

Planning and Practices Examined

Operational Planning

NRFL A89359 operations are included in the Tolko Industries Ltd. Southern Interior Forest Stewardship Plan (FSP 684), which has a term of five years that commenced in 2019. FSP 684 covers Forest Development Unit 3,³ which includes the areas where Yucwmenlúcwu operates and its forest activities are subject to the FSP requirements for this area.

Yucwmenlúcwu's operations fall within the area covered by the Okanagan-Shuswap Land and Resource Management Plan (OSLRMP) and are subject to the Order Establishing Objectives in OSLRMP (2007). Specific objectives that apply to Yucwmenlúcwu's operations include enhanced coarse woody debris areas, recreation areas, trail corridors, tourism, and wildlife objectives for elk, marten, fisher, and bighorn sheep. The order also establishes general objectives for community/Crown interface areas,⁴ forest roads, streams, and Williamson's sapsucker. Other orders established under the Government Actions Regulation that apply to Yucwmenlúcwu's operations include those for moose winter range and a grizzly bear-specified area. FSP 684 links the relevant aspects of the Orders to Yucwmenlúcwu's operations.

Auditors examined the FSP and stand-level site plans for consistency with legal requirements. During harvesting, road, and silviculture field sampling, auditors also confirmed whether site plans accurately identified conditions on the ground.

Riparian, soil, visual, wildlife habitat, and cultural resources as well as enhanced coarse woody debris areas are commonly featured in the harvesting and road activities subject to audit. Results or strategies for the management of these resources were included in site plans.

Timber Harvesting

Yucwmenlúcwu harvested seven cutblocks during the audit period and auditors examined six of them.

¹ A forest stewardship plan (FSP) is a key planning element in the FRPA framework and the only plan subject to public review and comment and government approval. An FSP is required to identify results and/or strategies consistent with government objectives for values such as water, wildlife and soils. These results and strategies must be measurable and once approved are subject to government enforcement. FSPs identify areas within which road construction and harvesting will occur but are not required to show the specific locations of future roads and cutblocks. FSPs can have a term of up to five years.

² Major structures include bridges and major culverts.

- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- A major culvert has a pipe diameter of 2 metres or greater or is an open bottom arch with a span greater than 2.13 metres.

³ A forest development unit (FDU) means an area identified in a forest stewardship plan where forest development may occur during the term of the plan, and within which, during the term of the plan, timber to be harvested or roads to be constructed are entirely located. An FDU may have a unique set of situations or circumstances where certain steps or practices are required to meet results, strategies or resource objectives.

⁴ Community/Crown interface (CCI) areas include the land adjacent to settlement areas, extending from private land boundaries to the visual height of land, as mapped in the OSLRMP. The order establishes objectives to maintain resources and values associated with CCI areas and scenic areas when planning and implementing forest health operations.

Road and Major Structure Construction, Maintenance, and Deactivation

During the audit period, Yucwmenlúcwu constructed roads, maintained and deactivated roads and major structures, but did not construct any major structures. Auditors examined a sample of these activities on the ground, as shown in Table 1.

TABLE 1. Population and Sample for Road and Major Structures

ACTIVITY	POPULATION	SAMPLE
	(Kilometres)	(Kilometres)
Road Construction	3.5	2.6
Road Maintenance	83.7	65.6
Road Deactivation	7.5	2.5
	(Structures)	(Structures)
Major Structure Maintenance	1 bridge 2 culverts	1 bridge 2 culverts
Major Structure Removed Deactivation	2 culverts	2 culverts

Silviculture Obligations and Activities

Yucwmenlúcwu conducted planting and brushing activities and had regeneration obligations during the audit period. Audit samples were chosen to represent different geographic areas and biogeoclimatic zones within the audit area. One cutblock with regeneration obligations could not be sampled due to a road closure. Auditors examined a sample of these activities on the ground, as shown in Table 2.

TABLE 2. Population and Sample for Silviculture Activities and Obligations

ACTIVITIES AND OBLIGATIONS	POPULATION	SAMPLE
	(Cutblocks)	(Cutblocks)
Planting	5	4
Brushing	2	1
Seed Transfer	5	5
Regeneration (due or declared)	5	4

Wildfire Protection

Fire hazard assessments were due on six cutblocks and hazard abatement was completed on six cutblocks during the audit period. Auditors examined all six cutblocks for fire hazard assessments and for abatement practices. There were no active sites during the field portion of the audit so fire preparedness was not examined.

Findings

The audit found that Yucwmenlúcwu's planning and practices generally complied with FRPA and the Wildfire Act as of September 2022. However, the audit identified opportunities for improvement in fire hazard assessments and regeneration obligations, and unsound hazard abatement practices, as described below.

Operational Planning

The FSP and site plans were consistent with FRPA requirements and legal objectives. Yucwmenlúcwu addressed site-specific resources in the site plans by accurately identifying and prescribing practices for resource features including riparian areas, visual quality objectives, wildlife habitat, cultural features, and recreation areas.

Auditors had no concerns with operational planning.

Timber Harvesting

The auditors sampled 6 cutblocks, covering 113 hectares, which provided a range of key management values to evaluate.

The harvest sample included potential fisher habitat in five cutblocks. Yucwmenlúcwu followed its FSP strategies and operational procedures and took the appropriate measures to protect the habitat, including retaining the required enhanced coarse woody debris levels.

One sampled cutblock was within a scenic area and Yucwmenlúcwu completed a visual impact assessment and met visual quality objectives for this cutblock.

Three cutblocks sampled potentially contained cultural resource features. Yucwmenlúcwu carried out detailed field assessments to identify and confirm whether cultural features were present and modified site plans and practices to protect them.

Two cutblocks contained fish streams. Yucwmenlúcwu surveyed the streams to confirm the fish-bearing status and protected the stream channels by establishing machine-free zones adjacent to them, and by retaining forest cover in riparian areas.

In summary, auditors found that harvesting met the requirements of legislation, the FSP, and site plans.

Road and Major Structure Construction, Maintenance, and Deactivation

Road Construction

All documentation was complete, including road permits and road designs. Qualified professionals were used when necessary, such as when constructing roads near riparian areas, and their recommendations were followed.

Road Maintenance

Roads were mostly located on gentle and rolling terrain with few sections located on potentially unstable terrain. Yucwmenlúcwu regularly monitored roads and addressed maintenance items in a timely manner. Culverts were functional and drainage was controlled. Active haul roads were stable and safe for industrial use.

Road Deactivation

Yucwmenlúcwu deactivated roads by removing drainage structures, installing cross ditches to maintain natural drainage patterns and sowing grass seed to stabilize the roads. Yucwmenlúcwu also rehabilitated several in-block spur roads, where road prisms were fully ripped, re-contoured, and armored with coarse woody debris.

Bridge and Major Structure Maintenance

Yucwmenlúcwu regularly inspected and maintained major structures and kept a detailed maintenance ledger that indicated they are proactively managing their crossing infrastructure. All structures inspected were in good condition.

Bridge and Major Structure Deactivation

Yucwmenlúcwu removed two arch culverts from fish streams. Work was done at a time and in a manner that did not impact fish or fish habitat.

Auditors had no concerns with any of the road or major structure work carried out by Yucwmenlúcwu.

Silviculture Activities and Obligations

Regeneration Delay

Section 44(1)(a) of the Forest Planning and Practices Regulation (FPPR) requires Yucwmenlúcwu to establish a stand that meets the applicable stocking standards set out in its FSP by the applicable regeneration date specified for the area. Yucwmenlúcwu harvested five cutblocks before the audit period where regeneration obligations were due prior to the field audit. During the field audit, auditors found that Yucwmenlúcwu did not regenerate four of the five cutblocks by the required regeneration dates and did not ensure that stand establishment expectations were met for these plantations.

Yucwmenlúcwu attributed this finding to staff changes and silviculture obligation transfers that occurred before the audit. Yucwmenlúcwu had recognized the error prior to the audit and initiated actions to regenerate these cutblocks in 2023. While these challenges did not relieve Yucwmenlúcwu of its obligations, due to the extenuating circumstances, this error is considered an area requiring improvement.

Silviculture Reporting

Yucwmenlúcwu just recently assumed the responsibility for silviculture activities and obligations for this NRFL and was not responsible for annual reporting for these activities and obligations until 2022. Yucwmenlúcwu completed recent annual reporting in a complete and timely manner. Auditors had no concerns with annual reporting.

Silviculture Activities

Auditors reviewed planting and brushing activities. Yucwmenlúcwu planted cutblocks on time with a mix of ecologically suitable species including cedar, spruce, larch, white pine, Douglas-fir, and lodgepole pine. Yucwmenlúcwu effectively site prepared two cutblocks to control brush and create a suitable number of plantable spots.

Yucwmenlúcwu conducted silviculture surveys to monitor regenerating cutblocks for seedling establishment and survival and treated them accordingly.

Auditors had no concerns with any of the silviculture activities carried out by Yucwmenlúcwu.

Wildfire Protection

Fire Hazard Abatement

Section 22 (1) and (3) of the Wildfire Regulation requires Yucwmenlúcwu to take all necessary precautions to ensure a fire is contained, establish and maintain a fuel break around debris piles and ensure that the fire does not escape.

Yucwmenlúcwu abated logging debris in six cutblocks during the audit period by piling slash and burning the piles at a time when site conditions were suitable. Auditors found that on four of these cutblocks Yucwmenlúcwu piled slash against standing timber, had not established or maintained a fuel break around the slash piles, and did not prevent the fires from escaping, resulting in damage to trees adjacent to the piles.

By employing unsound abatement practices, Yucwmenlúcwu potentially placed forests, forest resources, property, and lives at risk, but because only a few trees were damaged at each site, no other forest resources were damaged and the escaped burns subsided before more damage could occur, this non-compliance is considered an area requiring improvement.

Fire Hazard Assessments

The Wildfire Act requires licensees to assess the fire hazard at specified intervals, including an assessment of the fuel hazard and the associated risk of a fire starting or spreading. Furthermore, the licensee must provide a copy of a fire hazard assessment to an official when requested. If the assessment identifies a hazard, it must be abated.

Auditors found that Yucwmenlúcwu abated fire hazards within the required period. However, it did not assess the fire hazard for four of the six cutblocks sampled. A hazard assessment is a required step to take to determine if harvesting has created a fire hazard. If a hazard is identified and abated in a timely fashion, a licensee could demonstrate that it has been diligent.

While Yucwmenlúcwu is abating fire hazards, it cannot demonstrate that it has been diligent in assessing the hazard, which is a non-compliance with legislation. This non-compliance is not considered significant, since fire hazards were abated on time, and this is an area requiring improvement.

Fire Preparedness

There were no active operations during the field audit and auditors did not assess fire preparedness requirements.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road, and major structure construction, maintenance and deactivation, silviculture, and fire protection activities carried out by Yucwmenlúcwu ("Caretakers of the Land") 2007 LLP on NRFL A89359 between September 1, 2020, and September 22, 2022, complied in all significant respects with the requirements of the Forest and Range Practices Act, the Wildfire Act and related regulations, as of September 2022.

In reference to compliance, the term 'in all significant respects' recognizes that there may be minor instances of non-compliance that either may not be detected by the audit or that are detected but not considered worthy of inclusion in the audit report.

Without qualifying my opinion, I draw attention to the Regeneration Delay, Hazard Abatement, and Hazard Assessment sections of the report, which describe areas requiring improvement.

The Audit Approach and Scope and the Planning and Practices Examined sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board, including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Forest and Range Practices Act, and the Wildfire Act.



Daryl Spencer, RPF
Auditor of Record

Kelowna, British Columbia
February 27, 2023

Appendix 1:

Forest Practices Board's Compliance Audit Process

Background

The Forest Practices Board conducts periodic audits of government and licensees to determine compliance with Parts 2 to 5 of the Forest and Range Practices Act (FRPA), and Parts 1 and 2 of the Wildfire Act, and associated regulations and standards.

Selection of Auditees

The number, type and scope of audits to be conducted each year are established by the Director of Audits in accordance with the Board's strategic priorities and budget. Once a licence has been audited, it is removed from the audit selection pool for five years.

The Board randomly selects districts or timber supply areas (TSAs) from each of the three natural resource areas of BC (North, South and Coast). The auditors then review the forest resources, geographic features, activities and operating conditions in the district or TSA selected, as well as past Board audits in that district or TSA. These factors are considered in conjunction with the Board's operational and strategic priorities and the type of audit is determined. At this stage, the Board chooses the auditee(s) that best suits the selected risk and priorities. This is considered a qualified random approach of selection.

In addition, each year, the Board randomly selects 2 of the 31 BCTS field units for audit.

Audit Standards

The audits are conducted in accordance with auditing standards developed by the Board and described in the Board's Compliance Audit Reference Manual. The standards are based on Canadian generally accepted auditing standards and relevant ethical requirements. This includes those pertaining to independence, as published by the Chartered Professional Accountants of Canada, and consistent with the Canadian Standards on Assurance Engagements (CSAE) 3001, the Conformity assessment – Requirements for bodies providing audit and certification of management systems (ISO 17021-1:2011), and the CPA Code of Professional Conduct (CPABC Code – June 2015).

Audit Process

Conducting the Audit

Once the Board selects an operation (licence or BCTS field unit) for audit, the next step is to determine the scope of the audit (timeframe, activities). For the timeframe, the Board normally examines activities that took place over a two-year time period up to the start of the audit field work (i.e., looking back two years). This is referred to as the audit period.

For a full-scope compliance audit, all activities carried out during the audit period are identified, which may include harvest, silviculture, fire protection and road related activities. These activities form the population.

From the population, the auditors select a sample of each activity to examine in the field. Generally, auditors will concentrate sampling on the areas of the auditee's operations where the risk of impacts to forest resources is deemed to be high. This is called the inherent risk. It can be a function of site conditions, natural circumstances, and the

particular forest or range practices involved. Proportionally more sampling occurs where the inherent risk is high because the higher the risk, the higher the likelihood of a significant non-compliance or failure to achieve specified results.

For smaller audits, the sample will include the full population. Auditors also consider factors such as geographic distribution and values potentially affected by activities to ensure an adequate sample size.

Auditors' work includes interviewing licensee staff, reviewing the auditee's applicable plans, and reviewing applicable legal orders, observations, inspections, and assessments in the field.

Evaluating the Results

The Board recognizes that compliance with the requirements of FRPA and the Wildfire Act is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legal requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet FRPA and Wildfire Act requirements.

Unsound Practice – where the auditor identifies a practice that complies with FRPA or the Wildfire Act, but may adversely affect a forest resource.

Areas Requiring Improvement (Not significant non-compliance) – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. In certain circumstances, these events may be reported as an area requiring improvement.

Significant non-compliance – where the auditor determines a non-compliance event(s) or condition(s) is, or has the potential to be, significant and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or more non-compliance events.

If a significant breach of the legislation has occurred, the auditor is required by the Forest Practices Board Regulation to immediately advise the Board, the party being audited, and the responsible Minister(s).

Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The auditor provides the party being audited with a copy of the draft report for review and comment before it is submitted to the Board.

The Board reviews the draft report and may make recommendations and/ or a commentary on the audit findings. The Board must, prior to publishing a report or recommendation, consider whether or not it may adversely affect a party or person. The Board must give any affected party or person the opportunity to review, rebut or clarify the information before the Board publishes its report. The final report is released; first to the auditee and then to the public and government seven days later.



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