BRITISH COLUMBIA
Ministry of Forests

Provincial Timber Management Goals, Objectives & Targets:

Provincial Timber Targets

2021/22 Status Report

Ministry of Forests

Province of British Columbia

5/1/2023

Foreword

While timber has been a mainstay of the British Columbia economy for decades, specific management goals, objectives and targets have often been assumed or buried in various plans or other documents rather than consolidated and clearly described on a provincial basis. The *Provincial Timber Management Goals, Objectives & Targets* (Provincial TMGOT) provides a co-ordinated provincial vision and a set of detailed timber management goals, objectives and targets to assist forest managers in sustainably managing British Columbia's complex, multi-value public forests.

I encourage all readers to review the full document and use this guidance in their local-level planning and practices to support sustainable forest management for present and future generations.

The intent is for this guidance to be regularly revisited and refined as necessary to address changing forest conditions, climate change, evolving public priorities and improvements in scientific knowledge. To that end, a thorough review of the Provincial TMGOT document is scheduled for the fall of 2023.

This document reports on the status of the nine measurable provincial targets described in the Provincial TMGOT to the end of the 2021/22 fiscal year.

If there are any questions, comments or feedback to improve this status report or the Provincial TMGOT document, please direct them to the Forest Science, Planning, and Practices Branch.

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Chief Forester
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Introduction

The *Provincial Timber Management Goals, Objective & Targets* aligns provincial objectives for timber with government planning and forest legislation (such as the *Forest Planning and Practices Regulation Sections 5-10 "objectives set by government"*), and aids in monitoring performance on the ground using **nine** measurable provincial targets and **thirteen** local management unit targets. This document reports on the status of the nine measurable provincial targets to the end of the 2021/22 fiscal year reporting using the **five** provincial goals herein. The thirteen local management unit targets are reported annually for each TSA and TFL in the province to present a current "state of affairs" for the local timber management targets.

Goal #1 - Timber Volume Flow Over Time

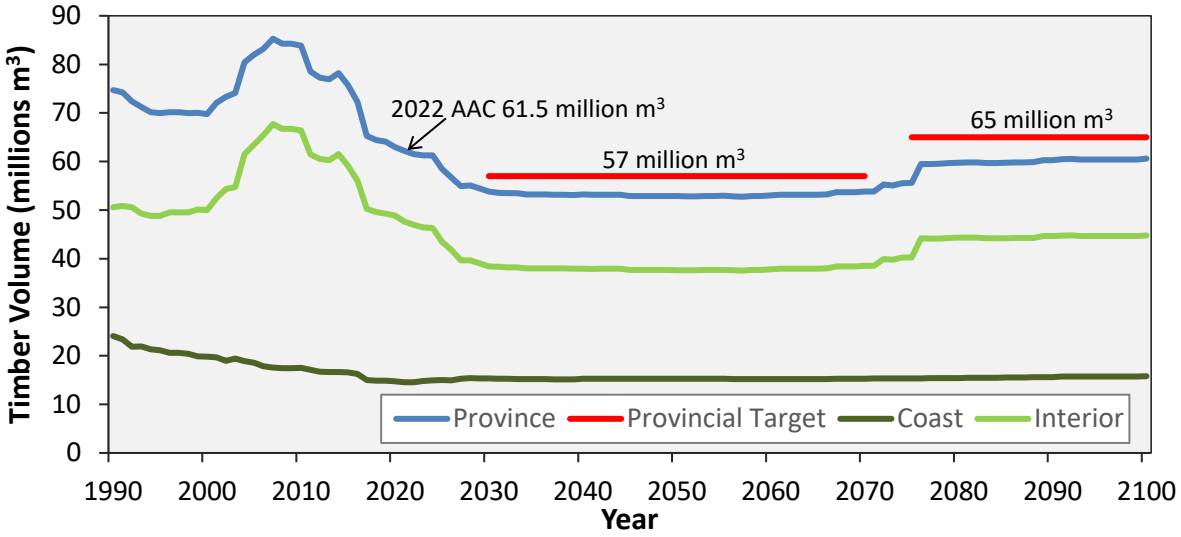

Figure 1. Provincial allowable annual cut forecast.

TARGET: Produce a TSA and TFL mid-term timber supply of at least **57 million m³/year** and a long-term timber supply of at least **65 million m³/year.** Based on the assumption of a stable 22-million hectare timber harvesting land base (THLB)
STATUS: Projected mid-term timber supply of **53 million m³/year** and long-term supply of **60 million m³/year.**
IMPLICATION: A predictable and reliable flow of timber has a positive impact on numerous local, regional and provincial economic and social objectives.
COMMENTS: The projected decline in timber supply is largely due to TSA and TFL land removals for small area-based tenures such as community forests and First Nations woodland tenures. These small area-based tenures account for over 4.7 million m³/year of AAC as of June 2023. Other impacts include updated forecasts to account for the impacts of mountain pine beetle losses, recently created protected areas for the northern goshawk, marbled murrelet, and mountain caribou as well as protected areas in the Great Bear Rainforest.

Goal #2 - Timber Quality

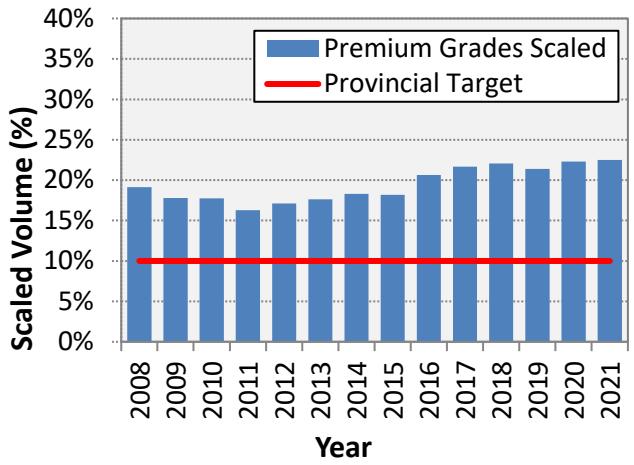

Figure 2. Premium grades scaled by year.

TARGET: To produce a minimum of **10% premium grades** annually from BC's forests, both now and in the future.
STATUS: Currently **23% premium grades** are produced annually from BC forests.
IMPLICATION: A diverse growing stock (or inventory) of timber quality is desirable in order to minimize risks and maintain future market options.

Goal #3 - Tree Species Composition

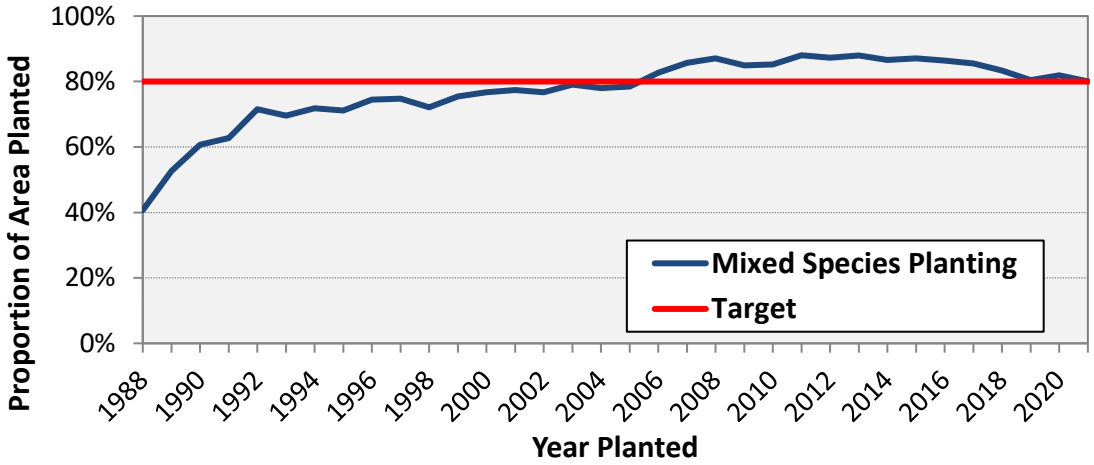

Figure 3a. Proportion of mixed species planting.

TARGET: At least **80%** of harvested areas are planted with **more than one** species.
STATUS: Currently **80%** of harvested areas are planted with **more than one** species.
IMPLICATION: Mixed species planting can increase resiliency to the negative effects of climate change and forest health impacts on timber and other forest values. However, it is not appropriate on all sites like those only suited to one species, ones with heavy natural regeneration, or where a resilient mix of species at the landscape level is achieved.

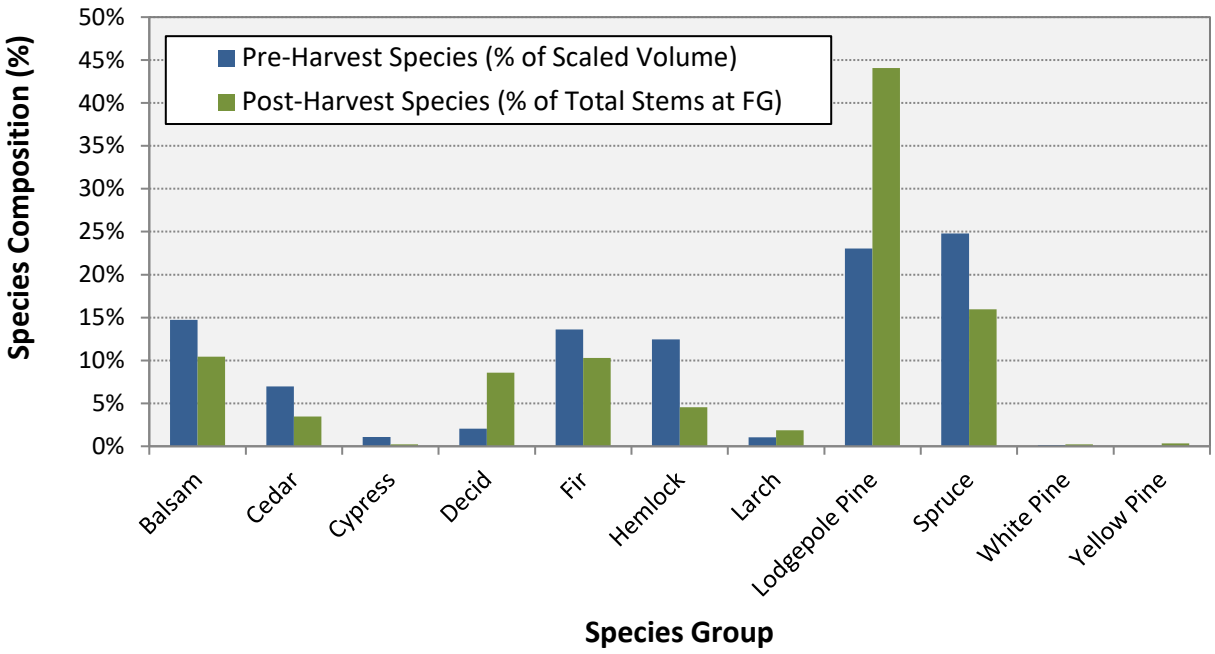

Figure 3b. Five year pre- and post-harvest species composition.

Note: The pre-harvest species composition is measured from HBS scale volumes over the past 5 years, and the post-harvest species composition is measured using RESULTS forest cover inventory label stems/ha for stands declared FG over the past 5 years. Given the lag between harvest and FG declaration and the resulting comparison of two different populations, this graph should be considered as an estimate of species composition change.

TARGET: The change in pre- and post-harvest tree species composition in the last five reporting periods is within **+/- 2 percentage** points.
STATUS: Seven of the eleven species groups did not achieve this target: balsam (-4%), fir (-3%), western redcedar (-4%), deciduous (+6%), western hemlock (-8%), lodgepole pine (+21%), spruce (-9%)
IMPLICATION: Tree species composition is an important overall forest resource consideration, at both the stand and landscape levels, as it influences timber values, health, resilience, and non-timber values. Tree species diversity is also a fundamental climate change adaptation strategy.
COMMENTS: Species management and seedling deployment is highly variable based on local management unit objectives and targets; therefore, detailed species reports have been created for each TSA and TFL to support local planning and monitoring of targets. The provincial increase in post-harvest Lodgepole pine composition is decreasing from previous years but still notable, and likely attributed to the reforestation of post MPB stands reaching free growing status. In addition, the Tree Species Selection project was designed to provide forest practitioners with the best available science-based information about tree species selection for a given geographical location. The Climate Change nformed Species Selection (CCISS) tool informs tree species selection decision-making at the stand- and landscape-level, in the context of a changing climate.

Goal #4 - Stand Productivity and Growing Stock

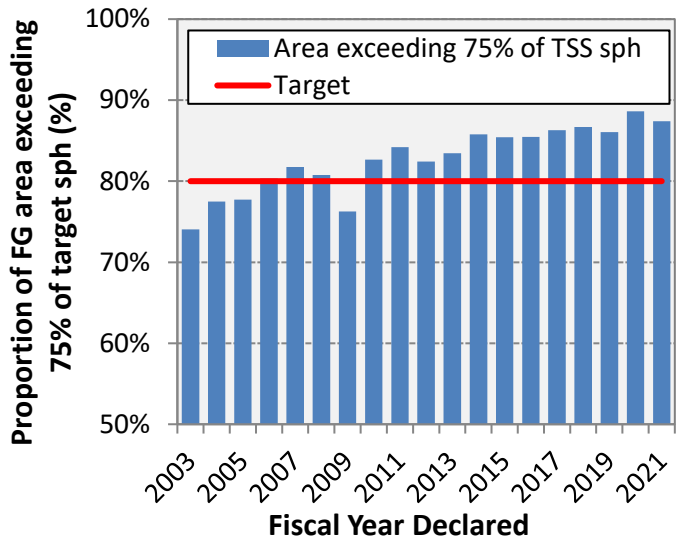

Figure 4a. Area (%) of free growing stands that exceed 75% of the target stocking.

TARGET: Free-growing (FG) stems per hectare exceed **75%** of the target stocking **80%** of the time.

STATUS: Currently FG stems per hectare exceed **75%** of the target stocking **87%** of the time.

IMPLICATION: The risk that all stand objectives won't be met over time is reduced dramatically if the number and distribution of healthy trees is near the intended target at FG.

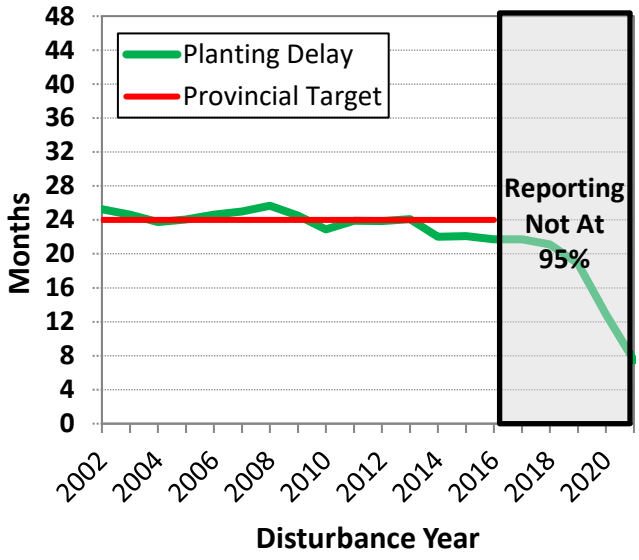

Figure 4b. Average planting regeneration delay.

TARGET: The average planting regeneration delay is less than two years (**24 months)** on harvested areas.

STATUS: Currently the average planting regeneration delay is **22 months** on harvested areas.

IMPLICATION: Prompt reforestation helps ensure that the desired species, density, and distribution of trees at the time of FG is achieved sooner.

COMMENTS: Approximately 80% of the areas harvested in the province are planted. The remaining areas are regenerated naturally.

It takes more than 5 years to capture 95% of the areas planted.

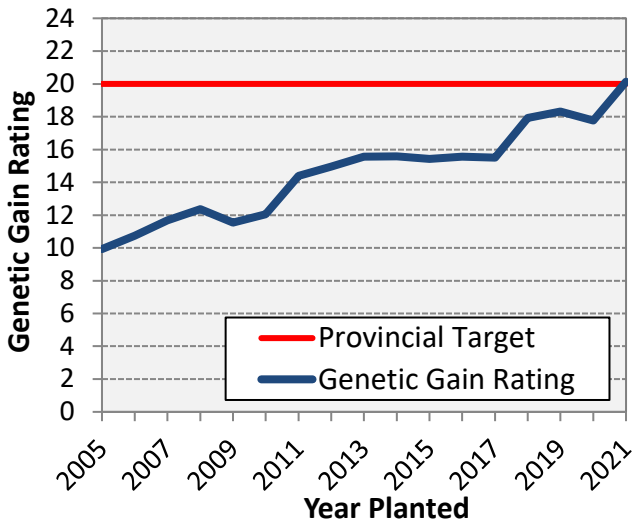

Figure 4c. Average genetic gain rating of planted select seedlings.

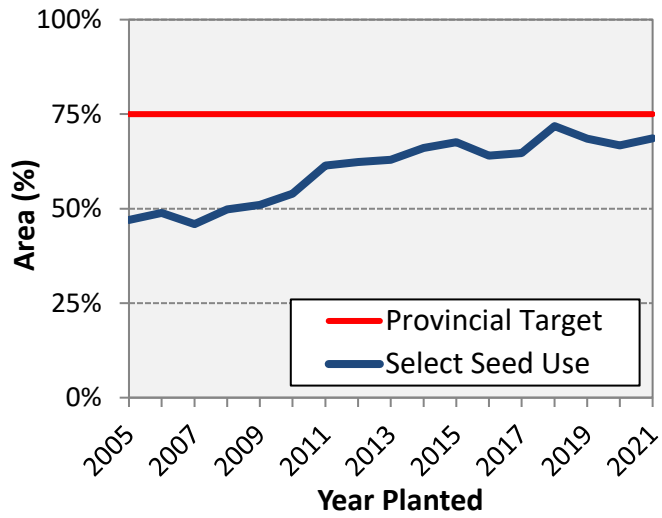

Figure 4d. Average select seed use of planted seedlings.

TARGET: 75% of all trees planted will be grown from select seed with an average **genetic gain of at least 20%.**

STATUS: Currently **69% of all trees** planted are grown from select seed with an average **genetic gain of 20%.**

IMPLICATION: Risks to productivity and growing stock (including risks from insects, disease, fire and windthrow) can be reduced across the forest through select seed use within the context of climate change and other long-term influences.

COMMENTS: Recent increases in the number of seedlings planted combined with a few years of reduced select seed crops from orchards resulted in minimal advancement towards the target from 2013 to 2017. Although progress was made in 2018, the demand for seedlings is expected to continue to increase for the next few years which may make the 75% of all trees planted grown from select seed target difficult to achieve.

Goal #5 - Inherent Site Capacity

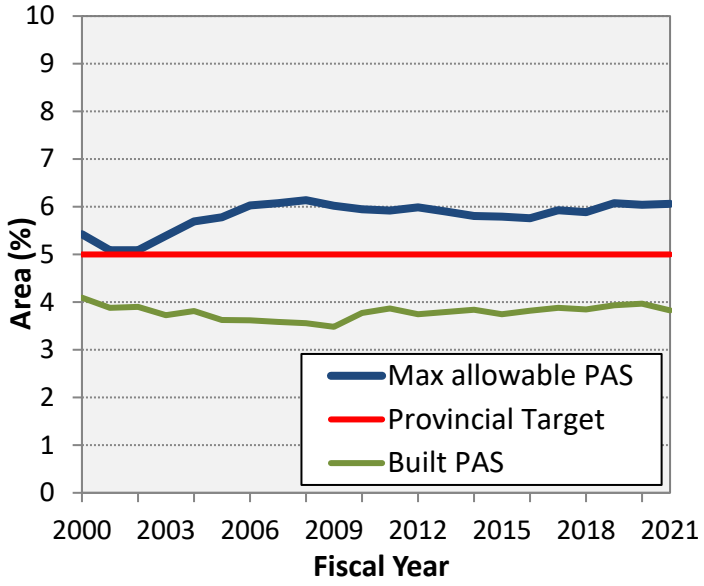

Figure 5. Average PAS reported to RESULTS.

TARGET: The pre-harvest maximum allowable Permanent Access Structures (PAS) percent reported in the last five reporting periods is **less than 5%.**
STATUS: The pre-harvest maximum allowable PAS has averaged 6% for more than 10 years.
IMPLICATION: PAS create a fundamental change in the ground's surface, reducing the productive land base and affecting hydrologic function over large areas.
COMMENTS: The actual amount of PAS built is under 4%.

Linkages to other tools and initiatives

Timber management goals, objectives and targets (including local management unit targets) build upon, and therefore need to be revised based on, a wide variety of key information available to forest managers including:

- *Legislated direction* – such as aboriginal title, establishment of parks and protected areas, and orders under the *Land Use Objectives Regulation* and the *Government Actions Regulation*.
- *Timber Supply Review* – identifies the economic, environmental and social information that reflects current forest management practices – including their effects on short- and long-term timber supply.
- *Stewardship Strategies* – provide context for management decisions necessary to achieve forest level (TSA or TFL) objectives. Since their inception as silviculture strategies, they have continually evolved to find solutions for an increasing number of forest management issues including timber supply, habitat supply, wildfire risk and climate change.
- *Climate Change informed Species Selection Tool* – The tool assists practitioners in making informed tree species selection decisions to maintain and enhance the resilience, adaptability and productivity of BC's forest ecosystems as our climate changes.
- *Forest Health Strategies* – describe the main forest health issues in the TSA, the recommended activities to address these issues, and the priorities for management and research,
- *Cumulative Effects Framework* – a set of policies, procedures and decision-support tools that helps identify and manage cumulative effects consistently and transparently across BC.

Linkages to local-level planning

To make provincial goals and objectives a reality, local timber management targets and strategies are required at the management unit level (e.g. TSA or TFL). It is key that local-level planning (e.g., integrated stewardship strategies and FRPA Forest landscape planning), supported by risk and scenario-based analysis, supports the selection of targets and the integration of management strategies for both timber and non-timber resource values. Local-level planning also provides the venue for continuous monitoring of the achievement of local targets, which facilitates adaptive management and the refinement of effective and efficient targets and/or strategies.