Provincial Timber Management Goals and Objectives
**FOREWORD**

While timber has been a mainstay of the B.C. economy for decades, specific management goals and objectives have often been assumed or buried in various plans or other documents rather than consolidated and clearly stated provincially. This working document is meant to provide a coordinated vision and set of clearly described goals and objectives, located in one place, to create a living document. This document is, therefore, meant as a vehicle to reflect B.C.’s timber goals and objectives within the complex multi-value environment our forests provide.

It is important to understand that goals and objectives have different scales and levels of detail. High-level provincial timber management goals, objectives and targets established in this document provide context and guidance for planning at the local level. The intent is for these provincial goals, objectives and targets to be regularly revisited and refined as necessary to address changing forest conditions, climate change, evolving public priorities, improvements in scientific knowledge, and local level use and experience.

To take goals and objectives and make them a reality, local timber management targets and strategies are needed at the management unit (e.g. timber supply area) level. It is key that local level planning (e.g. Type 4 silviculture strategies), supported by risk and scenario-based analysis, be done to support the selection of targets and the integration of management strategies for timber and non-timber resource values. Local level planning also provides the venue for continuous monitoring of the achievement of local targets allowing for adaptive management to implement effective and efficient refinement of targets and/or management strategies.

This working document is intended to be used, tested and monitored in 2014/15 so that it can be improved in 2015/16. Once the document is improved based on use and experience, the intent is to have the updated document endorsed by the Chief Forester.

We encourage readers to review the full document, and to use the guidance in their local level planning and practices that support sustainable forest management for present and future generations. If there are any questions, comments, or feedback to improve this working document, please direct them to Resource Practices Branch by contacting Lorne.Bedford@gov.bc.ca

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Introduction

British Columbia has the largest and most diverse public forests in Canada. Managing forests for timber\(^1\), water, wildlife, recreation and other values over the long term is therefore very important and complex. Clearly documented goals and objectives for B.C.’s forests assist forest managers in meeting public expectations for the sustainable management and use of this broad array of forest resources.


As a first step in clarifying provincial timber management objectives the ministry provided some further detail in the 2013/2014 Service Plan. Performance measure 7 specifies targets for producing additional timber (see Appendix 1) with the supporting discussion addressing provincial sustainable harvest level targets in the mid- and long-term based on timber supply reviews for timber supply areas and tree farm licences. For forest administration and management purposes, the province is divided into “management units” consisting of 38 timber supply areas (TSAs) and 34 tree farm licences (TFLs). “Local level” planning is at the management unit level.

As a second step, this ‘Provincial Timber Management Goals and Objectives’ document has been prepared. This document brings together and augments the goals, objectives and targets in the Service Plan, forest legislation (such as the Forest Planning and Practices Regulation), and other ministry reports – so that it is provided in one document.

The material in this document is intended to guide the management of timber in management units and the tracking of performance through the use of measureable targets. The ministry intends to report on performance annually.

High-level provincial timber management goals, objectives and targets established in this document provide context and guidance for planning at the local level. These provincial goals, objectives and targets should also be regularly revisited and refined as necessary to address changing forest conditions, climate change, evolving public priorities, and improvements in scientific knowledge. Accordingly, the targets will be monitored and this document will be periodically improved to address those considerations as well as feedback and experience with its use.

Local timber management targets and strategies are particularly meaningful at the management unit level. Local level planning, supported by risk and scenario-based analysis, can support the selection of targets and the integration of management strategies for all relevant resource values. Continuous monitoring of the achievement of goals, objectives and targets and a clear feedback loop provide the basis for refining targets and/or management strategies. See appendix 2 for a process diagram.

The provincial hierarchy of goals and objectives at various levels includes:

- **Vision for B.C. Provincial Forests** - a provincial vision statement for management of B.C.’s provincial forests provides context for timber management goals and objectives.
- **Provincial timber management goals, objectives and targets\(^2\)** – provide context and direction to help guide the development of supporting local management unit targets.

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\(^1\) B.C.’s Forest Act defines ‘timber’ to mean trees, whether standing, fallen, living, dead, limbed, bucked or peeled.

\(^2\) Over time targets can be developed for coast, southern interior and northern interior areas of B.C.
Local (management unit) timber management targets – rationalize provincial goals, objectives and targets in the context of local conditions, needs and values. Local targets guide timber management activities such as harvest practices and silviculture.

This document focuses on timber objectives in the context of integrating timber with other societal goals, objectives and targets for other natural resource values associated with B.C.’s public forests. Objectives for the full suite of natural resource values will be developed over time and ministry staff will continue to focus on developing integrated management strategies that optimize the achievement of all objectives.

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

- Forest inventory (e.g. vegetation resource inventory)
- Forest research
- Forest health strategies
- Timber supply review
- Tree improvement (e.g. improvements in genetic worth)
- Climate change adaptation
- Wildfire and fuel management
- Fish and wildlife values as well as other non-timber values
- Incremental silviculture investments (e.g. Forests for Tomorrow)
- Cumulative effects assessment and management information

Goals are long-term aims.

Goals are more about the grand vision, or everything that should be accomplished on the journey, rather than specifically how to get to that distant point. Goals will often go into undiscovered territory and, therefore, the exact endpoint may be uncertain.

Objectives – are concrete attainments that can be achieved by following certain actions (strategies).

Objectives are concrete and can be clearly linked to timelines, budgets, and activities. Timber management objectives define the strategic condition that needs to be attained to achieve the timber management goals. These objectives are linked to a set of management targets.

Targets numerically specify desired management results to be achieved.

Targets – specify a desired condition that can be measured, tracked and reported –supporting the attainment of the goals and objectives. The targets may be updated over time based on factors such as changing forest conditions and new information.
Vision for B.C.’s Provincial Forests

‘Sustainable forest management’ has been defined to mean management that maintains and enhances the long-term health of forest ecosystems for the benefit of all living things while providing environmental, economic, social and cultural opportunities for present and future generations.3

The ministry’s vision for sustainable management of B.C.’s provincial forests4 includes5:

- Managing forests to meet present needs without compromising the ability of future generations to meet their needs;
- Providing stewardship of forests based on an ethic of respect for the land;
- Maintaining and restoring proper ecosystem function and promoting ecological resilience for influences such as climate change;
- Balancing economic, social, spiritual, ecological and recreational values of forests to meet the needs of peoples and communities, including First Nations; and
- Conserving biological diversity, soil, water, fish, wildlife, scenic diversity and other forest resources.

The timber management goals and objectives that follow are intended to be aligned with the above vision for B.C.’s provincial forests.

The Ministry of Forests, Lands and Natural Resource Operations is working on a ‘Charter’ that outlines government’s principles, priorities and decision-making framework that is intended to complement this Timber Goals and Objectives document.

Balancing Timber with Other Values

The purposes and functions of the ministry include doing the following6: “plan the use of the forest and range resources of the government, so that the production of timber and forage, the harvesting of timber, the grazing of livestock and the realization of fisheries, wildlife, water, outdoor recreation and other natural resource values are coordinated and integrated, in consultation and cooperation with other ministries and agencies of the government and with the private sector.”

Timber management goals, objectives and targets are developed consistent with legal actions7 that protect or conserve non-timber values, and in consideration of management objectives for other values and uses.

Timber management objectives are needed to guide how economic interests are balanced with environmental and social opportunities both in the present and in the future. They are also fundamental to the establishment of policies and practices needed to help ensure the health and competitiveness of the forest sector and to foster an industry that is sufficient to support the local, regional and provincial economies at levels desired by society while ensuring broader provincial economic, social and environmental objectives are met.

Timber management strategies will seek to optimize benefits for multiple values, for example, to improve habitat for wildlife, and reduce fuel loads in the wildland urban interface while producing high value timber.

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3 Canadian Council of Forest Ministers’ 2008 Marking Canada’s Progress in Sustainable Forest Management.
4 ‘Provincial forests’ are as defined in the Forest Act
5 Adapted from the Preamble to the Forest Practices Code of British Columbia Act
6 Ministry of Forests and Range Act
7 ‘Legal actions’ refer to direction provided through legislation such as establishment of parks and protected areas, and orders under the Land Use Objectives Regulation and the Government Actions Regulation.
Government’s role is to appropriately balance values in a consistent manner across all resource sectors and across all agencies within government.

**Forest and Range Practices Act Context** - The Forest Planning and Practices Regulation of the *Forest and Range Practices Act* outlines in Sections 5 to 10 ‘objectives set by government’ for timber and a variety of non-timber values. These objectives are legally applicable to forest stewardship plans developed by forest licensees.

Similarly, timber management goals and objectives must be achieved through management strategies that are integrated with the management strategies and objectives for other values. All of the forest land base in B.C. has existing non-timber (e.g. conservation) goals and objectives.

As an example, Figure 1 indicates the extent of areas designated (over 50 per cent of B.C.) as:

1. Parks, conservancies, ecological reserves, protected areas
2. Wildlife management areas, old growth management areas, biodiversity areas, and retention visual quality objectives (VQOs)
3. Wildlife, grizzly, ungulate, and partial retention visual quality objectives
4. Ecosystem based management and community watersheds

Note: Commercial timber harvesting is precluded or integrated with the various designations so that the non-timber values goals and objectives are attained.

**Figure 1: Composite map showing a range of non-timber designations in B.C.**
Timber Management Goals and Objectives - TIMBER VOLUME FLOW OVER TIME:

Timber volume flow over time describes what has traditionally been the focus of sustainable forest management. The provincial aim is not a strict even flow regime, but rather predictable and reliable flows to support economic and social objectives. Timber flow will be managed in an integrated manner with other key forest values.

Provincial Goal
Promote resilient and diverse forest ecosystems that will provide a sustainable flow of economically valuable timber that generates public revenues, supports robust communities, healthy economies that provide an opportunity for a vigorous efficient and world competitive timber processing industry.

Provincial Objectives
1. Timber is managed in an adaptive manner to address the dynamic nature of natural processes and the inherent uncertainty of managing over long time frames.
2. Attainment in the long-term of realized harvest flows that benefit from timber management activities including harvest practices and silviculture investments.
3. Data used to determine timber flows will be continuously improved, to verify assumptions and to reduce uncertainty.

Provincial Targets
- Based on a 22-million hectare timber harvesting land base (THLB) and projections from Timber Supply Reviews, for individual management units to produce provincially:
  - a mid-term timber supply of at least 57 million m$^3$/year, and
  - a long-term timber supply of at least 65 million m$^3$/year
- These targets are included in Performance Measure 7 in the 2014/15 to 2016/17 Service Plan for the ministry. See Appendix 1.

Local Targets
- Local targets can be initially set based on the most recent Timber Supply Review projections for mid- and long-term timber supply in individual management units.

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8 The THLB area and timber supply targets are based on a roll-up of the results from Timber Supply Reviews (TSRs) for all TSAs and TFLs in B.C. TSRs consider the management of non-timber values and uses. Current TSR provides local management unit target that can be rolled up for the Coast, Northern Interior and Southern Interior areas.

9 The 57 million m$^3$/year mid-term target and 65 million m$^3$/year long-term target are based on projections from TSRs.
• Targets for timber flow may be refined through local management unit (i.e., TSA/TFL) analysis and planning such through Type 4 silviculture strategies.\textsuperscript{10}

**Strategies**

At the local management unit level:

- Regular analysis (consistent with s. 8 of the Forest Act) of current and projected future forest conditions, exploration of a range of feasible management options to set harvest levels, and other criteria to manage timber supply.

- Ensure timber supply forecasts are consistent with legal actions that protect or conserve non-timber values.

- Regularly update timber supply forecasts to reflect harvesting and silviculture practices, changing conditions and values.

- Design harvesting and silviculture plans and activities that promote smoother harvest flow transitions between the short-, mid-, and long-term.

- Plan and implement harvesting and management activities consistent with mid-term and long-term local (management unit) timber supply targets such as:
  
  - Stand and/or species profile priorities for harvesting.
  
  - Harvest age, timber size criteria, and utilization standards.
  
  - Access to timber over all profiles of the THLB.

- Monitor harvesting and silviculture activities for consistency with management unit plans and assumptions.

- Assess and mitigate risks to timber flows (including risk from insects, disease, fire and wind throw) in the context of climate change and other long-term influences.

- Encourage maximum use of avoidable waste through full merchandising and innovative technology.

- Management will adapt with continuous improvement as new and better information becomes available.

Local targets will be influenced by management unit forest conditions combined with consideration of all forest resource values and uses. While it may not always be practicable to achieve all local timber flow targets over time, deviations should be clearly rationalized in the context of impacts to long-term timber supply.

\textsuperscript{10}Type 4 silviculture strategies, among other initiatives, provide management unit level specific harvest level targets, and helps develop a 5-year plan for silviculture investments; see http://www.for.gov.bc.ca/HFP/silstrat/index.htm
Timber Management Goals and Objectives – TIMBER QUALITY.

Timber quality is defined by species, log sizes and grades, end use, and economic value that combine to achieve desired characteristics in the marketplace. In order to minimize risks and maintain future options for different products, a diverse portfolio of timber quality is desirable.

Provincial Goal
Maintain a diversity of timber-related economic opportunities through time.

Provincial Objectives
1. Proportions of high-value tree species\(^1\) within each management unit will be maintained at no less than pre-harvest levels (based on the forest inventory).
2. Proportions of lower value species within each management unit will not be increased\(^2\) above pre-harvest levels.
3. To restock new forests with trees which will produce high quality fibre (including sawlogs) as the primary product objective\(^3\).
4. To ensure a proportion of logs are of premium grade\(^4\).

Provincial Targets
- No reduction in the proportion of provincial forest land made up of high-value tree species.
- To produce a minimum of 10 per cent premium grades from B.C.’s forests\(^5\).

Local Targets
- Local targets are set through management unit plans such as Type 4 silviculture strategies where current or potential local industry requirements are addressed.
- Management practices and timber supply review assumptions will be aligned.

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\(^1\) ‘High value species’ include western redcedar, yellow-cedar, Douglas-fir, western larch, spruce, pine, and other species that have explicit regional or local strategic objectives related to value.

\(^2\) Based on trends over the past 10 years.

\(^3\) 84% of the B.C. annual timber harvest goes to lumber mills, 5% to chip/pulp mills, 8% to plywood and veneer mills, and 3% to panel/mdf mills. Of the volume that goes to the lumber mills, about 47% ends up as lumber. From the scaled harvest plus bark, about 1/3 goes to lumber, 1/3 to bioenergy and 1/3 to pulp, paper, and other products. Dymond, C.C. 2012. Our Logs’ Story from Truck to Product. BC Forest Science Program Extension Note 107, Victoria, B.C.. [http://www.for.gov.bc.ca/hfd/pubs/docs/En/EN107.pdf](http://www.for.gov.bc.ca/hfd/pubs/docs/En/EN107.pdf)

\(^4\) Premium grades are defined as logs having qualities such as larger diameter, narrow ring width, low taper, and few or no knots, such that the particular quality or combinations of qualities commands higher than average prices in a free market. Specifications may vary by tree species and forest region.

\(^5\) Based on the harvest billing system, currently 15% of harvest volume provincially is from premium grades; this can vary considerably by management unit.
Strategies

- Management will adapt with continuous improvement in the understanding of stand establishment, development and management for timber quality characteristics - to ultimately improve associated management objectives and targets.
**Timber Management Goals and Objectives - TREE SPECIES COMPOSITION.**

Tree species composition is an important overall forest resource consideration as it influences timber values, health, resilience, and non-timber values. Tree species diversity is a fundamental climate change adaptation strategy. Tree species composition overlaps with other timber management goals such as timber quality and stand productivity.

**Provincial Goal:**
To maintain or enhance timber and non-timber values, forest health, and resilience, through the management of tree species composition.

**Provincial Objectives:**
1. Where it is ecological feasible, reliable and productive, a resilient mix of species at both the stand and landscape scales will be used to reduce long-term forest risks and maintain future options.
2. Promote reforestation of species compositions that reduce vulnerability from climate change and forest health impacts on timber and other forest values.
3. Management will reduce the occurrence of species where future risks (ecological and economic) are disproportionately high compared with other species.
4. Seedlings planted are grown from source-identified and genetically-diverse tree seed that is climatically-suitable to the planting site.

**Provincial Targets**
- The proportion of monoculture stands\textsuperscript{16} at free growing in B.C. is no greater than the proportion of monoculture stands prior to harvest (based on the forest inventory).
- Within the management unit, the total number of tree species at free growing is no less than what was present prior to harvest.
- Within the management unit, the proportion of a specific tree species at free growing is no more than 10 per cent greater than what was present prior to harvest unless it increases the proportion of higher value species or specific species diversity targets are approved for the management unit.
- By 2020, all tree seed used to establish a free growing stand is registered and selected in accordance with new climate-based seed transfer standards.

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\textsuperscript{16} ‘Monoculture stands’ means at least 80% of trees in a stand are one species.
Local Targets

- Initial timber targets for each management unit, will be set using tree species diversity information at: [http://www.for.gov.bc.ca/hfp/sof/species%20monitoring%20reports.htm](http://www.for.gov.bc.ca/hfp/sof/species%20monitoring%20reports.htm)
- Management unit plans such as Type 4 silviculture strategies will be used to define future targets.

Strategies

- For all timber supply areas in B.C. create landscape-level species targets that promote resilience at meaningful ecological scales, analysing and reporting trends annually against these targets.
- Management will successfully adapt by continuously improving the understanding of resilience and adaptability in the face of influences such as climate change. As well, understanding the role of tree species compositions at various scales will increase to ultimately improve objectives, targets and management success.
Timber Management Goals and Objectives - STAND PRODUCTIVITY AND GROWING STOCK.

Management of stand productivity and growing stock focuses on trends in standing timber (all ages) over the management unit through time. This encompasses the health, genetics, density, and stocking of various stands so that they can productively utilize site resources, balanced against the various risks, which threaten that growing stock through its life span.

Provincial Goal:
Maintain or improve stand productivity.

Provincial Objectives:
1. Develop cost effective management options for the consideration of government with timely management unit analysis and planning after significant and sudden changes to growing stock from natural disturbances and salvage harvesting.
2. Management will target full site occupancy of growing space, after making effective allowances for other values and risks.
3. The proportion of high-risk species\(^{17}\) across a management unit will not be increased and, where future risks for such species are disproportionally high compared with other species, they will be gradually reduced.
4. Decisions at the stand level will not be made solely on the basis of return-on-investment data, but will consider stand level risks and management unit objectives and targets.
5. Use tree seed selected for improved growth or pest tolerance, where available.

Provincial Targets
- Harvested areas will be reforested with tree species and stocking levels that meet or exceed growth and yield projections assumed in timber supply review.
- By 2020, 75 per cent of all trees planted will be grown from selected seed with an average genetic gain of 20 per cent.

Local Targets
- Local targets such as growing stock/harvest ratios and minimum proportion of Mean Annual Increment (MAI) at harvest will be set using management unit plans such as Type 4 silviculture strategies.

Strategies
- Planning will be done to support mid- and long-term economic development, and to provide some flexibility to adapt to random events. Planning will ensure that harvest levels and total

\(^{17}\) ‘High-risk species’ are species with a high risk of mortality during its development stages due to a range of biophysical influences including climate change (an example is lodgepole pine in some provincial ecosystems as identified through vulnerability analysis or district forest health strategy).
growing stock levels are sufficiently robust to provide some flexibility in harvest scheduling and location.

- **No more than 5 per cent of a standards unit**\(^\text{18}\) within a cutblock will be below prescribed stocking standards at free growing. The maximum size of an area below prescribed stocking standards is two hectares (Forest Planning and Practices Regulation s. 46.11).

- **As a long term goal, stands should normally not be harvested before they reach 95 per cent of the culmination of mean annual increment:** however this can be modified through locally based planning processes. For example, the use of scenario analysis indicates trade-offs where significant short falls in the mid-term are identified due to factors such as mountain pine beetle mortality. Area impacted by reducing the harvest age should be considered in the process.

- **Manage merchantable growing stock levels over time to provide for sufficient harvest availability and operational flexibility**\(^\text{19}\).

- **Risks to productivity and growing stock (including risks from insects, disease, fire and wind throw) will be reduced across the forest in the context of climate change and other long-term influences.**

- **Management will adapt with continuous improvement in the understanding of stand dynamics, growth, yield, and potential risks, as well as approaches to manage risks over time - to ultimately improve associated management objectives and targets.**

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\(^{18}\) A “standards unit” is defined in the Forest Planning and Practices Regulation

\(^{19}\). For example with a ratio of 20:1 there is 20 times the allowable annual cut (AAC) volume that is merchantable and unconstrained that a planner can choose from, versus a ratio of 5:1 where there is much less area suitable for harvest. The accuracy of the underlying assumptions (e.g., slope, growth rates, utilization, etc) become more critical as the ratio gets smaller, because there is less and less flexibility in the string of assumptions in the analysis. There is no ideal ratio, a ratio of 5:1 may be suitable if the data are good and the AAC is stable. Conversely it may indicate a significant logistical bottleneck if the data are speculative, the AAC is predicted to go through a large step down and other pressures limit harvest area choices.
**Timber Management Goals and Objectives – INHERENT SITE CAPACITY:**

From a timber perspective, inherent site capacity is about the biophysical attributes of the land as they relate to timber productivity. While the focus for this goal is timber, site capacity is important for all values. Site capacity is mostly influenced by soil attributes, hydrological flows and balances, and associated processes such as decomposition and nutrient cycling.

**Provincial Goals**
To maintain the inherent site capacity of B.C.’s forested ecosystems.

**Provincial Objectives**
1. The permanent footprint of road, trails, and landings will not exceed what is necessary for logical and efficient natural resource management.
2. Access construction and maintenance will maintain natural drainage patterns and flows, and will not contribute to slope failures or chronic erosion over the long term.
3. Harvesting, silviculture and other management activities will not result in significant soil compaction and/or erosion on growing sites, temporary trails and work areas that will be reforested.
4. Harvesting, silviculture and other management activities will be conducted to provide for maintenance or recovery of proper nutrient cycling and soil nutrition.

**Provincial Targets**
- Currently the province restricts soil disturbance to a maximum percentage of site disturbance within the net area to be reforested (Forest Planning and Practices Regulation, s. 35).
- Currently the province has incorporated explicit maximum percentage limits for site disturbance and construction of permanent access structures into the Forest Planning and Practices Regulation, s. 36. The ministry’s target is to have the average site disturbance for the province at less than 5 per cent\(^\text{20}\).
- Currently the province directs the maintenance of natural drainage patterns for road construction and maintenance (Forest Planning and Practices Regulation, s. 37-39).

**Local Targets**
- Local targets may be set based on management unit planning and analysis.

\(^{20}\) Adapted from Ministry of Forests’ Service Plan 2005/06-2007/08 Performance Measure where the outcome indicator ‘% of annual harvest area with soil loss due to establishment of permanent access roads’ should be less than 5% based on a 5-year rolling average. The 5-year average for 2008/09 to 2012/13 soil loss is 3.6%.
Strategies

- Piling and redistribution of soil to recover disturbances in the net area to be reforested.
- Management will adapt with continuous improvement in the understanding of influences and processes that affect site capacity, to ultimately improve associated management targets.
- To encourage the rehabilitation of temporary access structures.
Appendix 1. Ministry Service Plan Performance Measure 7


Ministry of Forests, Lands and Natural Resource Operations

Performance Measure 7: Timber volume gain from silviculture investments.

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Data Source: Volume gains (millions of cubic metres of wood) estimated using data submitted by licensees and the Ministry to RESULTS (Reporting Silviculture Update and Land status Tracking System) and SPFF (Seed Planning and Registry System).

\(^1\) Volume as compared to basic reforestation using natural unimproved seed sources. "Timber volume gain" includes incremental growth associated with silviculture treatment (planting using select seed, rehabilitation, juvenile spacing, and fertilization) and is based on the estimated total accumulated volume gains in 65 years.

\(^1\) Targets are based in part on Land Based Investment Strategy (LBIS) funding, and are also influenced by license activity. Targets are forecast based on activity from the previous 2 years as, for example, seedlings sown in fall 2012 for planting in spring and summer 2014 influence targets in 2014/15.

Discussion

This measure complements attainment of the provincial sustainable harvest level targets which are 57 million cubic metres per year during the mid-term, and 65 million cubic metres per year for the long-term. The targets are derived from the projected sustainable harvest levels in the most current timber supply review for various B.C. management units. The timber supply review assesses each management unit’s long-term sustainable harvest level, and analyzes projected timber supplies in the short-, medium- and long-term. The projected provincial sustainable harvest levels are based on B.C.’s 22 million hectare timber harvesting land base and account for factors such as existing stand volumes, reforestation, forest growth, the conservation of wildlife, tree and riparian reserves, water, fish and wildlife habitat, and biodiversity.

The factors that can influence timber supply are dynamic and can change significantly over time, such as the mountain pine beetle epidemic and climate change. Through the timber supply review update process the Allowable Annual Cut (AAC) is determined, and mid- and long-term harvest level targets are refined on a regular basis.

In B.C., there is a legal obligation to reforest harvested areas. These additional silviculture practices support the achievement of timber supply objectives. For example, as set out in ‘Beyond the Beetle: A Mid-Term Timber Supply Action Plan’, seedlings are planted from required select seed sources to promote both the production of quality commercial timber, and diversity and resilience in future forests. The Ministry monitors trends in harvest, forest health and current silviculture practices. It ensures that current trends and practices are appropriately incorporated, considered and portrayed in the timber supply review process.

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B.C.’s Forests for Tomorrow is the silviculture investment program that invests in a diversity of timber and non-timber values. For example, the program rehabilitates areas impacted by the mountain pine beetle or wildfire.

This performance measure accounts for Forests for Tomorrow investments and volume gains from the required use of select seed. Approximately half of the volume produced in the measure is related to future program activities that are not currently accounted for in current AAC determinations; so is incremental to the 65 million cubic metre per year long-term harvest level target. Increases in this year’s targets reflect increased numbers of tree seedlings sown with select seed and increased area to be planted by Forests for Tomorrow.
Appendix 2.

Key linkages between provincial goals, objectives, strategies, management units and performance measures