



Forest Legislation and Policy Reference Guide 2009

Chapter Thirteen

Sustainable Forest Management

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Sustainable Forest Management

13.1 Future Forest Ecosystems Initiative

13.1.1 Overview

The Ministry of Forests and Range's Chief Forester established the Future Forest Ecosystems Initiative (FFEI) in 2006 to adapt BC's forest and range management framework¹ to a changing climate. Adaptation is necessary to address both current and potential future management challenges posed by climate change. Climate change has already contributed to the unprecedented infestation of mountain pine beetle (MPB) in BC's interior forests. Beyond the current MPB epidemic, the implications of climate change to forest and range management are significant.

Based on current forecasts of climate change, some of the key management challenges we are likely to face over time include:

- increased maladaptation of tree species to their environment, which would reduce their productivity and increase their susceptibility to insects and disease;
- increased frequency and intensity of wildfires, storms, droughts, and floods, which would increase landslides, debris flow, windthrow, and variability in water quality and quantity; and,
- encroachment of grasslands into forests, and forests into alpine areas.

FFEI will address these and other management challenges by:

- increasing our understanding of (a) ecological processes and changes associated with climate change, and (b) associated risks to forest and range ecosystem values (through research, forecasting and monitoring); and,
- using that knowledge to adapt the forest and range management framework to changing ecological conditions (through policy evaluation and change).

Over time, adaptation of the management framework will help:

- maintain and enhance the resilience of B.C.'s forest and rangeland ecosystems to ecological changes associated with climate change; and,
- ensure ecosystems continue to provide the basic services, products, and benefits society depends on and values.

The scope of FFEI is limited to the legislation and land base under the Ministry of Forest and Range (MFR)'s jurisdiction, and is further limited to environmental and ecological aspects of forest and range management. Although FFEI does not directly address social and economic objectives, adaptation of environmental and ecological aspects of the management framework will be essential to achieving B.C.'s long-term social and economic objectives for forest and rangeland management. Furthermore, any proposed changes to legislation and policy under FFEI will be subject to the ministry's rigorous policy review

¹ The forest and range management framework includes the legislation, policies, procedures and systems under or supporting the *Forest Act*, the *Range Act*, the *Forest and Range Practices Act* (FRPA), and the *Wildfire Act*.

process that ensures full consideration of social, economic and environmental costs and benefits before policy changes are approved.

The FFEI 2007/2008 – 2009/2010 Strategic Plan sets out FFEI direction and how it the initiative will be implemented over a three year period. The plan is available on the FFEI website: www.for.gov.bc.ca/hts/Future_Forests/. A technical report by Dave Spittlehouse entitled "Climate Change Impacts and Adaptation Scenarios: Climate Change and Forest and Range Management In British Columbia" is also available on the FFEI website. This report describes a range of possible future climate scenarios and corresponding ecological changes that may occur, and provides a preliminary assessment of risks to and opportunities for forest and range resources.

13.1.2 FFEI Progress and Next Steps

Over the 2008-09 fiscal year, significant progress was made under FFEI to:

- increase collaboration and staff engagement in planning and delivering projects across programs, disciplines and agencies;
- expand partnerships with external organizations and increase funding capacity to deliver on FFEI research objectives;
- lay important groundwork for moving forward in key work areas, including modeling, monitoring, establishing the scientific foundation for resilience-based management, assessing vulnerability, planning long-term research, and developing interim policies;
- improve our knowledge base through ongoing collaborative research projects led by the MFR and external organizations; and,
- raise awareness of and interest in climate change adaptation through information sharing and communication of FFEI outcomes

Over the 2009-10 fiscal year, progress in key areas will continue. For example, 16 new research projects will be initiated by the end of 2009 under the Future Forest Ecosystems Scientific Council (FFESC) Research Program. The FFESC was established in March 2008 to allocate a Grant-In-Aid of \$5.5 million to research projects that will help inform adaptation of the forest and range management framework to climate change.

The FFESC is a partnership between the MFR, the University of British Columbia (UBC), and the University of Northern British Columbia (UNBC). Research projects under the FFESC will be implemented by teams representing government agencies, academics, land managers, communities, First Nations, and other groups.

In addition to these research projects, other near-term priorities under FFEI include:

- modeling the implications of climate change on key species and ecological processes;
- developing a climate change monitoring strategy focused on tracking and measuring key indicators for species and ecological processes;
- refining the scientific foundation of FFEI and extending associated guidance to policy makers and forest and rangeland managers;
- continuing development of interim policies that support adaptation to climate change; and,
- communicating and extending FFEI progress and outcomes.

13.1.3 FFEI Objectives

FFEI has six objectives, as outlined in the following table.

Several strategies have been identified for each of these objectives. Additional information is available from the FFEI website: www.for.gov.bc.ca/hts/Future_Forests/.

#	FFEI Objectives
1	Understand the functional constraints for key species and ecological processes to establish a baseline of information for forecasting and monitoring ecosystem changes.
2	Forecast how a range of climate change scenarios might alter key species and ecological processes over time.
3	Monitor key species and ecological processes to detect changes over time, and determine the agents of change.
4	Evaluate a range of existing and new approaches to forest and range management for their ability to maintain and enhance ecological resilience and ecosystem services, products and benefits under changing ecological conditions.
5	Adapt the forest and range management framework to maintain and enhance ecological resilience and ecosystem services, products and benefits under changing ecological conditions.
6	Communicate knowledge gained and changes to the forest and range management framework.

13.1.4 FFEI Key Terms

Functional constraints – limited capacity of species characteristics (e.g., morphology, phenology, genetics) to facilitate adaptation to changing environmental conditions.

Key species – species that have a disproportionate influence on determining the composition & structure of ecosystems; their loss would cause a greater than average change in populations of other species & ecosystem processes.

Ecological processes – continuous actions that operate directly or indirectly, and in concert, to determine composition and structure of ecosystems; examples include: vegetation succession following disturbance; nutrient cycling, such as the redistribution of carbon; soil development; and, hydrological cycling.

Ecosystem services – nutrient cycling; carbon storage; soil formation; climate, disease, fire and flood mitigation; water purification.

Ecosystem products – water, timber, non-timber forest products, forage, and fuel.

Ecosystem benefits – recreation; spiritual, aesthetic, and educational values.

Forest and range management framework – legislation, regulations, policies, procedures and systems under or supporting *Forest Act*, *Range Act*, *Forest and Range Practices Act*, and *Wildfire Act*.

Environmental and ecological aspects of forest and range management – biogeoclimatic classification, timber supply, ecosystem services, biodiversity, wildlife, fish, riparian, water, soil, timber/forest plant species, genetics, forage/range plant communities, biotic/abiotic agents, exotic/invasive species, and fire.

13.1.5 FFEI Frequently Asked Questions

Why do we need FFEI?

Climate change is creating forest and range management challenges, e.g., current MPB infestation; potential increase in frequency and intensity of wildfires and droughts; potential increase in maladaptation of tree species to their environment, resulting in reduced productivity and increased susceptibility to insects and disease.

What is our purpose?

To adapt B.C.'s forest and range management framework to a changing climate. This framework includes legislation, policies, procedures and systems under or supporting the *Ministry of Forests Act*, the *Forest Act*, the *Range Act*, the *Forest and Range Practices Act*, and the *Wildfire Act*.

What effects could climate change have on our forest and range ecosystems?

Over time, climate change could lead to tree species that are poorly adapted to their environment, reducing their productivity and increasing their susceptibility to diseases and insect infestations such as the mountain pine beetle. Climate change is also expected to result in more frequent and intense wildfires, droughts, floods and storms. This may increase landslides, debris flow, wind throw, and changes to water quality and quantity. Encroachment of grasslands into forest ecosystems, and forests into alpine areas, will also likely be an increasing management challenge.

What are the desired outcomes?

Ecosystems remain resilient to stress caused by climate change, human activity, and other agents of change; and continue to provide the basic services, products, and benefits society depends on and values.

What is the scope of FFEI?

The scope of the FFEI is limited to the legislation and land base under the Ministry of Forests and Range's jurisdiction, and the environmental and ecological aspects of forest and range management. These management aspects include biogeoclimatic classification, timber supply, ecosystem services, biodiversity, wildlife, fish, riparian, water, soil, terrain, timber and forest plant species, genetics, forage and range plant communities, biotic and abiotic agents, exotic and invasive plant species, and fire.

Who will implement FFEI projects?

Implementation is being led by the Ministry of Forests and Range, particularly the forest science, forest practices, tree improvement, forest analysis and inventory, protection, and range programs and branches in its forest stewardship and operations divisions. The Ministry of Environment will lead or participate in projects related to ecosystem services (nutrient cycling, carbon storage, soil formation, etc.), biodiversity, wildlife, fish, riparian areas and water.

Does FFEI involve other partners?

Yes. Besides the Ministry of Forests and Range and the Ministry of Environment, other organizations will help deliver FFEI projects where their interests, expertise and resources support their involvement. These partners are expected to include:

- Canadian Forest Service
- Integrated Land Management Bureau
- Department of Fisheries and Oceans
- Universities and research institutions
- Pacific Climate Impacts Consortium
- Forest Science Board
- Future Forest Ecosystems Scientific Council (FFESC)
- FORREX
- Forest Genetics Council
- First Nations
- Forest and range industries
- Professional associations

How will FFEI be delivered?

FFEI will be carried out through or in collaboration with other climate change and resource management initiatives, such as:

- FIA-Forest Science Program
- Forest Health Program
- Forest and Range Evaluation Program
- Gene Resource Management Strategy
- Forest for Tomorrow
- FFESC Research Program
- Mountain Pine Beetle Action Plan
- BC Wildland Fire Strategy
- Ecosystem Restoration
- Future Forest Strategy

Other delivery mechanisms will be utilized and/or adapted to deliver FFEI projects. These include research installations and projects, monitoring and inventory initiatives, resource information systems, adaptive management (operational trials), policy review and approval processes, and extension programs.

13.1.6 References

- MFR Future Forest Ecosystems Initiative web site: www.for.gov.bc.ca/hts/Future_Forests

13.2 Ecosystem-based Management from a Forest Professional's Perspective

13.2.1 Introduction

After many years of public process effort, land and resource management planning (LRMP) tables recommended a system of Ecosystem-based Management (EBM) for the South Central Coast, the Central Coast and North Coast. The Joint Solutions Project, a collaborative effort between environmental groups and the forest industry, negotiated elements to transition to EBM in 2003. Between 2003 and 2005 North and Central Coast LRMP tables made recommendations to government on elements of land use planning for the Coast and EBM. The BC government then engaged on government-to-government discussions with First Nations. These discussions led to a commitment to government-to-government agreements on the Implementation of EBM in 2006.

EBM is being implemented through three separate legal tools. They are: conservancies, biodiversity tourism areas and land use objectives. Each has been designated or established, and are discussed in more detail further on. Discussions between all parties continue on policy arrangements related to full implementation of EBM.

The EBM framework endeavors to manage the ecological endowment while recognizing and protecting key environmental and social values in the area by:

1. protecting old growth and focal species habitat under Conservancies and Biodiversity, Mining and Tourism Areas, and protecting multi-scale features involving cultural values, aquatic habitats, and biodiversity;
2. establishing EBM operating areas; and
3. establishing an adaptive management steering committee that will report to the joint governments' Land and Resource Forum and further inform EBM implementation and provide info for a later review of the legal objectives.

Protected areas, are reserved and provide an ecological "backbone" to lower ecological risk at a landscape scale, and provide for certainty and opportunity for more intensive management on the adjacent working land base. EBM objectives may vary across traditional territories, as can be seen in the Protocol Agreements reached between provincial and First Nations governments², but are informed by the ecological targets and planning framework introduced in the Coast Information Team (CIT) EBM Handbook.

Forest professionals working within the context of EBM will need to:

- provide results or strategies in their FSP's that protect the values described in the orders;
- work within a new policy system that engages First Nations at many levels of planning; and,
- apply adaptive management practices in forest development and operations where variances from legal objectives are required.

2 See: ilmbwww.gov.bc.ca/lup/lrmp/coast/central_north_coast/forums.html

13.2.2 Background

13.2.2.1 Core Values

The land use objectives focus on some key themes that are incremental requirements to the *Forest and Range Practices Act* and regulations. These include: First Nations traditional and cultural interests, watershed and riparian management, old growth retention and biological diversity at the landscape unit and stand levels, CDC³ listed plant communities, and focal species such as grizzly bears.

First Nation interests, as expressed in government-to-government Protocol Agreements, the approved legal Orders, and in territorial Detailed Strategic Plans assist in describing key forest values at the territorial level and provide some clarity and certainty for forest professionals in developing strategies in forest operations planning and management. This sets a framework for forest companies to work directly with First Nations to identify and incorporate First Nations values in operational planning

Similarly, the ecological thresholds described in the land use objectives attempt to define acceptable levels of risk associated with environmental values centered around watersheds, riparian areas, and habitat supply for old growth-dependent species on the coast.

Passive and Active Adaptive Management

The EBM implementation framework is based on applying principles of passive and active adaptive management in land and resource management planning. Basically, *active adaptive management* occurs when structured research trials inform management decisions. *Passive adaptive management* occurs when operations are monitored and plans adjusted when undesirable impacts are detected. Active adaptive management process can happen through existing institutions where possible (i.e. FORREX), and passive adaptive management can occur through existing MFR and/or licensee monitoring and environmental management systems.

13.2.2.2 Policy Framework

Protected Areas

The Lieutenant Governor in Council (Cabinet) establishes conservancies under the *Park Act*. The *Park (Conservancy Enabling) Amendment Act* (2006) introduced “conservancies”, a new class of protected area to be managed and administered by the Minister of Environment.

Conservancies maintain access for traditional uses conducted by First Nations, allowing a wide range of low impact uses compatible with the primary objectives - cultural, recreation, and biodiversity - as described in the area’s management plan; however, the relative priority or balance of purposes for the protected area may vary between individual conservancies and First Nations interests. Comparatively, Class A parks “are dedicated to the preservation of their natural environments for the inspiration, use and enjoyment of the public” and are therefore clearly different from Conservancies as established under EBM.

³ Conservation Data Centre, Ministry of Environment

The Biodiversity, Mining and Tourism Areas were established in March of 2009 under the *Environmental Land Use Act*. These areas allow non-recreational or some industrial uses, including hydro-electric connected to current grid but do not allow commercial forestry activities.

Land Use Objectives Regulation

The Minister of Agriculture and Lands establishes an “Objective set by government” under the *Land Act*’s Land Use Objectives Regulation (see the previous chapter on Strategic Land and Resource Planning for more detail on the LUOR). Government land and resource management objectives, established under Ministerial Order⁴, are considered under FRPA in Forest Stewardship Plans, site plans and in subsequent forest operations. In establishing an Order, the minister must be satisfied that proposed objectives provide management direction that has not otherwise been provided under other order or another enactment.

In establishing the Order, the minister must also consider the social, economic and environmental balance in the decision. Most of the objectives proposed thus far for EBM on the coast have been described under Order enabled by the LUOR⁵. Where appropriate, (i.e. over a specified area) management objectives may also be enabled under the FRPA Government Actions Regulation.

District and Licensee Implementation Policy

The Ministry of Agriculture and Lands has provided Interpretation guidance to the Implementation of EBM. As of the initial Joint Solutions Project agreement in February 2003, BC Timber Sales (BCTS) and Coast Forest Conservation Initiative (CFCI) businesses have also provided Internal implementation policy to assist with implementing the legally established EBM objectives.

Allowable Annual Cut Determination

The Chief Forester, Ministry of Forests and Range, determines any change to the Allowable Annual Cut (AAC) as a result of designated areas (i.e. Conservancies established under the *Park Act*) considered under **Part 13** of the *Forest Act*. Determinations for each management unit are made ad hoc under Part 13, until deleted areas and changes in practices can be more formally recognized in a subsequent TSR.

Government Process

Some EBM objectives will require substantive changes to planning and layout for forest operations, and amendments to FSP’s are required as described in **sec. 7 of FRPA**. Current reductions in AAC’s have been considered as designated area net-downs under **Part 13 of the Forest Act** (for example, see Mid-Coast TSA link in footnote below)⁶.

Timelines

The land use objectives updated in March 2009 will require FSP amendments consistent with FRPA requirements.

4 See ilmbwww.gov.bc.ca/lup/luo/legal_est_luos.html for a listing of current land use objective orders in B.C. at the time of writing, subsequently to be moved to: <http://ilmbwww.gov.bc.ca/slrp/legalobjectives/approvedlegalorders.html>

5 See [/ilmbwww.gov.bc.ca/lup/lrmp/coast/cencoast/objectives/index.html](http://ilmbwww.gov.bc.ca/lup/lrmp/coast/cencoast/objectives/index.html)

6 for a designated area reduction example under S. 173 of the Forest Act, see www.for.gov.bc.ca/hts/tsa/tsa19/CF_Order/19ts06_cfo.pdf

13.2.3 Professional Implications

Public Values

As forest professionals we must consider land and forestry-related legislation and policy in our forest management prescriptions and land use decisions. Acts, regulations, and ministerial orders are an explicit expression of public values describing protection measures for other resource values in forest management. EBM objectives are additional to objectives set by government under FRPA, and must be applied over and above those already established in regulation.

EBM considers both ecological and human well-being, such that a forest professional might consider objectives for both in forest management over time. For example, in some areas a land manager may incur higher ecological risk at a watershed scale in order to maintain or enhance human well-being (i.e. provide economic opportunity) in forest-dependent communities. At a sub-regional scale however, the same land manager must comply with landscape unit direction and manage to a level of ecological risk as defined by the land use orders.

Forest professionals will be accountable to meeting those objectives set out in the land use orders, while monitoring under passive and active adaptive management will inform measures of long term ecological and economic viability and integrity of an area.

Profession

As EBM objectives apply over and above those considered in FRPA, professional expertise and judgment is required to ensure those public values expressed in statute are protected. The scope and magnitude of risk to a public resource requires the ABCFP, as an administrative body, to ensure members are qualified and held accountable in conducting forest operations on public lands. Members are required to act with due diligence and to ensure their perspectives consider the implications of forest management decisions at all scales over long time periods. Many professionals, across many disciplines and licensees, will need to coordinate their efforts and work collaboratively to ensure EBM to work at these multiple scales.

Employer

Forest professionals have the duty to plan, advise and recommend economically viable forestry activities for employers where an ecosystem is robust enough to accommodate forest management and development. This has implications to all phases of forest management including public value in rents (stumpage, taxes, etc.), industry profitability (incremental costs affecting economic access to the species profile on the coast), and forest investment activities (future value of those investments), and will redefine the working land base and working relationships between forest licensees and other member professionals operating on the coast.

Other Members

The administrative boundaries for management units (TFLs and TSA's) do not typically follow neither the traditional territory nor the ecological and landscape unit boundaries under which EBM objectives apply. This will require professionals working for different client/employers in the same ecological/landscape unit to define a relationship, coordinate and manage forest operations accordingly, planning and communicating with other resource professionals in a way not typically required under FRPA. For Forest Professionals, EBM will require information

sharing, multi-scale analyses and collaborative planning, public involvement and engagement with First Nations governments. The relationships with other resource and forest professionals continue to be guided by the ABCFP Bylaws.

EBM objectives under the legal Orders guide forest managers to retain ecological infrastructure at the stand, landscape unit and sub-regional levels. At the operational level however, predictive higher-level forest inventories cannot always reliably describe actual on-the-ground ecosystem site series, red and blue-listed plant communities and species critical habitat. How EBM objectives apply at the stand level to meet these objectives will therefore require more detailed information collection and watershed/landscape-level collaboration and strategic planning.

Species At-Risk, Identified Wildlife and Focal Species

EBM objectives require that, to the extent practicable, seek to include focal species habitat in retaining ecological structure considered in stand and landscape level reserves. Concurrently, recovery teams are working to provide government recommendations on species recovery plans for Species At-Risk on the coast.

As predictive habitat models provide insight into likely areas to meet habitat needs, and EBM objectives require a percentage of these areas be retained, some thought is needed on which “predicted area(s)” at the stand level are retained to best meet the intent of the objective.

Coastal Communities

Logging-based communities on northern Vancouver Island and milling/processing communities on the Island and in the Lower Mainland are very dependent on harvest from the coastal EBM plan areas. BCStats reports that local communities within each of the plan areas are not primarily dependent on forestry for employment and income.

Access to markets

In the latter part of the 1990s, government and forest companies took the threat of market campaign very seriously and initiated discussions with environmental groups to set aside key areas and modify forest operations to maintain access to key markets in the U.S. and Europe. Land and resource objectives were initially voluntarily implemented by licensees, and later legally established by government to mitigate the risk of an environmental campaign that would negatively brand forest products from the BC coast. Similar to voluntary forest certification, EBM forest products are not expected to fetch a premium in lumber markets; instead companies are expected to incorporate the cost of this stringency as a part of doing business in the plan areas. The potential benefit occurs where licensees operating under EBM have an opportunity to maintain or gain access into blocked markets looking for ecologically sensitive branded products.

Crown Revenues and Timber Supply

Where stumpage rates are high enough above the minimum \$0.25/m³, most of the increase in roads and engineered infrastructure development unit costs under EBM will be partially recognized as a Tenure Obligation Adjustment in the Coast Appraisal Manual (CAM). The CAM also recognizes an additional \$2.75/m³ harvest cost adjustment for incremental costs incurred in each phase of development under EBM. These are therefore expected to reduce stumpage payable to the Crown, and at least partially mitigate the effects on licensee operability.

The greatest projected impact remains to be access to the dominant marginally economic hemlock-balsam profile in the areas north and inland from Cape Caution on the coast.

Increased effort required during planning and operational phases under EBM is expected to reduce bids for BCTS sales in representative stands and likely translate into an additional downward pressure on stumpage charged by the Crown for timber harvested in the plan areas. Any increase in unit costs *not recognized* by the appraisal system will then be borne by forest licensees and, in marginal stands, affect their operability.

Overall, EBM is forecast to reduce timber supply through land base reductions (net of protected areas) and lower volumes available under EBM objectives. Lower stumpage rates applied over less available harvest volumes are expected to impact on Crown revenues from timber harvesting within the plan areas.

13.2.4 Summary

Ecosystem-based Management is social choice as expressed in legislation through conservancies established under the *Park Act* or the *Protected Areas of British Columbia Act* and in land use objectives introduced by ministerial Order under the Land Use Objectives Regulation. These objectives must be considered in developing strategies in Forest Stewardship Plans under FRPA.

Our role as forest professionals is to apply EBM objectives in our practice, and advance science and methods through adaptive management to ensure the results reflect EBM as described by governments. With clients and employers we, as professionals, are responsible to ensure forest operations under EBM are economically viable and compliant with the objectives set under Order. To be successful we must continue to work with First Nations, the public, stakeholders and other forest professionals to ensure the objectives set by the public through government are met across plan areas.

13.2.5 Apply the Knowledge

1. The coastal Orders describe bounds on operational development that are over and above FRPA objectives. In essence, through the Orders, the Public has described a lower ecological risk level of stewardship for the North Coast and Central Coast areas.

Q. As a forest professional, are you obligated to consider whether your work reflects "EBM" in areas and operations outside areas covered by EBM land use objectives Order? Why or why not?

2. Planning under EBM considers First Nations cultural, traditional and domestic interests, old growth representation, focal species habitat, hydro-riparian and terrain processes and biological diversity objectives. At the same time, EBM planning addresses economic access to timber as a strategy maintaining community well-being in plan-area dependent communities.

Assessments and collaborative efforts were required by professionals throughout the planning process to inform planning tables and government on the implications of table recommendations.

Q. Who would need to be engaged in developing this information? How would professionals describe conflicting objectives and the implications to planning tables and decision-makers? Given some of the science is new and emerging under EBM (i.e. ecological risk thresholds at a sub-regional scale, community resiliency), how would professionals make sure they were confident in their recommendations?

3. Debate continues on the purpose of EBM forest management strategies - whether they support the maintenance of current old growth-dependent species' populations or are focused more broadly on the recovery of the species. Land use objectives are incremental to FRPA, but do they go far enough to meet expectations under SARA?

Q. As a forest professional, how would you ensure forest practices under your FSP meet the intent of the objective?

13.2.6 References

- Protocol Agreements between provincial and First Nations governments:
ilmbwww.gov.bc.ca/slrp/lrmp/nanaimo/central_north_coast/news/agreements.html
- EBM Working Group:
ilmbwww.gov.bc.ca/slrp/lrmp/nanaimo/cencoast/plan/ebm_wg.html
- North and Central Coast Protected Area Planning:
www.env.gov.bc.ca/bcparks/planning/mgmtplns/nrth_cent_cst/nrth_central_coast_pa.html
- Current land use objectives orders in BC:
ilmbwww.gov.bc.ca/slrp/legalobjectives/approvedlegalorders.html
- Designated area reduction example under sec. 173 *Forest Act*:
www.for.gov.bc.ca/hts/tsa/tsa19/CF_Order/19ts06_cfo.pdf
- BC Stats: www.bcstats.gov.bc.ca/pubs/econ_dep/ed_2.pdf
- EBM Handbook: www.citbc.org

13.3 Provincial Mountain Pine Beetle Strategy Overview

13.3.1 Policy Objective Statement

The Provincial Mountain Pine Beetle Action Plan outlines the collective goals, objectives and actions that are and will be taken to monitor and mitigate the effects of the Mountain Pine Beetle (MPB). The Action Plan has proven to be very robust, even as major biophysical and economic issues expand, and is a starting point for collaborative policy development. Efforts by various ministries, the federal government, First Nations and non-governmental agencies, including industrial sectors, are regularly reported (see 13.4.2 References). An updated Action Plan will be developed as needed.

The MPB Epidemic Response Division, Ministry of Community and Rural Development (MCRD), is the lead agency with responsibilities to strategically plan and coordinate the Provincial government's efforts to mitigate and adapt to the MPB effects. The Ministry of Forests and Range, Ministry of the Environment and other resource, economic and social ministries have mandated responsibilities, many of which are influenced by the MPB epidemic.

The 2009/10 Throne Speech made the following point related to the mountain pine beetle:

- Hundreds of millions of dollars are being invested to help communities meet the onslaught of the mountain pine beetle and create a more diversified, stabilized economic future.

Donna Barnett, MLA for Cariboo-Chilcotin, was assigned as Parliamentary Secretary for Pine Beetle Community Recovery on June 9, 2009, which indicates the Provincial government's continued commitment to support communities affected by the MPB epidemic. The Ministry of Community and Rural Development is assisting rural development by providing support to local governments through tax policies, various funding initiatives, and the Union of BC Municipalities.

The Provincial MPB Action Plan has many biophysical and socio-economic objectives that are inextricably linked to the MPB impacts and the impacts of increased development. Communities across the impacted area are being affected in various and differing ways depending on several factors:

- Economic forest dependency and vulnerability to downturns in the forest sector;
- Amount and distribution of pine;
- Diversification of the local/regional economy; and
- Resilience of the community, that is, the overall ability to adapt to dramatic changes.

In order to address local needs and capitalize on strengths across a larger region, three organizations of local government were established:

- Cariboo-Chilcotin Beetle Action Coalition (C-CBAC),
- Omineca Beetle Action Coalition (OBAC), and
- Southern Interior Beetle Action Coalition (SIBAC).

The C-CBAC submitted its final report to the Provincial government in September 2008, and is being supported to implement some aspects of forest worker training and economic diversification. The OBAC covers a much larger geographic area, and its report to the Province is expected this summer. The SIBAC was formed more recently in 2007, and is also expected to report to the Province this summer.

The general breadth of priorities for the BACs covers:

- State and condition of community infrastructure (systems and services);
- Communication, information and education;
- Social issues and opportunities (including forest workers);
- Venture capital attraction of the region; and
- Economic opportunities.

First Nations are involved at various levels and in many initiatives. The First Nations Leadership Council supported the development of the BC First Nations MPB Action Plan in 2005. Among many statements, the 2005 Action Plan notes:

Given this time of crisis, and the ever-increasing need to establish sustainable forest management practices, measures must be implemented immediately to facilitate joint action with all other affected parties (federal and provincial governments, municipalities, industry, and others) so that the broad challenges associated with the epidemic's destructive impact on forest ecology can be met head on.

One outcome from the 2005 First Nations' efforts was the formation of the First Nations Forestry Council (FNFC). The FNFC proposed several key opportunities for First Nations to accept a more active role in managing MPB, and helped produce the BC First Nations Forestry and Land Stewardship Action Plan in May 2008. This plan is broader than MPB impacts, and sets out seven goals:

1. Restore and sustain healthy ecosystems through stewardship and planning,
2. Implement recognition and the New Relationship,
3. Effect legislative and policy development and reform,
4. Build capacity through traditional knowledge, research and education,
5. Support resolutions through negotiations and litigation,
6. Maximize economic opportunities for First Nations, and
7. Foster relationships and networking.

One active area of effort for the FNFC is community protection, and more distinctly, fuel management around affected First Nations' communities. Many communities are developing Community Wildfire Protection Plans, with support from the MFR Wildfire Management Branch, Natural Resources Canada and Indian and Northern Affairs Canada, and several pilot projects are completed. Strategic planning for ecosystem stewardship and sustainable economies has been completed, and integration with ongoing and new initiatives continues.

Many provincial initiatives have specific application to the effects of the MPB. For instance:

1. The MFR Forests for Tomorrow (FFT) program reforests areas affected by MPB that are not the obligation of a tenure holder.
2. The BC Hydro call for expressions of interest in bioenergy opportunities is related to MPB wood; projects are being implemented and additional proposals are being developed.
3. Forestry Innovation and Investment Ltd (FII) and its partners are identifying new market opportunities for existing products and for new products, along with improving manufacturing processes.

FORREX provides a gateway to information, extension and training on MPB issues, research and initiatives.

The MPB epidemic creates serious challenges for the forest industry, all levels of government, workers, and communities throughout the impacted areas. Effects will be with us for decades, and the results are shaping our future forests and communities.

13.3.2 References

- Mountain Pine Beetle Action Plan 2006-2011:
www.for.gov.bc.ca/hfp/mountain_pine_beetle/actionplan/2006/Beetle_Action_Plan.pdf
- Mountain Pine Beetle MPB accomplishments to 2006/07:
www.for.gov.bc.ca/hfp/mountain_pine_beetle/MPB-Annual_Report_20070917.pdf
- Federal MPB funding implementation: www.for.gov.bc.ca/hfp/mountain_pine_beetle/
- Province of BC Throne Speech 2008/09:
www.gov.bc.ca/premier/2008_throne_speech/index.html
- Cariboo-Chilcotin Beetle Action Coalition: beta.c-cbac.com/index.php
- Omineca Beetle Action Coalition: www.ominecacoalition.ca/
- BC First Nations MPB Action Plan:
www.ubcic.bc.ca/files/PDF/FN_MPBActionPlan270905.pdf
- Forests For Tomorrow: www.forestsfortomorrow.ca/
- BC Hydro: www.bchydro.com/info
- Forestry Innovation and Investment new market opportunities:
www.forestry-innovation.bc.ca/

