



A GUIDE: YOUR COMMUNITY & THE MOUNTAIN PINE BEETLE (MPB)

This guide is intended to help forest communities, interested in the local economy and forest environment, to monitor the cumulative effects of the mountain pine beetle epidemic. The full impact of the epidemic may not be felt for another decade or so, because salvage harvesting will increase short term economic activity in many communities. People should start now to gather information, plan for the future, and take effective action.

Communities Taking the Initiative

The British Columbia Forests Society recommends that a community take the initiative in monitoring the local effects of the MPB epidemic. Unfortunately, a number of factors including wildfire control operations, warm winters and decisions by forest managers to avoid targeting lodgepole pine trees for harvest, has led to large areas of standing old pine which are particularly susceptible to MPB attack. A community initiative in response to previous deficiencies in forest policy and practice, will provide an important stimulus in progress towards sustainability.

The potential for non-timber forest products and nature-based activities

Timber will continue to be a major economic benefit from most local forests. However, the British Columbia Forests Society believes there are many opportunities forgone by not developing all potentials, including non-timber forest products, nature-based activities, value-added wood products, firewood sales, the outdoor classroom, forest recreation, and small-scale community timber tenures. For example, BC has about the same commercial forest area as Sweden (24 million hectares) but they produce double the value. So think 'outside the box'.

The MPB Impact Monitoring Process

The British Columbia Forests Society has a **nine step process**, and a list of associated questions, that will help communities, community groups or local Branches of the Society to monitor stewardship needs in local landscapes and participate with decision-making from an informed perspective. (Establishing a local Branch is a simple process; visit our Web page for instructions: <http://www.forestsociety.com>)

The monitoring process involves nine steps:

1. **Identification of the forest stewardship issue**
2. **Definition of the Geographic extent (area, line or point defined)**
3. **Description of the stewardship requirement**
4. **Explanation of the objective or desired future condition**
5. **Identification of the solution or alternative solutions**
6. **Assessment of alternative solutions or practices**
7. **Recording of the desired solution**
8. **Monitoring and recording of progress**
9. **Evaluating progress, revisiting, improving solutions or practices**

Note: An **adaptive management cycle** is included in this process. Forest ecosystem processes are complex, and planned solutions may not work as well as originally intended. If monitoring shows that the desired results are not happening, then gather information, determine the reason for the results, and change the practices so as to try to achieve better solutions. **It is a common sense approach** that will lead to improved results if the parties involved recognise the problems and are willing to take corrective action.

Arrange a meeting and invite the stewards of the local forest landscape

Government agencies and forest industry managers are deeply involved with the mountain pine beetle epidemic, and many programs and plans are in place. Information to fill in the blanks for items #1 to 7 in the monitoring process should be readily available to a community group wishing to monitor progress. The British Columbia Forests Society **recommends** the community organise a **meeting** where the public asks answers to questions from the resource managers who have stewardship responsibilities in their local landscape.

Although most local forests are owned by the Crown (i.e. we, the public), you may not find a local forest steward for the forest surrounding your community. The nearest Ministry of Forests and Range office is the first place to go to identify who are the officials with stewardship responsibilities.

Invite representatives from the Ministry of Forest and Range, First Nations, other government agencies and forest companies. Depending on the activities in the local forest landscape, you may also wish to invite range (cattle) users, woodlot license holders, guide outfitters and representatives of nature based economic or recreational activity. Provide the meeting participants with a copy of the questions listed below (in

advance). These basic questions can be modified or additional ones pertinent to your situation can be added.

Questions to gain necessary information for the monitoring process:

1. Forest stewardship Issue: Mountain Pine Beetle Epidemic

- Are there any other stewardship issues involved?

2. Geographic extent

- Is there a map showing areas of forest affected by mountain pine beetle?

3. Stewardship requirement (Background information that aids understanding of the stewardship need, origins, significance, potential treatments and solutions)

- What is the area and volume of timber stands affected by the MPB?
- Of the total, what is the area and volume of predominately pine stands?
- Of the total what is the area and volume of mixed stands?
- What is the area and volume of pine stands greater than 80 years old presently unaffected?
- How is the salvage of pine in mixed species stands being conducted?
- Who will regenerate beetle-killed stands that will not be salvaged?
- What is the effect on biological diversity and forest dependent species?
- What is the effect on endangered species, water and aquatic resources?
- What about scenic, cultural, aboriginal, or recreational resources/values?
- Will manufacturing facilities survive with post-salvage harvest levels?
- Do secondary manufacturers have access to the wood supply?
- If a secondary manufacturer establishes an operation in the salvage period, will it be sustained when timber harvest levels decline in the post-salvage period?
- What are the present and future effects on existing non-timber forest products enterprises, or nature-based economic activities?
- Are there other related activities that could be started up now (eg. firewood sales, tree planting, falling/leaving)?
- Is there an increased forest fire risk owing to dead, dying, fallen materials?
- How do we avoid creating another epidemic potential 80 years from now?

4. Objective or desired future condition

Problems and especially emergencies make us seek solutions and we often jump into action. However, it is essential to think about what result we want to achieve or the condition of the forest and its dependent communities years into the future.

- What will be the future condition of forests, without and with management?
- What will be the condition of other resources and values? What non-timber resources or nature-based values can be used or developed to supply economic benefits to the community to substitute for future reductions in the timber economy due to the epidemic?

5. Solution or alternative solutions

There are no 'complete solutions' for the mountain pine beetle epidemic. It will have serious consequences for forests and the livelihood of forest dependent communities. However, we can be creative in finding solutions that mitigate the consequences. The epidemic has created an emergency situation and most of the present solutions involve efforts to contain the epidemic, and salvage dead and dying stands. Communities should rely on their own initiatives if they wish to see increased economic activity such as in non-timber forest resources and nature based activities. Communities or businesses wishing to pursue activities should obtain necessary permits, while being aware that persistence may be needed with an existing administrative and tenure system that may not be a good fit to innovative proposals.

- What solutions and alternative solutions have been considered for dealing with the epidemic?
- What solutions have been developed for dealing with the effects on other resources and values? (specifics identified in #3 should be addressed)
- What solutions with regard to substitute economic activity are being considered?
- Are there any support programs that the community can access to help develop substitute economic activities?

6. Assessment of alternative solutions

In most cases, there are alternative solutions to a forestry problem. Careful examination of costs and benefits assists in selecting the best solution. Unfortunately emergency situations can sometimes be seen as opportunities for proceeding without normal assessment, caution and control.

- What alternatives for dealing with the epidemic were examined?
- What are the reasons for selecting the intended solution?
- If the preferred solution isn't working, which alternatives could be tried?
- Similar questions can be asked of treatment of other values, resources or other non-timber developments
- Does the solution reflect the same type of action that helped the mountain pine beetle epidemic to occur in the first place?

7. Decision

Make a written record of the solutions and practices to be implemented. Verify and gain additional information and maps with local stewards.

8. Monitoring and recording of progress

Form a group of local volunteers and monitor the solutions and practices to be implemented in the landscape. The monitoring group should:

- Visit the field to view operations, and make a record of progress including issues and problems
- Discuss with stewards the reasons for changes to plans or solutions
- Seek and suggest improvements
- Meet periodically with the stewards in an office setting to record ongoing discussions and decisions, particularly any changes in solutions or practices, and keep the community informed

9. Evaluating progress and improving solutions

(go to #3, add history and information, and proceed)

Try to develop a good working relationship with the local stewards. Review records on progress and implementation and seek improved solutions. This means revisiting step #3 to analyze the additional knowledge and working through the processes again. Be objective. Outline the findings of monitoring and follow the steps from #3 onward if improvements are indicated.

- Arrange an annual public meeting or more frequent meetings if necessary to report on progress; invite the media
- Be persistent in monitoring; think about the local forest landscape and community in the long term

Contact the British Columbia Forests Society if you need advice.

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