



**The Grande Alberta Economic Region
Mountain Pine Beetle Initiative**

Phase Two:

**The Economic, Social and Environmental Costs
of the
Mountain Pine Beetle
in the
Grande Alberta Economic Region:**

Towards Transformation

EXECUTIVE SUMMARY

Presented to GAER by
Cambridge Strategies Inc.

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INTRODUCTION

The Mountain Pine Beetle (MPB) infestation in Alberta is expected to have extensive impacts upon Alberta's forest-dependant communities - their economies, their social and physical infrastructures and where forest fires are concerned, perhaps their very safety. Due to the emerging scope and scale of the pine beetle infestation, Grande Alberta Economic Region's (GAER's) communities must plan for, and adapt towards, a post beetle future. With financial support from Community Future's Rural Community Economic Development (RCED) Fund, GAER is developing a strategy to ensure their communities have the capacity to respond effectively to the arrival of the Mountain Pine Beetle in their forests.

This document invites the Government of Alberta, Government of Canada, industries, and other parties to partner with GAER citizens and communities. These partnerships will be necessary to meet the challenge of transformative change and adaptation toward long term sustainable, self-reliant and prosperous communities in the Grande Alberta Economic Region.

THE MPB IN ALBERTA

Alberta has traditionally been outside the MPB's natural "distribution range". The incidences of pine beetle in Alberta's forests have, in the past, been very low. In July of 2006, strong winds blew millions of beetles across the Rocky Mountains into Alberta. Provincial surveys now report the estimated number of trees infested by the beetle is three million – a number which will grow as more surveys are completed this spring and as the beetle takes flight again this summer. The provincial government has declared a Mountain Pine Beetle emergency and has allocated \$50 million in immediate emergency funding to continue aggressive harvesting and salvage efforts against the beetle. It has also implemented a provincial management strategy to try to reduce beetle related economic damage and to attempt to slow the rate of population expansion. The federal government has also dedicated money to mitigation and control efforts; \$200 million to fight the existing threat of MPB (both in and from BC) and another \$1 billion over the next decade to slow the spread of the beetle, to recover economic value and to protect communities and forest resources.

While many scientists and environmentalists argue salvage and harvest practices are not an appropriate response to the beetle explosion, there are other issues which need to be considered. First, scientists expect the beetle will migrate to the jack pine, the predominant pine species in the Canadian boreal forest. If this occurs, the beetle could spread across the entire country, potentially leaving a ruined pine forest in its wake. Secondly, there are not enough traditional uses for the expected excess of beetle killed timber. Additionally, the MPB is not the only 'pest' impacting upon North American forests. The spruce beetle has destroyed more than 350,000 hectares of spruce across Alaska and the Yukon, and has begun to spread both south and east. Given these factors it is prudent to expect the entire face of our forests will be changed. For long-term planning, it is prudent to proceed on the basis that the entire pine content of the forests will be affected by the MPB.

GRANDE ALBERTA ECONOMIC REGION (GAER) – LOOKING TO THE FUTURE

Given the above assumption, GAER communities planning for future sustainability should focus upon the question, "What is our most comprehensive and viable response in the worst case event of massive beetle kill and widespread destruction of the forest?"

The Grande Alberta Economic Region

The Grande Alberta Economic Region (GAER) is an economic development partnership of thirteen communities and one associate member (Jasper National Park) in west central Alberta. The region is rich in natural resources and like the rest of Alberta, is experiencing an economic boom on the strength of oil and gas, the largest economic sector in the region. While this explosive growth is placing strains upon regional and community infrastructures (service delivery, land availability, transportation systems and the labour supply), there are other sectors which also provide economic strength to the region and which, with continued development, point to great potential for the communities and citizens of GAER. These include coal mining, agriculture and tourism.

Next to the oil and gas sector, the forest sector is the second largest employer in the region. Based on statistics from Alberta Sustainable Resource Development, forest sector related activity in GAER employs almost 12,300 people (in primary and secondary forest industries) and results in over \$3.33 billion in revenue. The reliance of member communities upon the forest cannot be overstated as almost all the municipalities in the GAER region experience major forest sector activity.

GAER's Forest Industry

The forest companies working on FMAs in GAER are altering harvest plans in an attempt to keep up with the beetle kill. Canfor expects to process up to 175,000 cubic meters (m³) of beetle wood before autumn 2007; Weyerhaeuser has approximately 1.3 million m³ waiting to be processed. Jim Lelacheur of West Fraser Mills says in terms of the amount of lumber expected to be logged "one can envision up to two million cubic meters extra consumption in the next one to two years, up to five million cubic meters extra consumption over the next three to five years and potentially more, should salvage programs be required [beyond] five years." He says the beetle is an industry wide worry and the sector must explore various options prompted by climate change, the search for energy alternatives, and the opportunities presented by the MPB.

CONSIDERING THE POST BEETLE FUTURE

A key component of the second phase of this initiative was to engage local forest dependant towns and counties and to encourage discussion about the MPB and the future of their community. Workshops were held in six communities in the region (Edson, Hinton, Jasper, Drayton Valley, Whitecourt and Grande Cache). The goal was to get participants thinking about what their communities would have to do to respond, adapt and prosper in light of beetle related realities. While each workshop identified issues, actions and ideas specific to the needs of their own community, there were clear thematic similarities from all communities. Overall, participants identified a need for:

- Education regarding the beetle, potential impacts, and viable community alternatives
- Developing technical expertise and alternatives, diversification strategies and community capacity
- Collaboration and partnerships between sectors, communities, governments, etc.
- Pre-planning
- Communications
- Leadership

Without these areas considered, communities felt they could not adequately prepare for the arrival and consequences of the MPB.

MAKING THE BUSINESS CASE

For forest dependent communities, the reality is that the MPB poses both serious risks and great opportunities. While there is potential for a wide range of forward-thinking economic initiatives that could be considered, creating the adaptive capacity to foster those initiatives could pose a challenge. Citizens in GAER communities will have to figure out, define and design their futures; this will require transformative thinking. The GAER region, its communities, organizations and institutions will need support, resources and enhanced capacity initiatives to assist them in creating useful change. Senior orders of government, industry, and other institutions will need to work collaboratively within the region. There is a confident, sustainable future for this region, but collaborative planning capacity building, skills and resource development must be done now if GAER citizens are to meet the challenge head-on.

OPTIONS TOWARD ADAPTATION

In order for necessary adaptive capacity to build in the region, there are a number of options which must be considered. The first is to continue and further build ties with the industries, enterprises and businesses already established in the region, and to ensure they have the capacity to continue to provide jobs and growth. Elsewhere, although the tourism sector could be particularly vulnerable to the effects the MPB will have on area forests, there is also a wealth of opportunity to be found in the development of eco-tourism, adventure tours or the creation of luxury resorts and other accommodations. Similarly, new opportunities in agriculture could be investigated and pursued. What's more, given the growing interest in the development of alternative energy sources and the attention being placed by industry and government on development of biomass, value will be found in the excess of beetle-killed timber we will find ourselves dealing with. For at least the next decade, and possibly two, there will be an abundance of trees which will need to be harvested. These in themselves constitute not just a significant resource, but a means of evolving an entirely new type of economy, based on forest products. A significant opportunity exists, therefore, for GAER communities in the exploitation of this wood for biomass uses.

Considering the new economic opportunities which may be available in a post beetle world, it is clear GAER communities will have a full and rich menu of options to choose from as they look towards a sustainable future. The key is to create collaborations, partnerships and capacity needed to adapt to the preferred future chosen by citizens in the GAER communities.

RECOMMENDATIONS

1. Build capacity within GAER to enable regional and community adaptation and transformation.

As currently constituted, the office of GAER lacks the human and fiscal resources, as well as technological and other infrastructures, and the broadly based mandate, to support the regionally based and community led adaptation necessary to respond to the Mountain Pine Beetle. While GAER has an essential role as a key driver of regional economic development, it does not have the appropriate institutional capacity to fulfill this role in the face of the pine beetle. The process of regional and

community adaptation is best designed and driven by the communities themselves. Any social, environmental, or economic transformation should flow from a preferred community vision of their future given the MPB realities. Therefore, GAER needs a significantly larger resource base, both human and financial, to provide more capacity (including additional skill sets) to enable and facilitate regional and community endeavours. Moreover, it needs the capacity to develop local partnerships, in local communities, with community based drivers of economic development. GAER would ideally be constituted and resourced to provide coordination of communication and advocacy for the program and coordination of regional leadership. Working with such endeavours as Community Futures groups and in concert with the capacity available through The Rural Community Economic Development initiative (RCED), GAER should be empowered to ensure a coordinated, region wide approach to community sustainability, based on the expressed needs of individual communities. This will build the community capacity within the GAER region through such measures as:

- a) The evaluation, selection, implementation, monitoring and expansion of opportunities.
- b) The commission of research, analysis, and feasibility studies to determine what projects and opportunities are viable and necessary for the region. This will include establishing triple-bottom line measurements to determine community and regional progress toward adaptation and long-term community sustainability.
- c) Collaboration and coordination, as required, of the work of all orders of government, their departments, boards, agencies and commissions which are engaged in supporting regional and community adaptation.
- d) Working with communities in the region and elsewhere, and as requested, to help develop their visions of the preferred future and design action plans to achieve those ends.
- e) Collaboration with local communities to coordinate and integrate community visions of the future into a “GAER Regional Response” which will respect the wishes of individual communities while ensuring that GAER, as a region, has taken optimal advantage of available opportunities, and has effectively sought and received new and enhanced supports from various orders of government to enable the necessary adaptation.
- f) Becoming the liaison and one stop information source between the Government of Alberta, Government of Canada and GAER communities to coordinate government support and assistance.
- g) Continuing to solicit, respond and assist all expressions of interest by any industry, entrepreneurs, investors and those who wish to pursue economic opportunities in the region.
- h) Continuing to work with existing industry to enhance their opportunities and capacity to adapt and change, so they can continue to provide jobs and growth in the region
- i) Continuing to develop the sustainability and viability of the tourism sector, this may be especially vulnerable in the short-term to the effects of the pine beetle.
- j) Becoming a full service and fully integrated economic, environmental and social well-being development agency for the region.

- k) Facilitation of information gathering, sharing, communications, planning, education and effective collaborative relationships between private industry, governments and citizens for the benefit of the region.
- l) Designing and offering a community led response model which may be adapted by other pine beetle affected communities and regions on a “learning and best practices” basis.

It is recommended that a minimum annual additional resource allocation of up to \$3 million per year, for the next five years be emplaced by the Province of Alberta to build GAER’s capacity to fulfill the role described above, against a business plan and budget developed by the GAER.

2. Ensure communities have enough of all the resources necessary to adapt on a timely and effective basis.

Assuming the GAER develops the capacity to become a full service development agency, further resources will be necessary to support individual projects. These will include, among other things, pilot projects to evaluate economic and societal alternatives and adaptations which are best suited to particular communities. They will include public sector and institutional support components, where appropriate, of enterprises which advance each community and regional visions of preferred futures.

- a) It is recommended the Government of Alberta create a special fund, perhaps the “Pine Beetle Community Sustainability Fund” (the “Fund”) to ensure sufficient and timely access to financial resources necessary for community and regional social, environmental and economic adaptations. Such a fund could be modeled after the recently established Rural Alberta Development Fund. This entity would be an extension of the Government of Alberta and receive and evaluate proposals for the benefit of the communities and the region. It would be able to make funding allocations. Submissions would come from individuals, enterprises, industry sectors, community local interest service and advocacy groups as well as local governments, including their agencies, boards and commissions. The RCED program referenced in Recommendation one above includes building a community economic development capacity to pursue various sustainability and development options.
- b) It is recommended the Government of Alberta consider the impact of the Mountain Pine Beetle as both an emergency and a special case. As such, an immediate and significant funding commitment should be made from the Alberta Sustainability Fund to provide capacity for supporting ongoing needs for adaptation on a case-by-case basis. Sustainability Funds must be provided for ongoing, project based, locally identified supports, which are necessary for community adaptation, in order to respond to the current and ongoing MPB infestation and the post beetle future. This fund should supplement emergency funding already in place for the pine beetle. The focus of such funding must be able to respond to short and medium term concerns. It must also have a “future forward” orientation which is focused on community sustainability and viability across all regions of Alberta affected by the MPB.
- c) It is recommended the Government of Alberta continue to work with the GAER region, its local communities and all pine beetle affected communities

in the province, on a collaborative basis, to identify and support realistic means of achieving the sustainable, preferred community visions of the future.

3. Ensure communities have appropriate emergency protection.

The threat of forest fires to communities grows as the beetle leaves dying timber in its wake. It is recommended the Government of Alberta ensure the forested lands surrounding GAER communities are managed in such a way as to reduce the chances that fires in pine-beetle-infested wood will threaten communities. Besides prescribed burns to create a protection zone around communities, it is recommended that emergency response plans be reviewed and updated, as needed, to ensure appropriate measures (such as local evacuation plans) are in place to provide for the safety of citizens and their communities.

CONCLUSION

The Mountain Pine Beetle is going to transform Alberta's forest. Yet there is time to adapt. There is significant optimism within the leadership of GAER communities, tempered by realism, that a viable future can be designed and sustained in a post pine beetle world. This adaptation depends upon community input into the design, development and deployment of plans for a preferred future. It depends upon cooperation and collaboration between communities, the governments that serve them, individual citizens and the private sector.