

***Initial Planning Fund Program for  
MPB Impacted First Nations – Phase 1 Report by  
the Lower Nicola Indian Band***



(Natural Resources Canada 2006)

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**Prepared for: Community Futures Development Corporation  
of the Central Interior First Nations**

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## **1.0 INTRODUCTION**

The Traditional Nlaka'pamux Territory of which the Lower Nicola Indian Band (LNIB) belongs; covers a majority of the Cascades as well as portions of the Kamloops, Chilliwack and Okanagan Forest Districts. Over the past few years the allowable annual cut (AAC) has been raised in many districts to address growing impacts of mountain pine beetle (MPB). First Nations have expressed concern over elevated harvest levels and its impacts on culture, ecology and the economy. As these impacts ultimately have a bearing on our Aboriginal Title and Rights, First Nations are entitled to lead strategic planning objectives to protect our interests now and into the future.

In September 2005 the Leadership of the Union of BC Indian Chiefs along with the Carrier Sekani Tribal Council organized a forum to develop strategies to manage the catastrophic impacts of MPB. From this forum a MPB Action Plan was produced. These groups along with the First Nations Summit and the BC Assembly of First Nations have appointed a First Nations MPB Working Group (WG). The objective of the WG is to develop budgets for the provincial government and Leadership council to deliver priorities laid out in the Action Plan. In turn, the administration and delivery of the WG programs will be completed by Community Futures Development Corporation of Central Interior First Nations (CFDC of CIFN).

In April 2006, CFDC of CIFN put out a call to First Nations to provide feedback on the impacts of MPB and concerns regarding their traditional lands and community. The information will be used by the WG to negotiate funding levels to address the MPB impacts and to develop programs that meet the needs of First Nations. The following report provides an estimate of MPB impacts on the traditional territory and reserve lands of LNIB. The report also compiles the cultural, ecological, and economic concerns of LNIB in light of the MPB epidemic and identifies priorities moving forward in terms of knowledge gaps and future planning.

## **2.0 BACKGROUND – The Lower Nicola Indian Band**

The Lower Nicola Indian Band belongs to the Sewemx ("People of the Creeks") branch of the Nlaka'pamux Nation of the Interior Salish peoples of the British Columbia. The band has 10 reserves totalling greater than 17,500 acres located throughout the Nicola Valley. The LNIB population is nearly 1000 members. A majority of the on-reserve membership resides on Nicola Mameet IR#1.

Nicola Mameet IR #1 – 11,350 acres, located approximately 8km west of Merritt.  
Joeyaska IR#2 – 320 acres, located east of Merritt between hwy 5A and Coldwater Rd.  
Pipseul IR#3 – 220 acres, located North of Mameet Lake on hwy 97C.  
Zoht IR#4,5,14 – 937 acres located 9km northeast of Merritt on hwy 5A near Nicola Lake.  
Logans IR#6 – 45 acres located on Quilchena Creek.  
Hamilton IR#7 – 4400 acres located 8km upstream of Quilchena Creek.  
Speous IR #8 – 280 acres located 7km's off hwy 8 via Sunshine Valley Rd.  
Hihium IR #6 78 acres located on the west end of the Hihium Lake, shared with Kamloops, Bonaparte and Upper Nicola Band.

LNIB is responsible for operating a number of entities including a school, child development center, community health services, adult education center and fire department. The band is the sole proprietor of Shulus Cattle Company, Naik Development, and Shulus Enterprises. In partnership with the Nicola Tribal Association, LNIB owns and operates an office building in Merritt, Nicola Valley Indian Development Corp, Spayum Developments (Days Inn Hotel) and the Nicola Valley Institute of Technology.

### **3.0 RESULTS**

#### **3.1 Current and Projected Impacts on Traditional Territory and LNIB Reserve Lands.**

The Traditional Territory of LNIB covers a majority of the Cascades as well as portions of the Kamloops, Chilliwack and Okanagan Forest Districts. The territory extends to the Bonaparte plateau in the north to Pyramid Peak to the west into Washington State (USA) in the south and Okanagan Lake to the east. The LNIB reserve lands are in the center of the territory in the surrounding area of Merritt.

Appendix A. shows an overview map of MPB incidence in the Traditional Territory.  
Appendix B. shows an overview map of MPB incidence in LNIB Reserve Lands.  
Appendix C. shows an overview of map of predicted percentage of pine killed by 2011 for British Columbia.

Based on incidence data for 2005, approximately 30% of the Traditional Territory (excluding the US) is currently impacted by MPB. Impact of MPB on the Traditional Territory is estimated to double based on the predicted pine kill for 2011.

Based on incidence data for 2005, approximately 5% of the LNIB Reserve Lands are currently impacted by MPB. However, the overview map does not accurately reflect the impact of Western Pine beetle which is estimated to affect an additional 10% of reserve lands. Impact of MPB on LNIB reserve lands is estimated to double based on the predicted pine kill for 2011. In addition, the incidence of Western Pine beetle is also expected to double.

#### **3.2 Significance of the MPB epidemic on the use of the Traditional Lands.**

Information from Traditional Use Studies, public meetings and personal interviews was combined to summarize concerns of the LNIB community in regards to the significance of MPB on the use of the Traditional Lands.

Awareness, Understanding and Concerns: All of the membership that participated in various forums were aware of the MPB epidemic and understood the potential impacts to the land, including timber and habitat supply. A majority of the awareness and

understanding of the MPB epidemic came through the considerable media attention the issue has received. In addition, the Cascades Forest District and Nicola Similkameen Innovative Forestry Society have raised awareness and understanding with public meetings to First Nations communities throughout the valley. Through awareness and understanding, all of the membership that participated expressed concern over the impacts the MPB may have on the use of Traditional Lands today and into the future. Major concerns identified by the community included: the economy, water (supply/quality/habitat), food sources (medicine), environment (plants and wildlife). The community often pointed out First Nations inherent tie to the land and that disruption to the land and the traditional practices ultimately impacts social and spiritual ceremony.

### Specific Concerns:

#### Economy:

Of all of the concerns raised by the community the economic impacts of the MPB epidemic was one of the issue most frequently identified. Issues raised with concern to the economy included:

- Aboriginal Treaty Rights in British Columbia: First Nations right and title to decision making in areas of economic development related to MPB and forestry.
- Develop revenue sharing opportunity with respect to the timber removed from the Traditional Territory.
- Opportunity for First Nations in the forest sector with secure operating areas.
- Diversification of forest land base to include non-timber forest products.
- Priority on re-forestation for future timber supply.

#### Water:

Concern around the impact to water was one of the ecological issues frequently raised. The following concerns were raised in relation to the removal of forest canopy to salvage MPB infected forests:

- Accelerated snow melts, and run-off leading to water supply shortages.
- Water Quality concerns including sediment and alterations in water chemistry.
- Fish Habitat and concerns regarding Temperature Sensitivity.

#### Environment:

Concerns regarding the impact of the MPB epidemic to plants, wildlife and their habitat were commonly raised by the community.

- Concerns regarding the impact to ungulates, furbearers and Grouse and their habitat were raised in regards to the community food supply and materials. It was also pointed out that all parts of the animals were utilized and none were wasted.

- Impact to plants, in regards to food supply and medicine were also major concerns raised by many community members.

Related to many of the concerns; community members were interested in retention and re-forestation strategies that would mitigate fall downs in the economy through mid-term timber. In addition, ecosystem restoration and retention strategies aimed at protecting water supply and the environment were commonly raised.

### **3.3 Community Planning – Preparedness**

#### **3.3.1 Completed Planning**

##### Community Planning Session

A community planning session was completed in 2003. The goals of the community planning sessions are to review department policies and progress and to set objectives moving forward. The Natural Resource Department was established in 2002. In addition awareness to the potential impacts of MPB epidemic was limited. As a result, the department had only initiated strategies in terms of working with stakeholders and the community or providing information to fill knowledge gaps in strategy development (Community Planning Session 2003).

##### Emergency Preparedness Plan

An emergency preparedness plan for LNIB was completed in 1997 and is regularly updated. It was most recently updated in May 2006. The plan details operational procedures to be followed in the event of flood, fire, earthquake and severe weather conditions. The plan also outlines procedures specific to individual departments and buildings, including administration, fire department, public works, social and health services and education (Emergency Preparedness Plan 1997).

##### Physical Development Plan

A physical development plan was for LNIB was completed in 1997. The plan focussed on the long term objectives for the community in terms of housing and building needs, community services and infrastructure as well as land and resource planning (Civic Eng. 1997).

#### **3.3.2 Proposed Planning**

##### Comprehensive Community Plan

The LNIB Economic Development department is in the early stages of developing a comprehensive strategic planning process. Two staff members from the LNIB have been designated to design and develop a framework to implement this long term planning process. The comprehensive strategic planning framework is expected to be complete in October 2006. However, the long term planning process is expected to take at least two years to complete. Although the comprehensive strategic planning process

is being initiated by the Economic Development department; involvement will comprise of and require participation from all departments of the LNIB. With respect to the MPB, the Natural Resource Department will address the impacts of the MPB epidemic currently and into the future.

#### Strategic Beetle Management Plan

Through the Mountain Pine Beetle Initiative, LNIB are proposing to develop a 10 year Strategic Beetle Management Plan for the reserve lands. The plan will attempt to predict the spread of Mountain and Western Pine Beetle through the reserves. In addition the plan will utilize the latest information in implementing mitigation strategies to impede the expansion. It is expect that the management strategy will feed into the comprehensive community planning as well as update the physical development plan.

#### Fuel Management Plan

Through the Mountain Pine Beetle Initiative, LNIB are proposing to develop a Fuel Management Plan for the reserve lands. Based on the results of the Strategic Beetle Management Plan, a fire hazard and risk assessment will be completed with recommendations to mitigate high risk areas. The proposed plan is expected to feed into the Emergency Preparedness Plan.

### **3.4 LNIB Projects Related to MPB**

#### Ecological and Cultural Habitat Modelling

Through an Innovative Forest Practices Agreement (IFPA) the Nicola Similkameen Innovative Forestry Society (NSIFS) manages Forest Investment Account (FIA) funding to complete innovative projects that contribute to better forest management. One of the NSIFS initiatives has been to complete plant and wildlife habitat models and incorporate them into Sustainable Forest Management platform that utilizes forest development plans to predict impacts to current and future habitat supply at the stand and landscape level. In addition to ecological plant and wildlife models, the NSIFS have also been working on cultural habitat models for species of interest to First Nations. The habitat ratings for the cultural models also include criteria of interest to First Nations. LNIB have been working with the NSIFS on the ecological and cultural species models and are in the process of loading their cultural models into the Sustainable Forest Management platform. Facing the MPB epidemic the platform will provide leading edge technology to predict current and future habitat supply as well as implement management strategies ([www.nsifs.bc.ca](http://www.nsifs.bc.ca))

### Retention Mapping for Non-Timber Objectives for Merritt Management Unit

In light of the MPB epidemic the Ministry of Environment (MOE) commissioned a project to collate data to develop a forest retention framework to assist resource managers in forest-level planning. JS Thrower & Associates contracted the LNIB Natural Resource Department to provide ecological input into the planning framework. The project considered recommendations in the Biodiversity Guidebook (1995) as well as Provincial Red and Blue listed plant communities and wildlife habitat models to determine retention priorities for mapping and use in forest development planning (JS Thrower & Assoc 2006).

### Impacts of Pine Beetle Harvesting on Mule Deer Winter Range in the Merritt TSA

In the winter of 2005 the LNIB Natural Resource Department initiated project to monitor the impacts of MPB salvage on wintering Mule Deer. Over the winter of 2005 Weyerhaeuser Company Ltd. provided funding to do a preliminary evaluation of candidate areas for inclusion in a long term Mule Deer Study (Caswell 2006). In April 2006, Habitat Conservation Trust Fund (HCTF) approved funding along with Weyerhaeuser Company to continue work in the 06/07 fiscal.

### Type II Silviculture Strategy for the Merritt TSA

Type II Silviculture Strategy work is planned for the Merritt TSA in 2006/07. Retention Planning for Non-Timber Objectives is one of the phases of the proposed work. The LNIB Natural Resource Department will be working with JS Thrower & Associates on the ecological inputs. In addition, First Nations retention priorities for LNIB will also be completed for input into the Type II Strategy.

### Sustainable Forest Management Strategy for the Natural Disturbance Type 3 (NDT3) (Biodiversity Guidebook 1995)

With funding from the First Nations Forestry Program, the LNIB Natural Resource Department is in the progress of developing harvest and silviculture strategies that protect and enhance LNIB's natural resource interests. The strategies will focus on the NDT3 (which is composed of the Montane Spruce zone and Interior Douglas-fir (dk) variants (Lloyd *et al.* 1990)) where a majority of MPB salvage activities will occur.

## **3.5 Priorities for Additional Work**

The broad concerns identified of economics, water and the environment were consistent with all of the participating membership. As a result there is considerable difficulty and reluctance to make a single priority for additional work or planning. Therefore, a single priority is identified under each of the broad concerns:

**Economy** - Develop true revenue sharing opportunity with respect to all natural resource development on the Traditional Territory.

**Water** – Development retention strategies to protect hydrological function in terms of water supply, quality, fish and wildlife habitat. Work should also include the relationship between surface and ground water. While concerns were often raised around the impacts to water it is likely the least understood.

**Environment** – Development of best management practices (reforestation/retention) at the stand level with respect to strategic landscape level planning. Strategies should account for a structural diversity at the stand and landscape level incorporating knowledge around patch size, adjacency and distribution.

#### **4.0 CONCLUSIONS – Moving Forward**

The LNIB is a member of the NSIFS and is represented at the NSIFS technical committee. The NSIFS and technical committee is composed of Ministry, Industry and First Nations representatives which work collaboratively on forest sector projects including strategy work around the MPB. LNIB also work with a number of other stake holders and agencies to develop projects that help promote the knowledge base around forest management in light of catastrophic impacts such as MPB. LNIB is also supportive of sharing the results and receiving feed back on its planning sessions and projects. LNIB have participated in the development of BC First Nations Mountain Pine Beetle Action Plan and look forward to continue working with other First Nations in managing the MPB.

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**APPENDIX A. Overview Map of Current Infestation (2005) of MPB in Traditional Territory.**

**APPENDIX B. Overview Map of Current Infestation (2005) of MPB in LNIB Reserve Lands.**

**APPENDIX C. Map of (2011) Projected MPB Infestation in BC.**