

Prince George  
LRMP Area



**Prince George Land and Resource  
Management Plan**  
**DRAFT IMPLEMENTATION UPDATE**  
**November 2003**

**Resource  
Values  
examined in  
this update:**

- Water/  
Fisheries
- Biodiversity
- Caribou
- Grizzly Bear
- Moose
- Elk
- Deer
- Waterfowl
- Trumpeter  
Swan
- Alpine &  
Sub-alpine
- Timber
- Agriculture &  
Range
- Crown Land  
Planning
- Sub-surface  
Resources
- Recreation &  
Tourism
- Access
- Economic  
Development
- Culture &  
Heritage

*Synopsis*

This document has been prepared in order to provide up to date information on land and resource based projects that play a role in the implementation of the Prince George Land and Resource Management Plan (LRMP). It provides brief descriptions of a variety of projects that have been initiated by government, industry and local organizations. An explanation of Land and Resource Management Planning is provided here, followed by a summary of the projects that are helping to implement the LRMP. Project updates are organized according to resource values, as listed in the side bar of this page. This update is not intended to be an all-inclusive implementation report.

*What is the Prince George LRMP?*

The Prince George Land and Resource Management Plan (LRMP), was approved by the BC Provincial Government on January 25, 1999 as an official long-term plan for land use and resource development on Crown land within the Prince George Forest District. This plan is based on the principles of integrated resource management and sustainability. It includes guidelines for the management of resources such as: energy, forestry, recreation, agriculture, range, minerals, fish, wildlife, transportation, heritage, culture and water. The approved plan provides direction for land and resource planning, management and development for a period of ten years.

*Prince George LRMP Monitoring Committee  
Field Trip 2002*





## Water / Fisheries

### Chilako Watershed Council

- Received funding from the Investment Agriculture Foundation of BC in 2001.
- Funds were spent by March 2003 on 10 projects instigated by small landowners.
- The projects focused on management changes, such as bank stabilization and fencing for cattle, rather than restoration.
- In 2001 a hydrology study was done for portions of the Chilako Watershed by Marten Geertsema and Dan Hogen of Ministry of Forests (MOF).



### Fraser – Nechako Riparian Program

- Started in 2002 and funding is to last until March 2004.
- The geographic extent of this program is from Valemount to Fort Fraser along Highway 16 and south of Prince George to Hixon.
- Initiates management changes similar to the work done by the Chilako Watershed Council.
- The program is made up of 5 producer (farmer) organizations, along with DFO, Ducks Unlimited, Ministry of Agriculture, Food and Fish, and Canfor.
- BC Conservation Foundation administers funds.

### Revegetation of Riparian Management Areas (RMA)

- All RMA are initially revegetated with grasses and legumes together with erosion control mechanisms such as silt fencing, hay bales, check dams, sumps and grass mat/hay spreading. Currently, in all RMA deactivation/restoration works, all efforts are made to re-incorporate rootwads of deciduous species found on site.
- Creeks/streams that have received treatment: Wansa, Spruce, Bowron, Kenneth, Littlefield, Narrow Lake, George, Everett, various sites on TFL 30, Torpy, Pelican, Altezega, Stone, and Blackwater.

### Riparian Function and Management of Small Streams

- This report was released by MOF in spring 2003 to help improve our understanding of the roles, processes, and attributes of small streams in a watershed context, aid in the improvement of riparian and stream management, and adaptively test alternative riparian management strategies.



### Anzac River Reconnaissance Fish and Fish Habitat Inventory (FFHI)

- Completed in 2001. Provides baseline information on fish distributions and habitats.

### Fish Habitat Assessment

- Fish distribution and stream classification modeling for the Anzac River and Government Creek watersheds was done in 2002. Used a sample-based fish distribution and habitat information to predict fish distribution and stream classification.



### **Reconnaissance Fish and Fish Habitat Inventory**

- Inventory done on Littlefield Creek and parts of Punchaw Creek and the Blackwater River drainage in 2002. Provides baseline information on fish distributions and habitats.

### **Fish Distributions for the Missinka River Watershed**

- Ground truthing of predicted fish distributions for the Missinka River watershed was done in 2001.

### **Fish and Fish Habitat Inventory (FFHI) Reports website**

- This website makes FFHI report queries available on the internet:  
<http://srmwww.gov.bc.ca/fish/ric/index-omineca-peace.html>

### **Provincial Fisheries Data Warehouse**

- This warehouse (<http://srmapps.gov.bc.ca/apps/fidq/>) has been developed to provide a variety of fish data for the Prince George Forest District (PGFD). Most PGFD fish inventory databases have now been loaded into the data warehouse, making comprehensive data queries available over the internet.

### **Temperature Sensitive Streams Monitoring**

- Continuous temperature monitoring is being done in several streams in the PGFD to identify temperature sensitive streams.

### **Omineca Fish Species At Risk Data Consolidation and Sensitivity Mapping**

- The intent of this project is to consolidate and analyse spatially explicit data for species at risk within the Omineca region, resulting in a sensitivity classification for a particular species.
- Depending on data distribution and quality, watersheds are assigned a Low/Medium/High or Data Insufficient rating according to a regionally developed decision matrix .

### **Nechako Recovery Program**

- This recovery program for white sturgeon is in progress.

### **Tabor Lake Clean-up Society**

- This community group is actively working with the Regional District (RD) to manage the lake.
- A weir was built in the 1990s, which is maintained and used to control the levels of the water. The group also removes weeds from the lake.
- A report is being prepared for the RD about work done this year.

## **Biodiversity (Timber)**

### **Landscape Level Objectives for Old Growth and Patch Size**

- Landscape level objectives for biodiversity are being developed using Natural Disturbance Units (NDU's) research conducted by the Ministry of Forests (Craig DeLong).



- Through a partnership of Prince George Timber Supply Area timber licensees and MSRM, legal objectives for old growth and patch size distribution are being prepared and are to be established by the Regional Director of MSRM in 2004.
- Biodiversity objectives will be addressed in all future operational planning for forestry, as per the *Forest Practices Code Act* and/or the *Forest and Range Practices Act*.

#### **Old Growth Management Areas (OGMAs)**

- OGMAs have been established in the Dome and Slim Landscape Unit (October 31, 2002) and in the Humbug Landscape Unit (August 31, 2003).
- OGMAs are established for old growth attributes (i.e. no harvesting unless certain conditions require it), but are subject to review and change over time.

## **Caribou**

#### **Ungulate Winter Range**

- Ungulate Winter Range for Mountain Caribou in the PGFD has been signed off by the Deputy Minister of Water Land and Air Protection (WLAP).
- The UWR designation includes mapping of the caribou habitat by high value, medium value and connecting corridor, plus habitat management guidelines.

#### **Effects of Partial Cutting and Edge Effects (Research Projects)**

- Effects of partial cutting on arboreal lichens in the Engelmann Spruce Sub-alpine Fir (ESSF) zone (Susan Stevenson and Darwyn Coxson).
- Effects of partial cutting on arboreal lichens in the Interior Cedar Hemlock (ICH) zone (Susan Stevenson, Darwyn Coxson, and Trevor Goward).
- Effects of partial cutting on wildlife tree and coarse woody debris habitat in the ESSF and ICH zones (Susan Stevenson and Mike Jull).
- Edge effects on the growth of *Lobaria pulmonaria* in the ICH zone (Susan Stevenson and Darwyn Coxson).

#### **Effects of Motorized Recreation**

- WLAP has begun reporting on impacts to caribou from motorized recreation and access. Draft due November 15, 2003. This report will form the basis for a broader project to "zone" areas of constrained use in caribou habitat.

## **Grizzly Bear**

#### **Primary Critical Habitat Mapping**

- MOF / WLAP is mapping avalanche chutes, a primary critical habitat for grizzly, within the Prince George LRMP area.

#### **Parsnip Grizzly Bear Project**

- Initiated in 1997 to address increasing concerns about the grizzly bear population in the Central Interior of BC, the project addresses habitat alteration, resource extraction, bear-human conflicts and human access. It is a gathering of information on population characteristics and habitat requirements of grizzly bear.



- The website provides current updates including recent publications : <http://web.unbc.ca/parsnip-grizzly/index.html>

## Moose

- No specific moose projects have been initiated in the Prince George LRMP area.

## Elk

- No elk management is anticipated for the near future in the Prince George LRMP area.

## Deer

### Ungulate Winter Range

- Ungulate Winter Range has been identified and is to be formally established by WLAP in the near future.

## Waterfowl

### Habitat Inventories

- The Lheidli T'enneh has done work to identify high quality waterfowl habitat on the Hominka Marsh.

## Trumpeter Swan

### Trumpeter Swan Inventories

- Crooked River has been inventoried for trumpeter swan habitat.

## Alpine & Sub-alpine

### Silviculture Research

- Projects on silviculture systems (partial cutting) in conjunction with caribou research (Mike Jull and Andrea Eastman).
- Projects on natural regeneration and planted stock (Andrea Eastman and Cleo Lajzerowicz).
- Working to link all high elevation silvicultural systems (i.e. ESSF) across B.C. which have regeneration as a component.
- Spacing trial project on Subalpine fir growth in the Wansa Creek area.

### Current Practices (input from Leisbet Beaudry and Anna Monetta)

- Planting more Subalpine fir in higher elevations during the summer (July/August), rather than planting earlier in the spring.



- Subalpine fir is a preferred species as there is a higher naturally occurring component of Subalpine fir in northern ESSF (80-90%).
- The use of partial cutting is a good alternative operationally although it is likely to be more costly and little administrative support/incentive exists, unless in Caribou high or visually sensitive areas.

## Timber

### Beetle Management

Mountain Pine Beetle continues to have a large impact on pine stands of the LRMP area, especially in the south-west. There is much work being done, some of which is listed below:

- "Challenges and Solutions" symposium hosted by Natural Resources Canada Kelowna (Oct. 30-31, 2003)
- Mountain pine beetle symposium hosted by Government of British Columbia Quesnel (fall 2003 - exact date to be determined)
- Mountain Pine Beetle Action Plan (MOF - November 2001)
- West Central BC Mountain Pine Beetle Strategic Recommendations Business Report – R&S ROGERS Consulting (September 2001).
- Animated Map Showing Outbreak History 1959-2002 (Canadian Forest Service)
- Emergency Bark Beetle Management Area Maps (MOF - 2001, 2002, 2003)
- Provincial Aerial Overview Surveys (Canadian Forest Service & MOF)
- Re-designation of Emergency Management Units (MOF - updated August 1, 2003)
- Bark beetle regulation – Forest Practices Code (MOF – 2001/2002)
- Bark beetle management guidebook (MOF – 1995)
- Forest health surveys guidebook (MOF – 1995)

The Prince George TSA has a Bark Beetle Strategic Plan (2002-2003) in place that will be revised using the updated pest aerial survey data. For further information see:

[http://www.for.gov.bc.ca/hfp/bark\\_beetles/index.htm](http://www.for.gov.bc.ca/hfp/bark_beetles/index.htm)

### Management Approaches for Rehabilitation of Degraded Wet Sites in BC Northern Interior

- This project will help the management of excess water through prescription drainage practices, which is key for restoration of natural drainage patterns and to sustain site productivity.
- With effective drainage, these sites can be re-established to their main tree cover sooner, and overall productivity of the forests increased.
- New best management practices guidelines will be produced in support of soil rehabilitation activities for valley-bottom receiving areas driven by regulatory requirements or under a sustainable forestry regime.

### Defined Forest Area Management (DFAM)

- DFAM is an initiative proposed by government where replaceable license holders and BC Timber Sales are required to submit a Timber Supply Review (TSR) document as required in each Timber Supply Area (TSA) and to annually submit a joint Forest Health Strategy in each TSA.
- The PG DFAM group is currently working on forest health issues concerning bark beetle detection within the areas known as suppression beetle management units.



- Currently, most of the aerial detection has been completed and the group is starting to work on developing a strategic plan. By mid-November 2003 a plan for further beetle control activities will be developed for review by the PG TSA DFAM Committee.
- The DFAM group has used Forest Investment Account funds to conduct numerous vegetation inventories to improve information available to forest managers.

#### **Alternative Harvesting in ICH Zone**

- TRC Cedar has been innovative in dealing with issues related to old growth cedar hemlock forests in the ICH zone of the PG LRMP area. Wildlife Tree Retention on many of their cutblocks exceeds 20% of the block area.

#### **Pest Management**

- The majority of Licensees are under a Pest Management Plan (PMP) using Integrated Pest Management. This trend will be increasing and in the forefront, especially when the new Integrated Pest Management Act and Regulations (IPM Act) is passed. This also includes PMPs for noxious weed control. IPM encourages proactive weed control and the use of all the tools available (manual, mechanical, cultural and biological).
- Chemical Use:
  - No insect targets in PGFD in 2002 (no use of insecticides), but there is potential for this to change as the beetle epidemic spreads.
  - In 2002, 5916.02 ha of forest in the PGFD received herbicide applications. This has remained relatively constant over recent years and is likely to remain this way.

#### **Growth and Yield**

- A growth and yield workshop was held January 2003 to develop a strategic plan for the PG TSA. This workshop resulted in a recommendation for the development of a tactical plan, which is to be completed this winter.
- Plot measurement for growth and yield modeling has not occurred. It will begin once the tactical plan determines the plots to be sampled.

## **Agriculture & Range**

#### **Soil Mapping**

- Arability soil mapping for priority Resource Management Zones in the PG LRMP Planning Area are complete. These projects have identified Crown land capable for agricultural use.

#### **Grazing Enhancement Fund**

- A number of projects (water developments, bridges, cattle guards and fences) were funded under the Grazing Enhancement Fund, however the fund was discontinued in early 2002.

#### **Grazing Agreements and Animal Unit Months**

- Prince George Forest District has seen a gradual reduction in the number (approximately 5-10%) of grazing agreements and Animal Unit Months (AUMs) over the last several years.



## Crown Land Planning

- No updates have been completed recently and none are planned for the near future because of lack of Provincial Government funding and other priorities for resource agencies.

## Sub-surface Resources

### No Staking Reserves

- A map of No Staking Reserves has been completed for the province.
- Removal of any No Staking Reserve requires review and recommendation from an appropriate regional advisory committee, as per Ministry of Energy and Mines (MEM) policy; however, a committee is no longer in place.
- MEM regional presence has decreased from 13 to 3 personnel in the last 3 years. Current regional responsibilities are primarily mine inspections.

## Recreation & Tourism

### Forest Recreation Sites and Trails

- There has been a downward trend in the number of forest recreation sites since the LRMP was approved.
- Since the development of the LRMP the number of recreation sites in the planning area have declined from 85 to 57 sites. The remaining 57 sites are all user maintained.
- The Prince George MOF office no longer has full time recreation staff and budgets have decreased considerably.
- The number of trails has increased a bit since the LRMP was underway. Recent trail development has been done by community groups with assistance from government agencies e.g. Cranbrook Greenway Trail (Greenway Trail Society) and the Red Mountain Trail (Penny Community Association). The Prince George Snowmobile Club has also grown considerably in the last 5 years and now manages a number of trails and cabins under agreement with the Ministry of Forests.

### McGregor-Torpy Recreation Agreement

- The McGregor Torpy Agreement is still in place and the groups were meeting in 2002.
- The group was working on an agreement regarding a Snowmobile Club cabin proposal in an alpine area near the Torpy River. The cabin site had to be re-located to a valley bottom location due to concerns about impacts to Mountain Caribou.

### Crown Land Recreation Conflict Documentation for the Ft. St. James, Vanderhoof, Prince George, and Robson Valley LRMP Areas (March 2002)

- Initiated by the Ministry of Sustainable Resource Management to address conflicts between motorized and non-motorized recreation users in these areas.
- It documents specific conflict issues between user groups, as well as some of the major provincial on-going management initiatives and is intended to establish a baseline of the current state of knowledge and practice for recreation conflicts and to serve as a guide for the future planning and management of public and commercial recreation in these areas.





### **A Recommended Legal Land Designation for the Upper Portion of the Red Mountain Watershed to Protect Grizzly Bear, Mountain Caribou and the Alpine Ecosystem (2003)**

- This WLAP initiated report has explored appropriate land designations to ensure the maintenance of the ecological values of this land.
- Controversy surrounds motorized recreation use of the Red Mountain Watershed and this report has addressed these issues.

### **BC Parks Purpose Statements**

- Approved Park Purpose Statements have been completed for: Arctic-Pacific; Bobtail; Carp; Close to the Edge; Crooked River; Erg; Evanoff; Fort George Canyon; Purden Lake; Slim Creek; and Whiskers Point.

### **Recreational Opportunities for Seniors and People with Special Needs**

- There has been no work done by the MOF related to the needs of Seniors and people with special needs and nothing is planned for the near future.

### **Scenic Areas**

- Currently, there are 71 known scenic areas in the Prince George LRMP area.
- Of the 24 areas specifically listed in the LRMP for their identification as scenic areas, 22 are known scenic areas while the remaining two (Otter Lake and Parsnip River) have been mapped and digitized at a broad scale only but have not been made officially known.
- As Otter Lake is now within a new protected area, it is not necessary to make it a formal known scenic area, unless the LRMP thinks otherwise.
- Since 2000, the only VQOs established in the district have been for the section of Highway 16 East where the visual landscape inventory was updated between Hungary Creek and the district boundary to the East.

### **Visual Landscape Inventories (VLI)**

- Of the 17 specific areas listed in the LRMP for detailed VLIs, 4 have been completed entirely (Lower Blackwater River; Green Mountain; Highway 16 East; Highway 97 North); 7 have been partially completed (Bednesti Lake; Davie Lake; Kerry Lake; McLeod Lake; Nechako River; Summit Lake; Tacheeda Lakes) and the remaining 6 areas are still broad inventories only (Highway 16 West; Highway 97 South; Norman Lake; Carp Lake; Dahl Lake; Firth Lake).
- Highway 97 North was completed in 2000 but has not been made known yet.
- The Nechako River was partially updated this summer from Foothills bridge to Wilkins Park and is in the process of being mapped.
- There is no budget for MOF to complete any new VLIs or update older ones and unless FIA money becomes available, MOF does not expect to improve VLI data in the next year or two.

### **MSRM Tourism Resource Planning**

- MSRM developed recreation and tourism resource inventories that identify areas of high potential for recreation/tourism activities in the Omineca Region in 2002/2003.
- Reference binders of recreation and tourism planning materials have been put together in 2002/2003 for both the Omineca and Peace Regions to help guide recreation and tourism development/management.



### Recreation and Tourism User Group Maps

- Canoeing + Kayaking BC's Central Interior – a guidebook (2002)
- Backroad Mapbook – Volume VI Central BC (2001)
- Sons of Norway Ski Club Prince George and District Cross-Country Ski Trails (2002)
- The Prince George and District Trail Guide – 9<sup>th</sup> Edition (2002)

### Acceptable Uses Matrix

- BC Parks is identifying acceptable uses for provincial parks through the development of an 'acceptable uses matrix' for the region.

## Access

### Access Needs Mapping/Management

- An access needs map has been developed by MOF.
- Over the next two years MOF plans to transfer responsibility for forest service roads with industrial use to the forest industry. In addition, it plans to discontinue maintaining forest service roads to the public use standard (those that access communities and reserves) and transfer the responsibility to either the Ministry of Transportation through a road rationalization process or to road user groups.
- The remainder, approximately 10,000 kilometres (B.C. total), will be maintained to the new wilderness standard. Because the wilderness standard is designed to protect environmental values, any roads and bridges considered unsafe to vehicular traffic will be temporarily or permanently closed.

## Economic Development (Timber & Tourism)

### BC Timber Sales (BCTS)

- Officially replaced the Small Business Forest Enterprise Program on April 1st 2003.
- BCTS has a commercial focus.
- The majority of timber sales will now go to the highest bidder.
- Timber sales will be larger in size than in the past.
- The Prince George Business Area encompasses the Prince George Forest District, Mackenzie Forest District, and the Robson TSA.
- Bid proposal timber sales directed to the value added sector will no longer be advertised.
- Currently, provides access to 13% of the provincial Annual Allowable Cut (AAC).
- To support the new market-based pricing system, BCTS will increase the amount of timber it auctions to 20% of the provincial AAC.
- The Prince George Business Area of the BCTS plans to sell 1,680,623m<sup>3</sup>: 28,320 m<sup>3</sup> in Robson Valley, 904,241 m<sup>3</sup> in Prince George, and 748,462 m<sup>3</sup> in Mackenzie.
- Through the *Forestry Revitalization Act (Bill 28)* BCTS receives a portion of volume from major licensees to bring the cut up to approximately 20% of the AAC, provincially. Some volume will go to Community Forests, First Nations, and expanding the Woodlot Program.



### Woodlots and Small Scale Salvage

- The Woodlot program is predicted to expand using the volume reallocation resulting from the *Forestry Revitalization Act (Bill 28)*.
- Community Forest initiatives and tenures for First Nations are in progress.
- Small Scale Salvage harvests about 30,000 m<sup>3</sup> per year in the PG LRMP area.

### Value-added Companies

- More of the AAC will be allocated to the B.C. Timber Sales program, First Nations and community forests and woodlots, creating new forest-sector opportunities. In addition, the timber processing requirements imposed on major licensees will be removed, providing value-added companies with much greater access to wood fiber. Together, these changes will result in a much greater percentage of the province's timber being sold through open market.
- Government will continue to support development and marketing of new value-added programs through Forest Investment Account (FIA) activities. For next year, \$7 million has been allocated to the FIA product development and secondary manufacturing program.



### MSRM Tourism Resource Planning

- See Recreation and Tourism section.

## Culture & Heritage

### Anzac Trail

- Portions of the Anzac Trail have been mapped using GPS and the trail is considered by the licensee in the area during forest development planning.

### Collins Telegraph trail

- The Collins Telegraph trail has been mapped and the trail is managed informally by the Telegraph Trail Historic Society in Quesnel



### Inventories

- Forest Licensees must do Archaeological Impact Assessments in areas identified as having high archaeological potential (i.e. land near streams and lakes).
- Numerous new sites have been identified including lithic scatter (tool making sites), camp sites, trails and culturally modified trees.

### Alexander MacKenzie Heritage Trail

- The trail within Prince George Forest District requires work (there are a few sections of trail impacted by blowdown). There are plans to have maintenance done next spring.



## Search the web for information on other projects that link to the Prince George LRMP

...a number of organizations who support projects related to LRMP implementation have project reports organized on their websites for public viewing.

### **Forest Investment Account (FIA):**

#### **Land-Base Investment Program Project Reports** <http://nrin.forrex.org/servlet/fia>

This repository currently contains reports generated from Restoration and Rehabilitation activities and Strategic Resource Planning activities.

- An example of a report published by FIA is: *Strategy for Sustainable Management of Water Quantity and Quality*, June 2003, Pierre Beaudry

### **Forestry Innovation Investment (FII)**

#### **FII has three areas of interest:**

- applied research (some of these projects can be linked to our biodiversity and wildlife strategies),
- product development and international marketing activities (and these projects can be linked to our economic development strategies)

The following site is a link to the funded applied research projects: [www.forestry-innovation.bc.ca/forestres/forestres\\_fundedprojects.htm](http://www.forestry-innovation.bc.ca/forestres/forestres_fundedprojects.htm)

- An example of one such project is as follows: FII Project Number: R04-004  
Project Name: Statistical verification of red attack stage mountain pine beetle detection with high resolution satellite imagery (Canadian Forest Products Ltd.)

### **McGregor Model Forest Association (MMFA) Projects:**

The McGregor Model Forest Association is a partnership driven non-profit organization, which works with the Canadian Model Forest Network to develop sustainable forest management understandings, methods and tools. MMFA expanded the boundaries of the Model Forest from Tree Farm License 30 to the PG TSA.

MMFA has done several projects that link to our LRMP strategies. Their published project reports can be found through their web-site: [www.mcgregor.bc.ca](http://www.mcgregor.bc.ca).

- For example, one project reported on is *Species at Risk, Species Indicators and SFM in the Prince George TSA - March 2003*.

### **Northern Land Use Institute (NLUI) Projects:**

The purpose of the Northern Land Use Institute is to support research focused on land use issues pertinent to Northern BC. To search for publications view their website: <http://trngweb.unbc.ca/nlui/> (select "Research Grants to Date" in the drop down box).

- An example of one such project: Kathy Lewis and Sarah Parsons, 2001 - *Importance of Stand Structure, Tree Condition and Decay Fungi in Creating Cavities for Bat Maternal Roosting Habitat in North-Central British Columbia*