



REGIONAL DISTRICT
OF BULKLEY & NECHAKO

Regional District of Bulkley Nechako Electoral Area B Industrial Land Use Inventory Study

Regional District of Bulkley-Nechako PLANNING DEPARTMENT

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“A WORLD OF OPPORTUNITIES
WITHIN OUR REGION”

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1 Introduction

1.1 Purpose

The potential impact of the mountain pine beetle on the traditional forestry based economy creates an increased need for a diversified industrial base in the region. An important component of any strategy to facilitate industrial growth and / or diversification is ensuring that a land base is available to accommodate the needs of new industry. Therefore, this study is being undertaken in preparation for the review of the Burns Lake Rural Official Community Plan scheduled to begin in 2008.

The primary intent of this study is to:

- identify the existing industrial land base in the study area;
- identify the present and future industrial land use needs in the study area
- evaluate the adequacy of the existing and potential industrial land base to meet future demand; and to,
- provide a detailed parcel based inventory of lands that are, or may be, potentially suitable for future industrial development.

It is anticipated that this study will:

- play a key role in guiding the manner in which the new Burns Lake Rural Official Community Plan approaches industrial development within the area;
- serve as a baseline for future comparisons of industrial land statistics over time;
- provide the basis for making informed land use choices around the supply and use of industrial lands by the Regional District of Bulkley Nechako, the Agricultural Land Commission, and member municipalities; and
- be used as an economic development tool for industrial development.

1.2 Report Structure

This report is organized into nine sections.

- Sections 1 and 2 present the purpose, methodology, and limitations of the study.
- Section 3 discusses the existing regulatory and planning structure that exists regarding industrial land development in the area.
- Section 4 presents data on existing developed and vacant industrial lands.
- Section 5 provides an overview of the factors that may influence future industrial land use needs.
- Section 6 provides information regarding the distribution of the key services and infrastructure in the area.
- Section 7 provides discussion and an estimate of future industrial land needs.
- Section 8 contains a detailed parcel based inventory and description of lands that are, or may be, potentially suitable for future industrial development.
- Sections 9 includes a summary of the study findings.

2 Methodology

2.1 Geographic Study Area

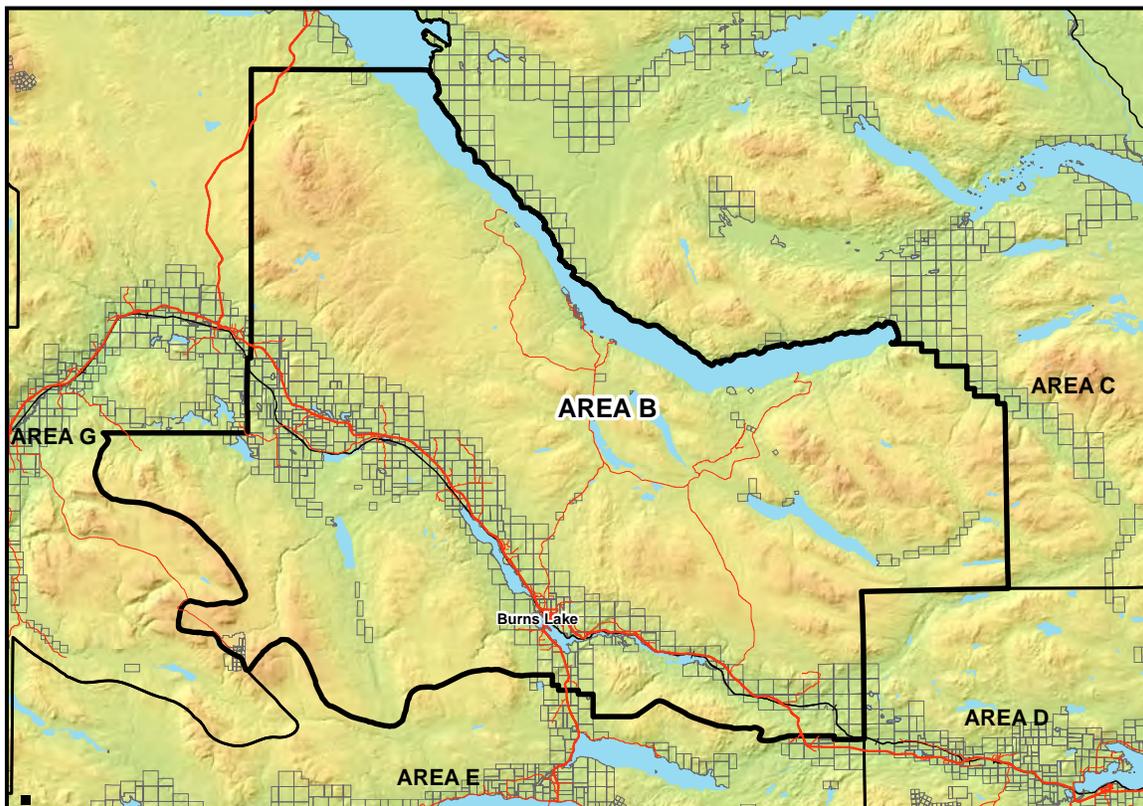
The study area includes all of Electoral Area B of the Regional District of Bulkley Nechako. This includes the area within the Village of Burns Lake. Electoral Area B is shown in Figure 2.1.

According to Statistics Canada Electoral Area B had a population of 2,277 persons in 2001, and 2154 persons in 2006. The total land area is 3,628 square kilometers, with a density of 0.6 persons per square kilometer. The Village of Burns Lake and Electoral Area "B" have a combined population of 4,261 residents and a geographic area of 3,635 square kilometer (2006 Census).

The average house price in Area B is \$117,091 compared to the Provincial average of \$230,645, and the average income level is \$42,227 (2001 Census).

In 2001, 25% of the workforce identified their employment as being in the manufacturing and construction industries, and 23% identified their employment as being in a resource extraction industry. The industrial sector plays a critically important role in the economy of the study area.

Figure 2.1
Map of Electoral Area B



2.2 Definitions

The following are the key definitions used in this report:

Developed Industrial Land means land that is wholly or partially utilized for industrial uses. A portion of a developed property that has significant remaining capacity for further industrial development may be considered Vacant Industrial Land.

Existing Industrial Land means land designated by a local government official community plan or zoning bylaw, or land currently being used, for industrial use.

Industrial Use means any of the uses permitted in the M1 Light Industrial Zone, the M2 Heavy Industrial Zone, or the M3 Agricultural Industrial Zone.

Potential Industrial Land means land that is not designated by an official community plan or local government zoning bylaw for Industrial Use, but may have some potential for an appropriate Industrial Use from an infrastructure and land use planning perspective.

Vacant Industrial Land means land designated by a local government official community plan or zoning bylaw for Industrial Use but not yet developed for Industrial Use. This includes properties that are designated industrial, but are currently zoned and/or developed for uses not permitted in the industrial designation (e.g. residential, agriculture).

2.3 Methodology

This study was prepared using the following steps and process:

Step 1) Review of Literature

A literature review of relevant reports, studies, strategies and other documentation regarding industrial development, economic development, and the regional economy was undertaken. A review of industrial studies from other jurisdictions was also undertaken to identify options for study design and content.

Step 2) Zoning and Land Use Designation GIS data

The Official Community Plan (OCP) land use designations, zoning, and other Geographic Information Systems (GIS) based data were examined for lands within the region and a series of maps were produced. An analysis of the GIS parcel data was undertaken to estimate the amount of Existing Industrial Land, Developed Industrial Land, and Vacant Industrial Land. Site visits were undertaken where the land use status of a property was uncertain.

All lands zoned for Industrial Use and all known lands without industrial zoning that contain an Industrial Use were identified as Existing Industrial Lands. Existing Industrial Lands were then reviewed to identify which parcels were developed and which were vacant. This review was based on Regional District Staff knowledge of each parcel and

was confirmed through a site visit where necessary. An analysis of the Market Readiness of each Vacant Industrial Lands was then undertaken based on site visits.

Step 3) Identification of Industrial Trends and Future Development

An identification of the general economic and industrial trends occurring in the region was undertaken through a literature review and consultation with local stakeholders and experts. This review was undertaken to provide a basis for estimating the areas of future industrial growth in the area, and the associated industrial lands needs.

Step 4) Identification of Infrastructure Distribution Expansion Options

Research was undertaken to determine the location of various infrastructure located within the study area. This includes power, rail access, telecommunications, and roads. The costs and process to expand and / or install various types of infrastructure and utilities was also investigated.

Research for this section was conducted through interviews with a variety of industry representatives which included the following public and private organizations:

- BC Hydro
- CN Rail
- Pacific Natural Gas
- Telus
- Navigata Communications
- Ministry of Labour and Citizen's Services (Network BC)
- Lakes Communications
- Omineca Cable

Step 5) Identification of Future Land Use Needs

An identification of the general amount of future industrial lands needed in the region was undertaken through a literature review and extensive consultation with local stakeholders, and industry experts. This review focused on confirming the industry types considered likely to locate in the area and the industry types being targeted by local economic development initiatives. Once the industry types were identified, research was undertaken to identify the service and location needs for the industry type.

Step 6) Creation of a Detailed Parcel Based Inventory

The maps created under Step 1 were reviewed by Regional District Planning Staff, in consideration of the information identified in Steps 3 and 4, to identify areas and / or parcels of land that may be suitable for future Industrial Use. The potential impact of the Industrial Use of the lands was then considered by Regional District Planning Staff. Parcels whose Industrial Use would have a clearly unacceptable community impact were identified and the remaining lands were identified as Potential Industrial Lands.

Each parcel identified as Vacant Industrial Land or Potential Industrial Land was added to the Industrial Lands Inventory and evaluated for services available, location attributes, challenges, and opportunities.

Step 7) Review of Research Results

This study included a thorough consultative process regarding the study purpose, existing industrial land supply, future industrial land needs, and the review of the inventory at the parcel level. The review process was comprehensive and included consultation with the Lakes Economic Development Association (LEDA) and its discussion groups and the Village of Burns Lake. A special thanks is owing to the critical advice and input provided by the Lakes Economic Development Association and its various discussion groups.

2.4 Limitations

The scope of the work undertaken in this study includes the compilation and identification of existing information from reports and studies and from local community and expert knowledge. The study did not include primary research beyond consultation with stakeholders and experts. In particular the estimated land needs identified in Step 4 are intended to be general in nature, and are not based on any scientific or statistical analysis.

Information on all potential development constraints was not readily available. There are various factors that can affect the development capacity of industrial lands. These factors include:

- Environmental constraints
 - Stream and water body setbacks
 - Environmentally sensitive areas
 - Contaminated sites
- Natural hazard constraints
 - Steep slopes
 - Areas prone to flooding
 - Loss of developable area due to the requirement to provide mitigation measures for flooding and other natural hazards
- The rezoning of designated industrial land for other uses, such as housing, farming, etc.
- Inclusion of non-industrial uses as permitted uses in industrial zones (e.g. large format retail and free standing offices) which reduces the supply of land for industrial uses

The evaluation of potential land use impacts undertaken in Step 5 was a highly subjective process and did not include a complete review with all relevant information.

In particular it is noted that this review did not include consultation with the general public. Lands identified as Potential Industrial Lands may be found, upon further review, to be unsuitable for a particular, or any, industrial use. The necessary public input is incorporated into the rezoning process for any Potential Industrial Lands. The public will also have an opportunity to provide input at during the Area B OCP review process.

3 Land Use Planning and Industrial Development

3.1 RDBN Industrial Land Use Planning

Burns Lake Rural Official Community Plan

Section 2.5 of the “Burns Lake Rural Official Community Plan Bylaw No. 637, 1990” contains the following policies regarding Industrial Development.

2.5 *It is the policy of the Regional District to apply the following policies to the Industrial (I) designation shown on the map in Schedule “B” of Bylaw No. 637:*

2.5.1 *to encourage significant new industrial uses to establish within the areas designated for industrial purposes in the Plan area or within the Village of Burns Lake;*

2.5.2 *to consider the issuance of temporary industrial use permits throughout the plan area for such uses as a portable sawmill, gravel crushing / batch plant or agricultural processing facility where;*

- a) *the use is clearly temporary in nature;*
- b) *there is a demonstrated need;*
- c) *the location is suitable;*
- d) *the environment would not seriously be effected; and*
- e) *generated traffic would not cause serious problems*

2.5.3 *to consider a limited amount of new industrial uses where:*

- a) *there is demonstrated need;*
- b) *the location is suitable;*
- c) *the environment would not seriously be affected;*
- d) *neighbouring uses would not seriously be affected; and*
- e) *generated traffic would not cause serious problems.*

2.5.4 *To allow appropriately sized parcels and industrial uses.*

The lands designated Industrial in Schedule B of the Burns Lake Rural OCP are also zoned to allow industrial use. These existing industrial lands are identified and discussed in detail in Section 4 of this study. The OCP states the following regarding the supply of industrial lands.

With these rural industrial sites and a 28 hectare industrial park within the Village of Burns Lake, it would appear that there is a sufficient supply of industrial land within the Plan area assuming there is no substantial relocation of industry in the next 5 – 10 years.

Since the creation of the Burns Lake Rural OCP in 1990 rural industrial lands have been developed and the industrial park within the Village has been partially utilized for residential development. The existing supply of vacant industrial land is certainly reduced from 1990. Also, the nature and type of potential industrial uses has changed significantly since 1990.

In 2008 the RDBN shall be initiating the development of a new Official Community Plan for the Burns Lake Rural area. The results of this study will play a critical role in informing the policies and land use designations contained in the new plan.

Regional District of Bulkley-Nechako Zoning Bylaw. No. 700, 1993

The Regional District of Bulkley-Nechako Zoning Bylaw. No. 700, 1993 contains three Industrial Zones. These zones are as follows.

M1 – Light Industrial Zone

Primary Uses Include:

- Light manufacturing*
- Warehousing*
- Food products manufacturing, processing and packaging*
- Building supplies and lumber yard*
- Automotive repair garage*
- Commercial workshop*
- Retail sales of petroleum*

M2 – Heavy Industrial Zone

Primary Uses Include:

- Wood products manufacturing and processing*
- Public utilities uses*
- Wrecking, salvage, and storage of automobiles*
- Concrete, asphalt, and rock-crushing plant*
- Waste disposal site*

M3 – Agricultural Industry Zone

Primary Uses Include:

- Processing, wholesaling/retailing of agricultural products*
- Livestock auction*
- Farm implement repair and sales*
- Growing and sale of nursery products, commercial crops, and garden supplies*

The Regional District of Bulkley-Nechako Zoning Bylaw No. 700, 1993 also contains a number of zones that allow industrial activity associated with agriculture and resource extraction. These zones are as follows.

H2 – Large Holdings Zone

Primary Uses Include:

- Agriculture and intensive agriculture*
- Horticulture, nursery, greenhouse*
- 2 Single family dwellings or 1 two family dwelling*
- Logging and silviculture, portable sawmill and lumber kiln*
- Mineral and aggregate extraction and processing*
- Waste disposal site*
- Kennel and veterinary clinic*

Ag1 – Agricultural Zone and RR1 – Rural Resource Zone

*Primary Uses Include: Agriculture and intensive agriculture
Horticulture, nursery, greenhouse
For Ag1: 1 Single family dwelling
For RR1: 2 Single family dwellings, or 1 two family dwellings, or 4 seasonal dwellings
Logging and silviculture, portable sawmill, and lumber kiln
Mineral and aggregate extraction and processing
Waste disposal site
Kennel and veterinary clinic
Outdoor recreation facility
Primitive campsite, guest ranch, rural retreat
Peat extraction
Unpaved airstrips and helipads for non-scheduled flights*

The M1, M2, and M3 zoned lands are identified in Appendix B and discussed further in Section 4 of this report. Lands zoned H2 and Ag1 are extensive and are located throughout the study area. Most, if not all, land that is zoned Ag1 is within the ALR. The RR1 zone is uncommon.

3.2 Village of Burns Lake Industrial Land Use Planning

Village of Burns Lake Official Community Plan

The Village of Burns Lake has recently undergone the process of developing a new Official Community Plan (OCP). The new OCP contains the following policies regarding Industrial Development.

The Village will:

- 1. Implement a strategy to provide industrial subdivisions with community water and sewer services as funds become available for existing areas and as part of the development process for new subdivisions;*
- 2. Implement development permit guidelines which address storage and screening of industrial activities along Highways 16 and 35;*
- 3. Direct Light Industrial development to those areas designated Light Industrial on the future Land Use Map;*
- 4. Limit the use of residential dwellings in industrial subdivisions unless the residence is an accessory use to the principal industrial use;*
- 5. Direct Heavy Industrial development to Heavy Industry areas as designated on the future Land Use Map;*
- 6. Continue to utilize gravel resources in the rural areas, as no known reserves are located in the corporate limits of Burns Lake.*

The Future Land Use Map from the Village of Burns Lake Official Community Plan is attached as Figure No. 3.2. Lands designated for Heavy Industrial use are identified on

the map as IH and lands identified for Light Industrial use are identified on the map as IL. The notable change from the previous OCP is that 15 lots within the former industrial park at the southeast corner of town are no longer designated for heavy industrial use. They are now designated for residential use.

Village of Burns Lake Zoning Bylaw

The Village of Burns Lake Zoning Bylaw No. 759, 1999 contains two Industrial Zones. These zones are as follows.

M1 – Light Industrial Zone

The purpose of this zone is to designate sites for the manufacturing, processing, assembly, distribution, service and repair uses which carry out a portion of their operation outdoors or require outdoor storage areas.

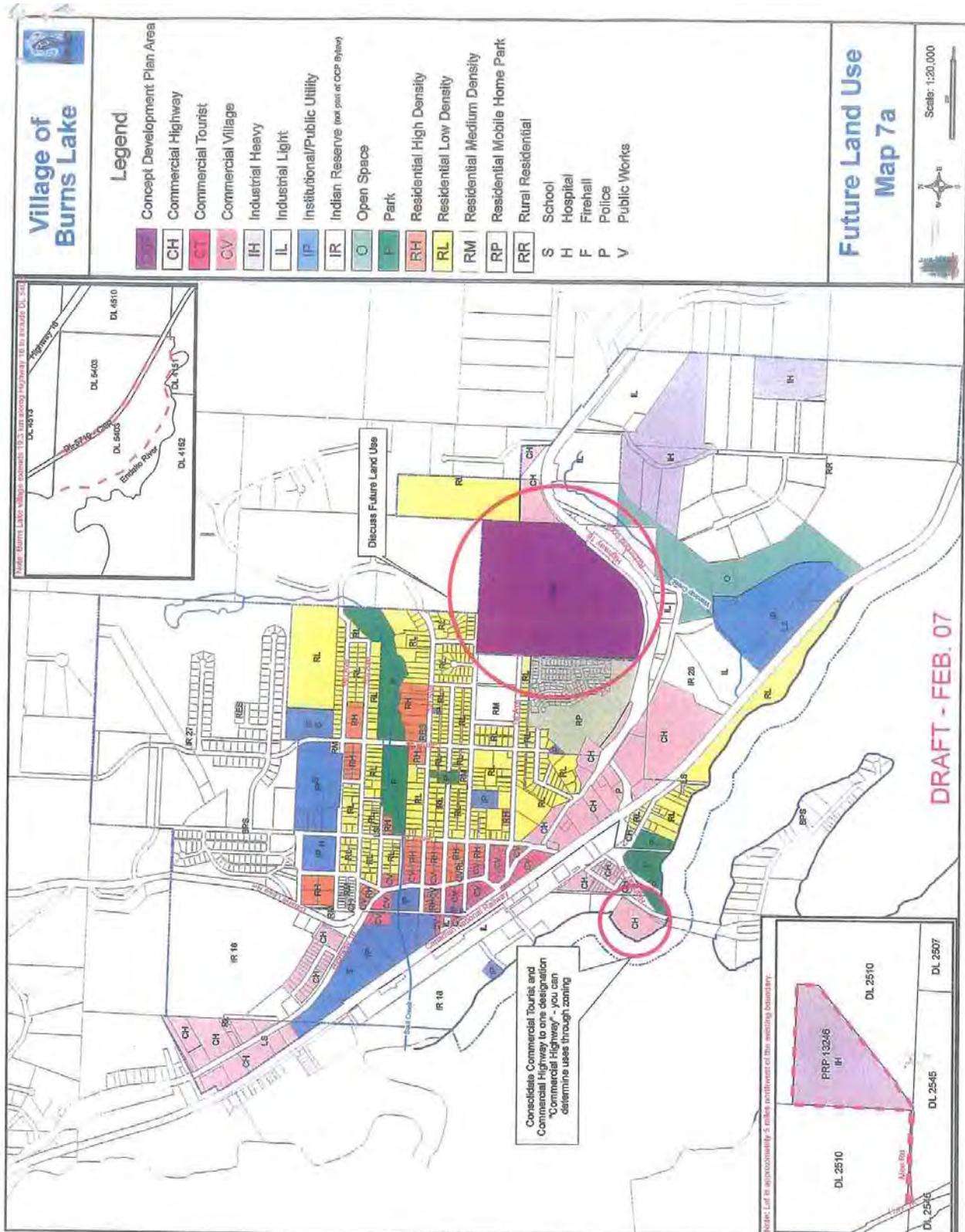
M2 – Heavy Industrial Zone

The purpose of this zone is to designate sites for those industries containing significant primary processing, resource extraction, and outside storage of materials and products which are generally not compatible with non-industrial uses.

The lands zoned Industrial in the Village of Burns Lake are identified in Appendix B of this study.



Figure No. 3.2
Village of Burns Lake OCP Land Use Map (unofficial version)



4 Existing Industrial Land Supply

4.1 Existing Industrial Land

Existing industrial land includes both developed and vacant industrial lands. For the purpose of this study the definitions for existing, developed, and vacant industrial lands are as follows:

Existing Industrial Land means land designated by a local government Official Community Plan or zoning bylaw, or land currently being used for industrial use.

Developed Industrial Land means land that is wholly or partially utilized for industrial uses. A portion of a developed property that has significant remaining capacity for further industrial development may be considered Vacant Industrial Land.

Vacant Industrial Land means land designated by a local government Official Community Plan or zoning bylaw for Industrial Use but not yet developed for Industrial Use. This includes properties that are designated industrial, but are currently zoned and/or developed for uses not permitted in the industrial designation (e.g. residential, agriculture).

It is noted that the determination of the vacant status of lands was a particularly subjective exercise. Lands that were in use for purposes of equipment storage, or contained buildings at or near the end of their economic life, or otherwise significantly underutilized were considered to be vacant.

Existing industrial lands are shown in Appendix A and B to this report. Appendix A includes lands within the study area that are outside of the Village of Burns Lake. Appendix B shows lands within the Village of Burns Lake.

The land area in hectares of Existing Industrial Lands, Vacant and Developed Industrial Lands, and Usable Vacant Industrial Lands are shown in Table 1. Data for lands within the Village of Burns Lake is not available. The data is broken down by page as shown in Appendix A.

4.2 Usable Vacant Industrial Lands

An evaluation of each piece of vacant industrial land was undertaken to identify the approximate area of land that is practically available for future industrial development. For example, areas that can not be developed because they are wetlands or steeply sloped were excluded from the calculation of useable vacant industrial lands as shown in Table 4.2.

There is a total of 339.13 hectares of Existing Industrial Land in the study area. Approximately 256 hectares, or 76%, of the Existing Industrial Land is developed. Approximately 55 hectares, or 77%, of the remaining 82 hectares of Vacant Industrial Land is considered usable based upon a preliminary site evaluation. The majority of the

usable portions of vacant industrial parcels are smaller than 4.4 ha in size, with only three parcels having usable portions estimated to be over 7 ha.

**Table 4.2
Existing Rural Industrial Land Area in Hectares**

Page #	Property Area	Total Existing Industrial Land	Developed Industrial Land	Vacant Industrial Land	Usable Vacant Industrial Land
1	53.00	4.69	4.69	0	0
2	19.68	12.40	0	12.40	7
3	170.44	89.26	57.72	31.54	22
4	9.42	4.36	0.07	4.29	4.4
5	60.00	28.46	11.32	17.14	14
6	10.69	10.69	10.69	0	0
7	28.71	28.71	11.64	17.07	8
8	49.79	49.79	49.79	0	0
9	15.98	15.98	15.98	0	0
10	74.39	63.32	63.32	0	0
11	28.22	28.22	28.22	0	0
12	62.26	2.26	2.26	0	0
TOTALS	582.52	338.13	255.70	82.44	55.4

The market readiness of the Usable Vacant Industrial Land is not addressed in this Section. Section 8 of this study will identify, on a site and property specific basis, potential future industrial lands, in more detail. The lands discussed in Section 8 will include the Usable Vacant Industrial Lands identified in this Section.



5 Industrial Trends and Opportunities

5.1 Regional Economy Overview

The economy and population in the study area has remained stable over the last several years. Timber harvesting and lumber production dominate the local economy, creating 37% of the total employment. The forest sector is expected to remain steady or grow over the next five to eight years. Restructuring will be required as a result of the Mountain Pine Beetle infestation (see Section 5.2). In response to the Mountain Pine Beetle infestation, and the identified need for restructuring, several initiatives are underway to facilitate the diversification of the area's economy.

The Lakes Economic Development Association (LEDA) is a society formed in 2006 from the Burns Lake and District Community Economic Development Association. It employs a full time Economic Development Officer, as well as an Administrative Assistant and Proposal Writer. LEDA is funded jointly by the Village of Burns Lake and the Regional District of Bulkley-Nechako, and has a Board of Directors comprised of local business people, First Nations Leaders, the Village of Burns Lake Mayor, and the Regional District Director for Electoral Area "B" (Burns Lake Rural).

LEDA's Mission is as follows:

- To lead, facilitate and support community economic development practices and projects for the Governing Board;
- Acting strategic by nature; promoting change with long-term sustainability; increasing community involvement, capacity, and empowerment; and
- Striving for economic, environmental, social, and cultural balance.

LEDA has an existing economic development strategy, guiding the staff and Board of Directors on an identified path resulting from community and First Nations consultation. LEDA was a critical contributor to the results of this study.

The Community Futures Development Corporation (CFDC) is a federally funded economic development organization providing services to the Village of Burns Lake and Electoral Area "B". Although CFDC's office is located in the neighboring community of Houston, they are inclusive of the study area. CFDC assists with new business start-ups as well as larger economic development projects in the area. CFDC also administers some unique federal funding programs specifically available to residents receiving Employment Insurance Benefits who would like to become entrepreneurs.

The Regional Strategic Development Analyst position for the Regional District of Bulkley Nechako (RDBN) was created in 2006 to facilitate regional economic development and assist established economic development organizations such as LEDA. The position is primarily focused on building and implementing a regional strategy to support economic diversification, while encouraging the concept of growth on a regional level to capitalize on regional assets as a whole. The Regional Strategic Development Analyst assists the region in economic growth by fostering existing businesses and encouraging new business development in the Region.

The Northwest Regional Alliance (NRA) was formed in 2006 as a result of a need for information sharing amongst northern communities. The NRA is not a formally structured organization but rather an informal group of Economic Development Officers from Vanderhoof through to the Queen Charlotte Islands, that meet to discuss economic development projects in their areas as well as collaborate on regional projects. To date the NRA has undertaken such projects as “Regional Foreign Investment Attraction Marketing Material” and a “Regional Destination Resort Attraction Study”.

The Omineca Beetle Action Coalition (OBAC) was formed in 2005 and is a provincially funded coalition of communities acting collectively to be more effective in ensuring the long term sustainability for the Region. The OBAC includes all communities within the Regional District of Bulkley-Nechako and the Regional District of Fraser-Fort George. Each community and Regional District is represented by an appointed member on the OBAC Board of Directors. The purpose of OBAC is “to work to ensure sustainable development and resiliency for the Omineca Beetle Action Coalition Region.”

Some of the priority items for OBAC include:

- Regional community-based interests in future forests and fibre use;
- Mineral exploration;
- Alternative energy;
- Integrated regional transportation;
- Retention and attraction;
- Conventional energy;
- Social/community services and support;
- Destination tourism;
- Agriculture;
- Regional cohesion, branding and profile strategy;
- Regional emergency response.

The Northern Development Initiative (NDI) Trust was established in October 2004 through an act of legislation passed by the Government of BC. NDI received \$185 million to form the trust bank account. NDI's region includes 50 communities, covering approximately 70% of the province. The NDI Trust offers grant and loan funding programs for local governments, First Nations, and not-for-profit agencies that reside within the Trust Area. The program is intended to support projects that demonstrate measurable economic benefits such as job creation and increased export sales. As of March, 2007 the Trust has approved \$28.1 million in funding for seventy-eight projects. Leveraged with other funds this has resulted in over \$177 million in economic development projects, close to 150 construction jobs, 36 full-time new jobs, and \$11.6 million in payroll and benefits injection into our communities.

5.2 Industrial Sectors Overview

Forest Sector – Thirty seven percent of the jobs in the study area are the result of the forest sector. The primary forest sector operations include timber harvesting and lumber production. The two main employers are Babine Forest Products, and Decker Lake Forest Products, both operating under the same ownership and jointly employing about 400 people. In addition to the two major mills there are over 25 independent forestry contractors and over 20 independent trucking companies.

Several forestry support organizations exist in the study area including the LEDA Forestry Discussion Group, Lakes Timber Health and Salvage Ltd., Lakes District Woodlot Association, Burns Lake Native Development Corporation (Logging Division) and the Central Interior Logging Association.

The Lakes Timber Supply Area (TSA) includes a total land area of 1.12 million hectares and producing forest of 745,000 hectares. The majority species for the TSA is Lodgepole Pine at 76% followed by Spruce at 20% and a mixture of Alpine Tundra, Balsam, and Douglas Fir for the remaining 4%.

The TSA is part of the vast area that is currently infested by the Mountain Pine Beetle (MPB). The infestation threatens most or all of the mature and near mature lodgepole pine stands in the TSA, which is the majority of the merchantable timber. To date, it is uncertain how long pine damaged by the beetle will be usable for manufacturing lumber but estimates from the BC Ministry of Forests office range between 6 and 10 years.



As a result of the epidemic, the Ministry of Forests re-evaluated the Annual Allowable Cut (AAC) for the Lakes TSA, with the intent of conserving forest values and recovering otherwise lost timber resources. Effective October 1, 2004 the Lakes TSA AAC was increased by 200,000 cubic metres (about 7%) to 3,162,000 cubic metres. The intent of the new AAC is to target moderately and severely impacted pine stands.

The goal of the increase is to harvest the standing dead pine trees while they remain in a usable condition. This increase has contributed to a short term upswing for sawmills and

logging contractors as well as the non-basic retail support businesses and transportation sector business (fuel suppliers, automotive repair, and automotive suppliers).

Once the remaining high quality pine stands have been logged and the standing dead timber is no longer of harvestable sawlog quality, there is opportunity for restructuring in the forest sector, shifting from lumber production towards alternate energy production. Local governments, First Nations, and Industry are conscious of, and responsive to, the fact that there is a need to expand in all industrial sectors. It is also important to identify methods to utilize and gain value from the standing dead pine to sustain the forest sector until newly replanted forests can mature and be harvested once again (see section 5.3).

Mining Sector - Although the area is rich in mineral deposits, there are currently no active mines operating within the study area. There are, however, many active exploration sites. There are 2 mines, as well as several major exploration sites operating in proximity to the study area (see Table 5.2 for further information). LEDA has formed the Mining Discussion Group comprised of local mining enthusiasts. The group meets for the purpose of collaborating to increase mining activities in the study area. Organizations assisting the Mining Discussion Group include OBAC and Geoscience BC.



Table 5.2
Mining Activity Surrounding Study Area

Operating Mine	Location	Commodity	Mine Type	Employees
Endako Mine	60 km east of Burns Lake	Molybdenum	Open Pit	260
Huckleberry Mine	160 km southwest of Burns Lake	Copper / Molybdenum	Open Pit	260

Potential Mines at the Environmental Assessment Stage				
Davidson	160 km west of Burns Lake	Molybdenum		
Mt. Milligan	240 km northeast of Burns Lake	Gold/Copper		
Major Exploration Sites				
Big Onion	135 km west of Burns Lake	Copper/Molybdenum/ Gold/ Silver		
Lucky Ship	145 km southwest of Burns Lake	Molybdenum		
Seel	190 km southwest of Burns Lake	Copper / Gold		
Morrison	135 km northwest of Burns Lake	Copper/Silver/Gold/ Zinc		
Lustdust	35 km NE Takla Landing	Silver/Zinc/Lead/Gold / Copper		
Nithi Mountain	60 km east of Burns Lake	Molybdenum/ Uranium		

Agriculture Sector - The agriculture sector makes up about 6% of total employment in the study area. The agriculture sector makes up about 0.5% of the total amount of economic activity generated in the study area, compared to the provincial agricultural contribution of 1.9% of total gross revenue. Agriculture is the smallest sector in terms of gross revenue generated in the study area; however, it represents an area for future economic growth.

As is common with other northern communities, the study area is limited with a short growing season so the main agriculture operation for the study area is cattle ranching. Most local farmers support their farms with supplemental income, many from the forest sector. There are currently approximately 16 Beef Farms, seven Grain and Forage farms, six Mixed farms, and six Poultry and Other farms. Most recent production numbers indicate an average of 10,000 cattle harvested in the area, followed by 1,000 hens, and 800 sheep/lambs.

The cattle industry has suffered recently due to trade restrictions resulting from cases of Bovine Spongiform Encephalitis (Mad Cow disease). The Provincial and Federal Governments have implemented strict processing regulations which has resulted in the lack of an approved abattoir facility in the study area. There are plans; however, to construct a slaughter and processing facility in the Smithers/Telkwa area located approximately 150km west of Burns Lake. This initiative is being supported by an active group of local farmers from the study area who have joined together to form the Agriculture Discussion Group operating as a branch of LEDA. The Agriculture Discussion Group meets regularly to discuss issues and initiate projects to assist the growth of local agriculture industry.

5.3 Prince Rupert Container Port Development

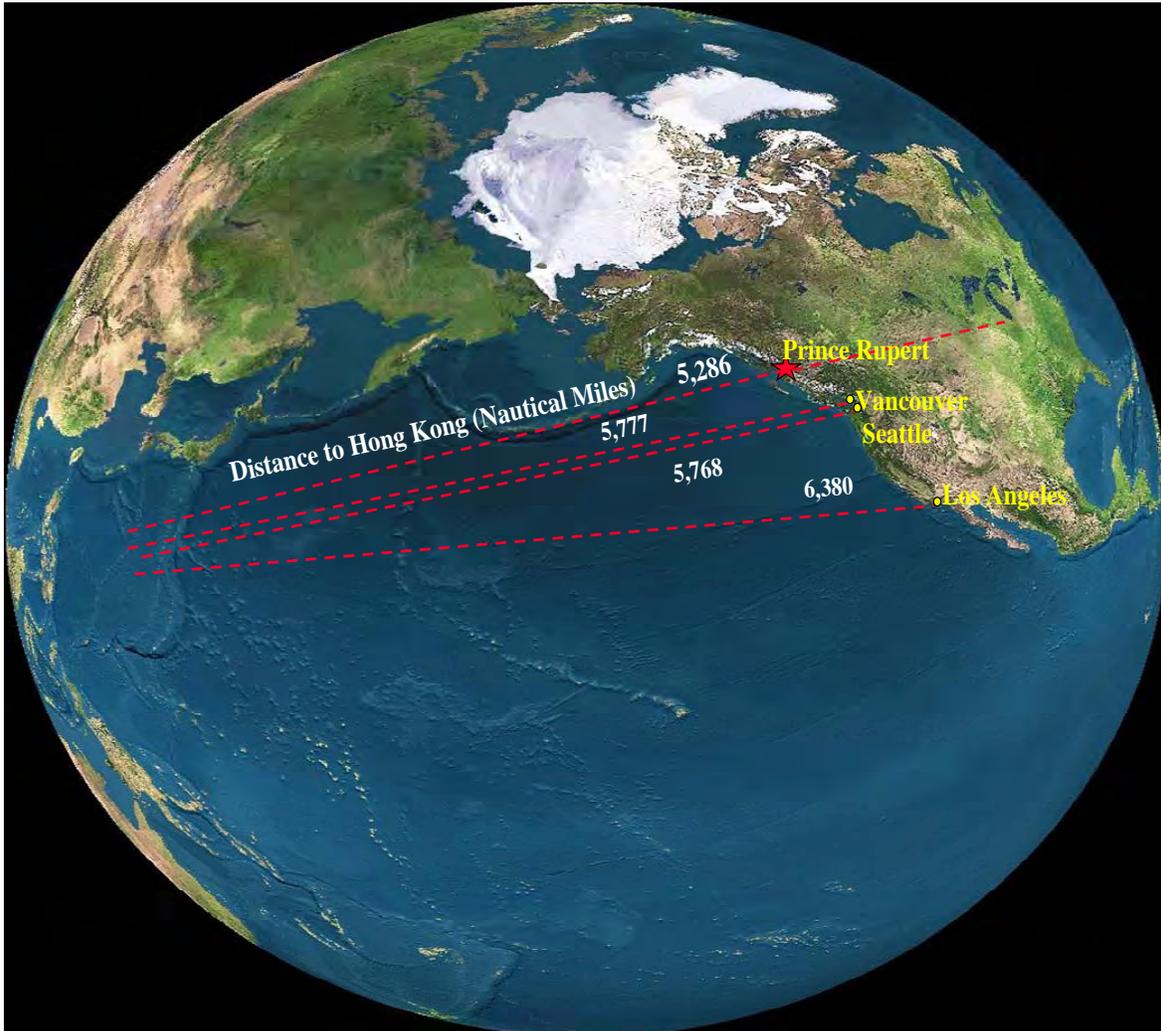
United Nation's forecasts of trans-Pacific container traffic show annual average growth of 7.5% for eastbound shipments and 4.6% for westbound shipments. The 2006 world maritime container traffic was estimated at 417 million TEU's. This is an increase of 10% over 2005 which was 378 million TEU's. A TEU is a unit of measurement of equivalent to 20 feet. Most containers today are 40ft in length. Between 1995 to 2006 global container traffic volume tripled. Currently, existing west coast ports are facing capacity constraints. As well, the rail corridor serving existing west coast ports is at overcapacity. The only major rail line with significant available capacity is CN's Northern BC line which ends at the development site of the Port of Prince Rupert.

The Prince Rupert Port Authority is planning to capitalize on the increased container traffic projections and existing port/rail constraints by constructing a container port at the Fairview Terminal in Prince Rupert. Phase 1 of this project will be complete in 2007 and includes the construction of one berth as well as the positioning of three container cranes. Phase 1 has an associated construction cost of \$170 million and the capacity to accept 500,000 TEU's per year. Phase 2 has a planned completion date of 2010 and involves an additional 3 container cranes and an increased capacity of 1.5 million TEU's at an associated cost of \$380 million.

Prince Rupert is located approximately 500 km west of the Village of Burns Lake, connected by a direct route on Highway 16 to Prince George. This positions the study area to capitalize on export opportunities. These potential opportunities include the following:

- The Prince Rupert Container Port offers the fastest route to Asia (see diagram below).
- The Prince Rupert Container Port offers Burns Lake residents a much closer ground shipping point compared to the next closest port at Vancouver which is 500 km further away.
- The majority of the containers are projected to be inbound (Asia to Prince Rupert), which will result in an abundance of empty backhaul containers and resulting lower costs for west bound shipments. By decreasing shipping costs for export companies Northern BC is able to remain competitive with product pricing.
- Shipping products by container results in lower damage to the product as well as greater delivery reliability, which are both important factors when dealing with Asian markets.
- The Prince Rupert Container Port will assist the study area in attracting new businesses in the distribution and warehousing sectors, as well as assisting with the expansion of existing export businesses such as lumber and value added forest products (log home building, furniture, flooring, etc).

**Figure 5.3
Prince Rupert Container Port Distance Chart**



5.4 Prince George Airport Expansion

The Prince George Airport is the closest international airport to the Village of Burns Lake, located approximately 240 km southeast of the Village. The Airport is aggressively marketing itself as a location to do business throughout North America. It has recently developed more than 300 hectares of Airport property for commercial and industrial use, including aviation and non-aviation enterprises. As a next step, the Prince George Airport Authority is planning to pursue the trans-Pacific air cargo initiative. This involves a major upgrade to the airport facilities, including the expansion of the runway from its current length of 7,400 feet to 11,400 feet, adding shoulders, strengthening the runway, and updating equipment including lighting and navigational aids. The total project is expected to cost \$33 million.

The longer runway will provide the opportunity to refuel cargo flights to and from Japan, China, and the eastern United States. It is estimated that as many as 1,560 cargo flights per year could be landing at the airport. The runway expansion project will benefit the

study area by aiding in the expansion of existing, and attraction of new, export businesses by provided new shipping options. There are 1560 cargo flights per year, or four per day, stopping to refuel. This creates the potential to load cargo for overseas flights.

The combination of the Prince Rupert Container Port and the Prince George Airport Expansion adds up to exciting times for the entire region between Prince George and Prince Rupert. The study area is well positioned to take advantage of new business development opportunities, specifically the attraction of manufacturing and distribution operations for export. There are also increased opportunities for existing forest sector businesses to ship products in empty backhaul containers at a reduced price thereby assisting Northern BC to maintain competitive prices of export resources.



6 Infrastructure and Utilities

6.1 Hydro

Overhead hydro (500 kV and 138 kV) runs along the Highway 16 corridor from Prince George through to Prince Rupert. Industry-related power consumption, and 3 phase power, is mainly located along the Highway corridor and north along Babine Road.

BC Hydro supplies the power throughout the Province of BC and is responsible for managing power consumption. BC Transmission Corporation owns the hydro infrastructure, or 'assets', in British Columbia and supplies industry users with hydro infrastructure for 60 kV power and higher.

New Infrastructure - BC Hydro and BC Transmission Corporation builds new infrastructure and lines where there are residential and industry demand. End-users requiring 59 kV power and less (residential and smaller industry) deal with BC Hydro. Industry requiring 60 kV power and above must deal with the BC Transmission Corporation.

BC Hydro and BC Transmission Corporation note that it is quite difficult to provide quotations for industrial connections to parcels identified as potential future industrial sites. Costs to install infrastructure varies and is dependent upon criteria such as: access, industry types, required load, power consumption, distance the power line is from the connection point, etc.

There are also options to reduce costs for line connections include utilizing or providing a new circuit from an existing sub-station, and possibly locating an industrial area closer to an existing sub-station. Industry may also purchase power at the transmission level and install their own substation to step down the power. This option allows the purchase of power at a cheaper rate from BC Hydro.

Appendix C contain information on the availability of 3 phase power to the existing vacant and potential future industrial lands in the study area. All properties have potential access to 3-phase power. Where Appendix C states "no" regarding 3-phase power this indicates that BC Hydro has identified some complicating factor and potential expense regarding the supply of 3 phase power to the site. In all cases the availability of 3-phase power should be confirmed with BC Hydro directly.

6.2 Rail Access

The CN Rail line follows the Highway 16 corridor from Prince George to Prince Rupert, through the study area. Siding access points are located at Babine Sawmills, the Village of Burns Lake, Decker Lake Sawmills, and two other private parcels identified in Appendix A.

Future Infrastructure - Expansion of rail sidings are not currently planned by CN for the area; however, industry looking at settling in the area may request a siding be

developed. CN representatives provided the following *rough* estimates to building a rail siding:

Site Preparation Requirements - Cost to be paid for by Client:

(This work is required to be completed prior to installing infrastructure)

- Firm, level rail bed to the right grade
- Rail bed has to hold a locomotive
- Needs to be positioned on a good clay and rock base

Installation of Infrastructure:

- Steel, ballast, track, ties and other
- Costs are about \$90 - \$100 per foot

Installation of Main-Line Turnout/Switch/Heater

(These costs are over and above installation):

- Main-line Turnout & Switch \$85,000
- Heater \$37,500

<u>Total</u>	<u>\$122,500</u>
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The costs for the main-line turnout installation are usually waived for clients with large volume thresholds (ie: several national locations) that enter into a long-term shipping contract with CN. This information is provided as an example of possible costs and should not be relied upon for a business or other purpose.

6.3 Telecommunications

Public telecommunications infrastructure in the study area is provided by companies such as Telus, Navigata Communications, Lakes Communications, and Omineca Cable. Other communication networks, mainly towers, have been built in the study area to support local private businesses and educational institutions, such as BC Hydro, the Canada Broadcasting Corporation, and School District No. 91 (Nechako-Lakes).

Companies, such as Telus and Navigata Communications, provide backbone telecommunications networks across northwestern British Columbia. This is done by either strategically placed tower locations and/or fibre-optics networks located across the northwest region. Through the Federal BRAND Initiative (Broadband for Rural and Northern Development), this backbone network creates opportunity for businesses to purchase fibre in order to provide internet services to more rural and remote areas. Lakes Communications, located in Burns Lake, has purchased broadband from these backbone networks and provides service to the study area and other outlying areas.

Public telecommunications coverage in the Lakes District includes a variety of digital and analog cellular services, wireless and ADSL (Asymmetrical Digital Subscriber Line) high-speed internet, and cable internet services. Cellular and wireless internet service is widely available within most developed parts of the study area. ADSL internet service is available within the Municipal boundaries and flows out approximately 5 kilometers from the central ADSL equipment location within the Municipality. Cable internet services are largely contained within the Municipality of Burns Lake.

Future Infrastructure - Lakes Communications, locally owned by Burns Lake Community Forests Ltd., has plans for future tower expansion within the Lakes District

and are available to provide innovative solutions to provide high-speed telecommunications for industry. Quotes for supply and installation vary and are dependent upon industrial requirements and how close the industry parcels are located to existing telecommunication infrastructure.

Through discussions with Navigata Communications, representatives noted that there are no immediate future expansion plans for the study area. However, this may be possible should a good “business case scenario” be presented. Information regarding infrastructure expansion plans by Telus was not available at the time of producing this report.

6.4 Natural Gas

Natural gas in the study area is provided by Pacific Natural Gas (PNG). Natural gas infrastructure runs west up to Decker Lake Forest Products, east to Fraser Lake up to and along Tintagel Road (to Bailey Road), and south along Highway 35.

Costs to install natural gas is dependent upon where the industrial parcel is located, required load in BTU's (British Thermal Unit), and the distance the line has to run from PNG's current infrastructure. Differing industrial load requirements dictates the size of the line and pressure required to run natural gas to the parcel site.

PNG can provide rough estimates for installing natural gas based upon identified potential industrial parcels and industrial load requirements.

Appendix C contain information on the availability of natural gas to the existing vacant and potential future industrial lands in the study area. Where Appendix C states “no” regarding natural gas this indicates that PNG has identified some complicating factor such as no transmission infrastructure to the site. A “yes” indicates that there is existing infrastructure in place in the area to service the site. In all cases the availability of natural gas should be confirmed with PNG directly.

6.5 Roads

In the Regional District the Ministry of Transportation (MoT) is responsible for regulating the use and establishing and implementing road design and construction standards for public roads. The MoT plays a role in ensuring that industrial activity does not have an unacceptable impact on the existing road infrastructure and that unsafe situations are not created. The MoT typically becomes involved with industry at the subdivision, rezoning, and access approval stages.

The MoT is the subdivision approval authority in the Regional District. At the time of subdivision approval the MoT ensures that new lots are serviced by a road and that the existing road network can support the traffic generated by the new development. The MoT may require new roads and / or improvement to existing roads as a condition of subdivision approval.

Where land requires rezoning for an industrial use, the application is referred by the Regional District to the MoT to comment on road related issues. The MoT must approve

all rezonings within 800 metres of a controlled access highway and may require new roads and / or improvement to existing roads as a condition of rezoning approval. The Regional District may also require improvement to existing roads as a condition of rezoning approval.

When a new business is established that business may require a new Access Permit from the MoT. As part of the process to issue the Access Permit the MoT will indicate the design of the new access, or the improvements required to the existing access to accommodate the vehicle traffic generated by the new use.



7 Outlook for Industrial Land Requirements

7.1 Introduction

This section identifies the industrial uses that have potential to locate in the study area and includes uses being targeted by local economic development initiatives. It also identifies the estimated land requirements for each use identified. The industrial uses identified are organized into either the 'Forestry', 'Mining', 'Agriculture,' or 'Other Special' resource sectors.

An evaluation is then made of the industrial uses considered most likely to locate in the study area in the near future. This information provides a basis for understanding the industrial land needs in the study area.

It should be noted that light industrial uses (particularly those with a service, retail, or office component) are encouraged, for the purpose of this study, to be located close to, or preferably within, the Village of Burns Lake. Please refer to the Village of Burns Lake Zoning Bylaw for industrial zoned properties within Village boundaries.

General descriptions of the Regional District's M1, M2, M3, H2, Ag1 and RR1 zones can be found in Section 3 of this study.

It is noted that this information is based upon literature reviews and extensive consultation with community stakeholders and industry experts. It is not a scientific study and is intended only to provide a rough estimate of land needs within the study area.

7.2 Forestry and Value-Added Sector

Due to the Mountain Pine Beetle epidemic, the study area will be facing a lack of sawlog quality fiber and an abundance of dead Mountain Pine Beetle affected timber within six to ten years. The decrease in sawlogs presents a significant threat to existing sawmill operations; however, it presents a unique opportunity to diversify from lumber production into other forest sector operations while making use of the abundance of poor quality fiber. Some examples of new businesses that could capitalize on the available wood waste are listed below:

- Pulp/Paper Mill
- Large Scale Secondary Manufacturing
 - Pellet Plant
 - Plywood Plant
 - Fibreboard
 - Log Home Building
 - Fence Post Manufacturing
- Small Scale Secondary Manufacturing
 - Furniture Manufacturing

- Flooring/Wainscoting Manufacturing
- Decking Manufacturing
- Bioenergy Plant (section 7.5).

The construction of the Prince Rupert Port (section 5.3) will also assist in the sustainability of large and small scale manufacturing plants. It will provide a close ground shipping point (500 km) for product export, as well as the shortest shipping route to Asia and decreased export costs in the utilization of empty backhaul containers. Further assistance for the small scale manufacturing plants could come in the form of community or cooperative infrastructure such as a log yard for purchasing fiber, a kiln for drying the fiber, and a warehousing facility for storage of finished products in preparation for shipping. These would provide a cooperative system of shared resources for smaller operators.

Specific industry types are indicated below with infrastructure, zoning and parcel size requirements.

Industry Type	Special Infrastructure Requirements	Zoning	Parcel Size Requirements
Large-Scale Secondary (Value-Added) Manufacturing Plant (s) ¹	<ul style="list-style-type: none"> ▪ 3 Phase Power ▪ Road / Rail Access ▪ Water 	M2	80 ha. +
Small-Scale Secondary (Value-Added) Manufacturing ²	<ul style="list-style-type: none"> ▪ 3 Phase Power ▪ Road / Rail Access 	M2	8 ha.
Pulp Mill – Pulp/Paper Products	<ul style="list-style-type: none"> ▪ 3-Phase Power ▪ Road / Rail Access ▪ Water 	M2	100 ha.
Log Yard	<ul style="list-style-type: none"> ▪ Good Road Access 	M2	4 ha.
Community Kiln		M2	2 ha.
Log-Home Building		M1	4 ha.
Warehousing	<ul style="list-style-type: none"> ▪ Good Road Access 	M1	2 ha.

Notes:

- ¹ Large-Scale Secondary Manufacturing includes: pellet plant(s), oriented-strand-board/plywood, fibreboard, fence post manufacturing.
- ² Small-Scale Secondary Manufacturing includes: specialty mill operations, furniture manufacturing, flooring, treated wood products (poles, posts, decking, etc).

7.3 Mining and Sub-Surface Resource Sector

There are currently no operating mines in the study area, nor are there any mine sites in the environmental assessment phase. There are; however, extensive exploration sites and considerable mineral showings throughout the study area. There exists future opportunities for a mine to be developed. If a mine was to begin operations in the area, it would present opportunities to existing skilled trade workers and other support businesses in the area. Some of the support business opportunities include:

- Welding & Fabricating
- Transportation (Ore Hauling)
- Lab Analysis (Samples)
- Warehousing / Industrial Park Development

Specific industry types are indicated below with infrastructure, zoning and parcel size requirements.

Industry Type	Infrastructure Requirements	Zoning	Parcel Size Requirements
Warehouse Facilities for Sample Storage / Explosives / Equipment	<ul style="list-style-type: none"> ▪ Good Road Access 	M1	2 ha.
Lab Analysis Facilities / Other Testing Facilities	<ul style="list-style-type: none"> ▪ Road access ▪ High Speed Internet 	M1	0.5 ha.
Welding, Fabricating	<ul style="list-style-type: none"> ▪ Road access 	M1	0.5 ha.
Transportation Industry (Product shipment)	<ul style="list-style-type: none"> ▪ Good Road Access ▪ Possibly Rail Access 	M1	4 ha.

7.4 Agricultural Sector

The beef cattle industry is a large part of the agricultural sector in the study area. Cereal/grain crop production also plays a role. A range improvement strategy for the Lakes District (Lakes Stock Range) is planned for 2—7 -2008. This strategy may contribute to the expansion of the agricultural sector in the study area.

There may be some opportunity for large and small-scale agriculture industries such as greenhouses, an auction arena, and abattoir facilities. Many industrial uses closely related to agriculture do not require industrial zoning, and do not need to be accommodated in this strategy given the abundance of Agricultural Land Reserve (ALR) parcels throughout the region and abundant zoning that allows agricultural related industry. Only a limited number of agriculture related uses require industrial zoning.

With the future restructuring of the forest sector in the area, there is also potential for local farmers to secure more crown land for farming purposes. Also, collaboration with

the local college (College of New Caledonia) for the purposes of offering agriculture training programs may assist in retaining youth locally to pursue farming opportunities.

Specific industry types are indicated below with infrastructure, zoning and parcel size requirements.

Industry Type	Infrastructure Requirements	Zoning	Parcel Size Requirements
Abattoir		M3	4 ha. +
Auction Arena (Livestock / Equipment)	<ul style="list-style-type: none"> ▪ Good Road Access 	M3	6 ha.
Greenhouse Facility	<ul style="list-style-type: none"> ▪ 3- Phase Power ▪ Good Road Access ▪ Possibly Rail Access ▪ Water 	Ag1 H2 RR1	2 ha.
Composting Facility (Organic)	<ul style="list-style-type: none"> • Good Road access 	M3	10 ha. +

7.5 Other Special Uses

There are opportunities that do not fit clearly within one single, or any traditional industrial sectors. These include;

- Business opportunities related to co-generation and/or bio-mass facilities and the energy sources created.
- Opportunities for the development of an industrial park in order to attract industrial uses.
- The development of the Prince Rupert Container Port and Prince George inland container facilities may provide opportunities for the development of transportation businesses to support future resource industries in and around the region.

There have been discussions regarding the expansion of the Burns Lake Airport to potentially accommodate commercial jets and cargo aircraft. This study recommends that potential industrial lands around the airport not be identified until the location of lands required for airport operations are first identified. This is due to the desire to avoid conflicts between future airport land and operational needs and new industrial development.

As noted, the Mountain Pine Beetle epidemic will result in an abundance of bio-mass (wood residue) that is no longer of sawlog quality but can be utilized for power production. There is increasing interest in the projected wood waste volumes in the study area from independent power producers. This new interest, coupled with opportunities and assistance presented by the Province of British Columbia (detailed below) can result in new industry for the area and diversification for the forest sector. Over the next 20 years, British Columbia is projecting an increase of 45% in energy requirements beyond what is currently produced in the province. The Provincial Government has made a commitment in the BC Energy Plan that British Columbia will be electrically self-sufficient by 2016. As a result of this commitment, in early March

2007, BC Hydro issued a Request For Expression Of Interest (RFEOI) for bioenergy power production utilizing wood waste. As well, BC Hydro announced the Standing Offer Program to purchase power from small producers in any format (wind, water, wood waste etc) for power plants producing less than 10 MW of power.

The RFEOI from BC Hydro is assisting the Province with the projected energy shortfalls as well as aiding in the Mountain Pine Beetle epidemic by capturing value from affected timber that may otherwise not be useable. There are several opportunities in the bioenergy sector including combined heat/power plants for community heating systems, or power production specifically for selling to the grid. A combined heat/power plant could be utilized to heat such facilities as housing complexes (apartments, senior's homes, etc.) hospitals, recreation centres, and large scale green houses. There is potential for joint ventures between the local governments (Village of Burns Lake and the Regional District of Bulkley-Nechako) and independent power producers. There is also potential for the local governments to move forward on these initiatives on their own, owning the assets and collecting revenues from power sales to offset taxation in the area.

Specific industry types are indicated below with infrastructure, zoning and parcel size requirements.

Industry Type	Infrastructure Requirements	Zoning	Parcel Size Requirements
Industrial Park	<ul style="list-style-type: none"> ▪ 3-Phase power ▪ Good Road access ▪ Rail access ▪ Telecommunications 	M2	20 ha. +
Co-Energy Plant Facility ¹	<ul style="list-style-type: none"> ▪ 3-Phase Power ▪ Good Road access ▪ Water access ▪ Telecommunications 	M2	40 ha. +
Transportation (Industry Product Shipment)	<ul style="list-style-type: none"> ▪ Good Road Access ▪ Rail Access 	M1	2 ha.
Trades Training Facility	<ul style="list-style-type: none"> ▪ High Speed Internet 	M1	.5 ha.

Notes: ¹ Parcel size requirements vary depending upon the operation.

7.6 Key Industrial Uses

It is not expected that all or most of the industry noted above will locate to the study area within the next 10 years. The following key industrial uses have been selected as the most likely to locate in the area within the next 5 – 10 years.

Industry Type	Infrastructure Requirements	Zoning	Parcel Size Requirements
Pellet-Plant Facility	<ul style="list-style-type: none"> ▪ 3 Phase Power ▪ Good Road Access ▪ Rail Access 	M2	40 ha. +
Bio-Energy / Co-Generation Facility	<ul style="list-style-type: none"> ▪ 3-Phase Power ▪ Good Road Access ▪ Water ▪ High Speed Internet 	M2	40 ha. +
Industrial Park	<ul style="list-style-type: none"> ▪ 3-Phase power ▪ Good Road access ▪ Possibly Rail Access ▪ High Speed Internet 	M2	20 ha. +
Greenhouse Facility	<ul style="list-style-type: none"> ▪ 3- Phase Power ▪ Good Road Access ▪ Possibly Rail Access ▪ Water 	M3 (with Bio-Mass) Ag1, H2, RR1 (without Bio-Mass)	2 ha +
Transportation (Industry Product Shipment)	<ul style="list-style-type: none"> ▪ Good Road Access ▪ Rail Access 	M1	2 ha.
Abattoir Facility	<ul style="list-style-type: none"> ▪ Good Road access 	M3	4 ha.
Welding / Fabricating Businesses		M1	1 ha.
Lab Analysis Facility	<ul style="list-style-type: none"> ▪ High speed Internet 	M1	.5 ha.
Warehousing Facilities	<ul style="list-style-type: none"> ▪ Good Road Access 	M1	2 ha.

7.7 Adequacy of Existing Industrial Land Supply to Meet Future Demand

The purpose of this section is to estimate the amount of land required by the key industry likely to locate/settle in this region, based upon a review of existing studies and reports and consultation with local industry and experts. At present there are approximately 55 ha. of vacant usable industrial land in the study area. This land is not adequate in amount or range of characteristics to adequately meet the area's future industrial demand.

It is very difficult to forecast the aggregate amount of land required for industry over the next 5 to 10 years given the variable factors involved, the changing nature of the regional economy, and the lack of historical data from which to base land absorption rates. It is certainly not practical to expect that all, or even a significant portion of the potential industrial activity identified in this section, will locate into the region.

The report estimates that it is reasonable, and not overly optimistic, to anticipate that the following amount of industrial lands may be needed over the next 5 years.

Industry Type	Amount of Land	Lot Size Requirements
Land for Light Industrial Use (warehousing, light manufacturing, transportation, etc.)	<ul style="list-style-type: none"> ▪ 25 ha. 	0.5 ha. - 5 ha.
Land for small to average size Heavy Industrial Use (abattoir and other Agriculture Industry, log home building, asphalt plant, etc.)	<ul style="list-style-type: none"> ▪ 25 ha. 	4 ha. - 10 ha.
Land for large scale Heavy Industrial Use (pellet plant, large wood products manufacturing, etc.)	<ul style="list-style-type: none"> • 80 ha. 	20 ha. - 40 ha.

It is noted that the Ag1 and H2 zones, which are discussed in detail in Section 3, are plentiful throughout the region. These zones allow many agriculture and light industrial uses related to agriculture and primary processing. Therefore, these uses are not included in the above calculations.

8 Potential Industrial Land Inventory

8.1 Vacant Existing Industrial Land Inventory

The parcels discussed in Section 8.1 are zoned by the Regional District for Industrial Use, but are not yet developed for Industrial Use, or have significant redevelopment potential. The following table provides an overview of the parcels discussed. It is noted that the information below is an estimate and should not be relied upon for any purpose.

**Table 8.1
Vacant Industrial Land Inventory Overview**

Parcel No.	Address	Property Area	Useable Vacant Industrial Land	Zoning
1	Bedore Road	20 ha.	7 ha.	M2
2	Near Maxan FSRoad	60 ha.	22 ha.	M2
3	Rowland Road	8.5 ha.	4 ha.	M1
4	Kissock Road	0.4 ha.	0.4 ha.	M1
5	Hwy 16	46 ha.	12 ha.	M1
6	Hwy 16	2 ha.	2 ha.	M1
7	Rod and Gun Frtg. Road	0.3 ha.	0.3 ha.	M1
8	Miller Road	3.5 ha.	2.7 ha.	M2
9	Railway Avenue	13 ha.	5 ha.	M2
Total		153.7	55.4	

8.2 Potential Future Industrial Land Inventory

The parcels discussed in Section 8.2 are not zoned by the Regional District for Industrial Use and are not yet developed for Industrial Use. The lands are those identified by Regional District staff as having the potential for industrial use. However, these lands may be found, upon further review and consultation with the public, to be unsuitable for a particular, or any, industrial use. The following table provides an overview of the parcels discussed.

**Table 8.2
Potential Future Industrial Land Inventory Overview**

Parcel No.	Address	Property Area	Potential Useable Industrial Land	Zoning
10	Lewis Road	65 ha.	40 ha.	H2 Ag1
11	Near Hwy 16	65 ha.	20 ha.	RR1 H2
12	Hwy 16	53 ha.	15 ha.	RR1 H2
13	Railway Avenue	29 ha.	10 ha.	H2 R5
14	26464-26458 Hwy 16	62 ha.	40 ha.	H2 M3

15	Hwy 16	162 ha.	130 ha.	H2
16	20975 Hwy 16	40 ha.	30 ha.	H2
17	Babine Lake Road	547 ha.	500 ha.	H2
18	Hwy 16	29 ha.	29 ha.	Ag1
Total		1052	814	

Parcels No. 1 through 18 are shown in greater detail in Appendix C. The information regarding parcel descriptions, infrastructure, and special considerations is provided for convenience only and should not be relied upon for any purpose. All information should be independently verified.

9 CONCLUSION

9.1 Conclusion

There is a total of 338 hectares of Existing Industrial Land in the study area. Approximately 256 hectares, or 76%, of the Existing Industrial Land is developed. Approximately 55 hectares, or 77%, of the remaining 82 hectares of Vacant Industrial Land is considered usable based upon preliminary site evaluations. The majority of the usable portions of vacant industrial parcels are smaller than 4 ha in size, with only three parcels having usable portions estimated to be over 7 ha.

The study has identified a potential demand for up to:

- 25 ha. of land in parcels that are from 0.5 ha – 5 ha. in size for Light Industrial Use (warehousing, light manufacturing, transportation, etc.).
- 25 ha. of land in parcels that are from 4 ha. - 10 ha. in size for Heavy Industrial Use (abattoir and other Agriculture Industry, log home building, asphalt plant, etc.)
- 80 ha. of land in parcels that are from 20 ha. - 40 ha. in size for large scale Heavy Industrial Use (pellet plant, large wood products manufacturing, etc.)

The study has identified, in Section 8 and Appendix C, properties that have some potential for industrial development. These properties total over 800 ha. of potential usable area. As part of the Official Community Plan review process for Electoral Area B, these lands will be further evaluated regarding their potential suitability for industrial designation. If designated for industrial use, the rezoning process will then be required to allow for further evaluation of each property's suitability for a specific industrial purpose. Both the OCP designation and rezoning process include a public review and input component.

Appendix A:

Existing Rural Industrial Lands

Appendix B:

Existing Municipal Industrial Lands

Appendix C:

Potential Industrial Land Inventory Maps

Appendix D:

Literature Review and websites

LITERATURE REVIEWED

Burns Lake & District Fibre Retention Strategy Report, Synergy Management Group Ltd., April 2002

Burns Lake & District Community / Investor Profile., Synergy Management Group Ltd., April 2002

Facing the Challenge of Industry Closure: Managing Transition in Rural Communities, Intergovernmental Committee on Urban and Regional Research (Canada), February 2005

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Lakes District Land and Resource Management Plan, British Columbia Ministry of Forests, January 2000.

Lakes Timber Supply Area. Rationale for Allowable Annual Cut (AAC) Determination, Larry Pedersen, Chief Forester, October 2004

LEDA 5 Year Economic Development Strategy (2007-2012), Lakes Economic Development Association (LEDA), February 2007

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Northern BC Container Terminal Opportunity Study, InterVISTAS Consulting Inc., November 2006

Northwest Transportation and Trade Corridor Capacity Report, AGRA Earth & Environmental Ltd., May 2000.

Regional Economic Implications of the Mountain Pine Beetle Infestation in the Northern Interior Forest Region of British Columbia, Natural Resources Canada, 2005

WEBSITES

Internet links referred to in this paper were accessed in May, 2007. The URL's may have been changes since that date.

www.burnslake.org	Village of Burns Lake
www.gov.bc.ca	BC Ministry of Forests and Range
www.gov.bc.ca	BC Ministry of Energy Mines & Petroleum Resources
www.rupertport.com	Prince Rupert Port Authority
www.pgairport.ca/yxs	Prince George Airport Authority
www.statcan.ca	Statistics Canada
www.bchydro.com/info/	BC Hydro
www.bctc.com/the transmission system/system overview maps/	British Columbia Transmission Corporation
www.about.telus.com/networktechnology	Telus
www.navigata.ca/	Navigata Communications
www.omineca.com/internet.html	Omineca Cablevision
www.png.ca/company_map.cfm	Pacific Northern Gas Ltd.
www.png.ca/customers_forms.cfm	Pacific Northern Gas Ltd.
http://www.shoprogers.com/store/wireless/content/moreabout/BC_2007.pdf	Rogers Network Coverage