

*A Component of British Columbia's
Land Use Strategy*

Diamond Land and Resource Management Plan A Model Report



January 1995



**Province of
British Columbia**

Prepared by:

Integrated Resource Planning Committee
P.O. Box 3575
Victoria, B.C.
V8W 3V1



Date: February 6, 1995

File: 204-20/LRMP-DI

Dear Readers:

I am pleased to present the Diamond Land and Resource Management Plan. It has been written to give Land and Resource Management Planning (LRMP) participants a better understanding of the end product of their efforts.


The Diamond provides guidance on the content and general format for a plan, as well as the level of detail for management objectives and strategies. The Diamond also provides a working example of terminology and definitions for Resource Management Zones that are to be used in all Land and Resource Management Plans.

Extensive consultation with LRMP participants has helped shaped this plan. As with many elements of this province's land use planning system, LRMP is changing and improving. The guidance provided by the Diamond represents our best efforts to document the current experience of LRMP participants and planning experts. This knowledge will change over time, and we will try to incorporate these changes periodically through advice and policy direction to LRMP participants.

Please remember that the Diamond LRMP area exists only on paper. Its purpose is simply to illustrate the major points outlined above, not to provide a template to cover every possible LRMP variation. The detailed information about specific resource management zones only covers a subset, the southeast corner, of the entire hypothetical LRMP area. Also, the Diamond only provides examples of four of six possible zoning categories.

Thank you for your interest in land and resource use planning in British Columbia. If you would like to provide comments on any aspect of LRMP, please forward them to the address noted on the inside cover of this plan. Please direct any questions on the Diamond LRMP to Lisa Mellor, Ministry of Environment, Lands and Parks (387-1850) or Allan Lidstone, Ministry of Forests (387-6656).

Yours truly,


Derek Thompson
Assistant Deputy Minister
Land Use Coordination Office

LM

Diamond Land and Resource Management Plan

A Model Report

Prepared by

Integrated Resource Planning Committee

January 1995

Canadian Cataloguing in Publication Data

Main entry under title:

Diamond land and resource management plan

"A component of British Columbia's land use
strategy"--Cover.

ISBN 0-7726-2407-0

1. Land use -- British Columbia -- Planning. 2. Land
use -- Government policy -- British Columbia. 3. Natural
resources -- British Columbia -- Management. 4. Land use
-- British Columbia -- Planning -- Case studies.

I. Integrated Resource Planning Committee (B.C.)

HD319.B7D55 1995 333.7'17'09711 C95-960101-5

Lieutenant Governor in Council – Letter of Approval

Deliberately omitted in this example. Insert the official letter of approval that is signed following presentation of the Consensus Management Direction or Options Report to Cabinet.

Executive Summary

Deliberately omitted in this example. Insert a one- or two-page summary of the major land use and resource management directions outlined in the Land and Resource Management Plan.

Table of Contents

Lieutenant Governor in Council – Letter of Approval	iii
Executive Summary	iv
1.0 Introduction	1
1.1 The planning area	2
1.2 Location	3
1.3 Land use planning history	5
1.4 Process	6
1.41 Vision	6
1.42 Objectives	6
1.43 Timeline	7
1.5 Principles for participation	8
2.0 Management direction	10
2.1 Base case and scenarios (analysis and assessment)	10
2.11 Base case	11
2.12 Scenario 1	13
2.13 Scenario 2	13
2.14 Consensus scenario	14
2.2 General management direction	15
2.21 Forest Practices Code	16
2.3 Resource management zone objectives and strategies	16
2.31 Merry River (low intensity resource development – natural habitat)	20
2.32 Homestead Valley (agriculture)	23
2.33 Sam's River (high intensity resource development)	28
2.34 Rapid River (protection)	33
2.35 Mount Merry (low intensity resource development – community watershed)	35
2.36 Merry Lake (low intensity resource development – scenery and recreation)	38
3.0 Implementation	42
3.1 Resource management zones and the Forest Practices Code ..	42
3.2 Agency roles	43
3.3 Priorities for more detailed planning	44
3.4 Economic transition	45
3.41 Measures to off-set short-term impacts	46
3.42 Long-term development and diversification	46
3.43 Sources of transition funding	46
3.44 Structures for transition delivery	47
4.0 Monitoring and review	47

5.0 Appendices	48
5.1 Participants	48
Joint Steering Committee Membership	48
5.2 Definition of consensus	49
5.3 List of related documents	50
5.4 Activity guide for resource management zones	50
5.5 Resource impact assessment and social, economic and environmental (SEE) impact assessment summaries	52
5.51 Resource impact assessment	52
5.52 Social, economic and environmental (SEE) impact assessment	55
5.6 Glossary	60

1.0 Introduction

The Diamond Land and Resource Management Plan has been completed according to the policy *Land and Resource Management Planning, A Statement of Principles and Process* (1993). The Land and Resource Management Planning (LRMP) process represents the sub-regional component of the provincial land use strategy.

The Diamond LRMP process has also taken direction from the *Provincial Land Use Charter* (1992). The plan was prepared by government agencies responsible for Crown land management, as well as by many public representatives.

First Nations participation was encouraged throughout the process and specific principles for this sector's involvement are listed in Section 1.5. In June 1993, the British Columbia Court of Appeal ruled that aboriginal rights were not extinguished on a "blanket" basis. Section 35(1) of the Canadian Constitution, enacted in 1982, provides that aboriginal rights are "recognized and affirmed." As such, they cannot be unjustifiably infringed by activities of the Crown or by activities authorized by the Crown (for example, through the sale of Crown land or the issuance of tenures, leases, licenses and permits).

Since the scope and content of aboriginal rights may vary in accordance with the distinct historical use and occupancy of land, consultation with local aboriginal people must occur in order to ascertain legal duty to avoid infringement on aboriginal rights. Because the Crown has a legal duty to avoid infringement on aboriginal rights before authorizing resource use activities, resource management must accommodate constitutionally protected aboriginal rights through discussion with First Nations.

The discussion of First Nations' jurisdiction and ownership of land and resources during treaty negotiations will not be limited by land use planning designations made by the province. The use of, ownership of, and jurisdiction to manage the lands in question may change as a result of negotiating treaties.

At present, no regional plan exists for this area. Lower level plans that address Crown land management (such as local resource use plans, wildlife management plans and silviculture prescriptions) will follow the land and resource management direction described in the Diamond Land and Resource Management Plan.

Providing recommendations on the Protected Areas Strategy was an integral part of the LRMP process and the results are documented in this plan.

All land use and resource management activities within the Diamond LRMP area are subject to existing legislation, policies and regulations for Crown land and

resource management. This includes the Forest Practices Code, which has a significant influence on resource management. The resource management zones described in this plan give direction to further planning that is required by the code. As stipulated in the code, such further planning must be consistent with the resource management objectives and strategies described in the Diamond Land and Resource Management Plan.

1.1 The planning area

The Diamond Land and Resource Management Plan encompasses an area of approximately 20,000 square kilometres, and is defined by the boundaries of the Diamond Forest District. The planning area is within the Highland Regional District which includes the city of Rapid City, the towns of Merryville, Rubytown and Milltown and the village of Scenicvale. There are also two First Nations within this area: the Tikwna'lan and Dlanootga. In total, about 40,000 people live within the plan boundaries.

Income and education levels of the labour force are comparable to non-metropolitan British Columbia averages. Income averages \$28,700 (\$1991) for males and \$15,200 (\$1991) for females. Less than 40 per cent of the labour force has a high school diploma. The majority of workers are employed in the service sector. Outside Rubytown and Rapid City, resource and manufacturing sectors generally provide the largest share of employment. Unemployment rates are high for the labour force aged 15 to 24 years (28 per cent compared to 20 per cent for British Columbia).

It should be noted that, on average, education levels are lower and unemployment rates are two times higher for aboriginals compared to non-aboriginals. The aboriginal labour force is primarily employed in forestry and public administration.

Education and training opportunities are available at the community college offices in Rapid City and Merryville. In general, social services are most readily available in Merryville, Milltown and Rapid City, although outreach workers circulate through most of the LRMP communities.

The topography of the Diamond LRMP area is varied. In the west and south, the landscape is gently rolling with wide river valleys and several large lakes, including Diamond and Merry Lakes. The north-eastern region is covered with small and medium-sized lakes, rivers and a few mountain peaks that are greater than 2,000 metres above sea level. The north-eastern portion of the region receives significantly higher precipitation than the south and west, and therefore has denser forests and less rangeland.

The entire LRMP falls within four ecosections. Five biogeoclimatic zones can be found within the boundaries: interior cedar-hemlock; Engelmann spruce-subalpine fir; alpine-tundra; montane spruce; and, interior Douglas-fir.

The planning area is home to a number of rare, threatened or endangered species including bighorn sheep, burrowing owls and a rare species of stickleback fish.

Two rivers are significant in the area. The Rapid River, draining south-west into Cat Lake and the Columbia basin, is known provincially for its recreational opportunities such as white-water rafting, kayaking and canoeing. It passes through several scenic corridors that attract tourists year-round. Equally important is the Merry River which also drains into the Columbia basin. This river has regionally significant steelhead trout spawning grounds that support sport fishers throughout the drainage. The Homestead Valley, located between Merry and Sam's rivers, has very productive soils that support a large agricultural community.

Four major economic sectors are supported by the Diamond LRMP's land resource base: forestry, tourism, agriculture and mining. The area supports an estimated 3,850 person-years of employment in these four sectors, generating gross revenues of \$798 million (\$1991).

The economy of the Diamond LRMP area is tied closely to natural resource development. Historically, the economic drivers for the area were mining and forestry. Today, the largest employer, when secondary and tertiary services are considered, is the forest industry. The second largest employer is tourism and related services. For the past several years, both Rapid City and Scenicvale's economies have been closely tied to new resort developments which attract visitors year-round. Several adventure-tourism businesses have also been very successful in the past five years. In particular, the river resources (white-water rafting, canoeing, scenic viewing and sport fishing) draw tourists to this area.

While historically important, agriculture and mining now contribute fewer jobs and dollars to the local economy than forestry and tourism. Agriculture is concentrated in the valley bottoms with the largest number of farms and ranches located in the western part of the LRMP area. Mining activity is scattered and includes quarry, sand and gravel operations as well as exploration and evaluation of undeveloped base and precious metal deposits.

1.2 Location

This map shows only the south-east quarter of the Diamond LRMP area. The source map was drawn at a scale of 1:250,000. It was reduced to fit the format of this report.

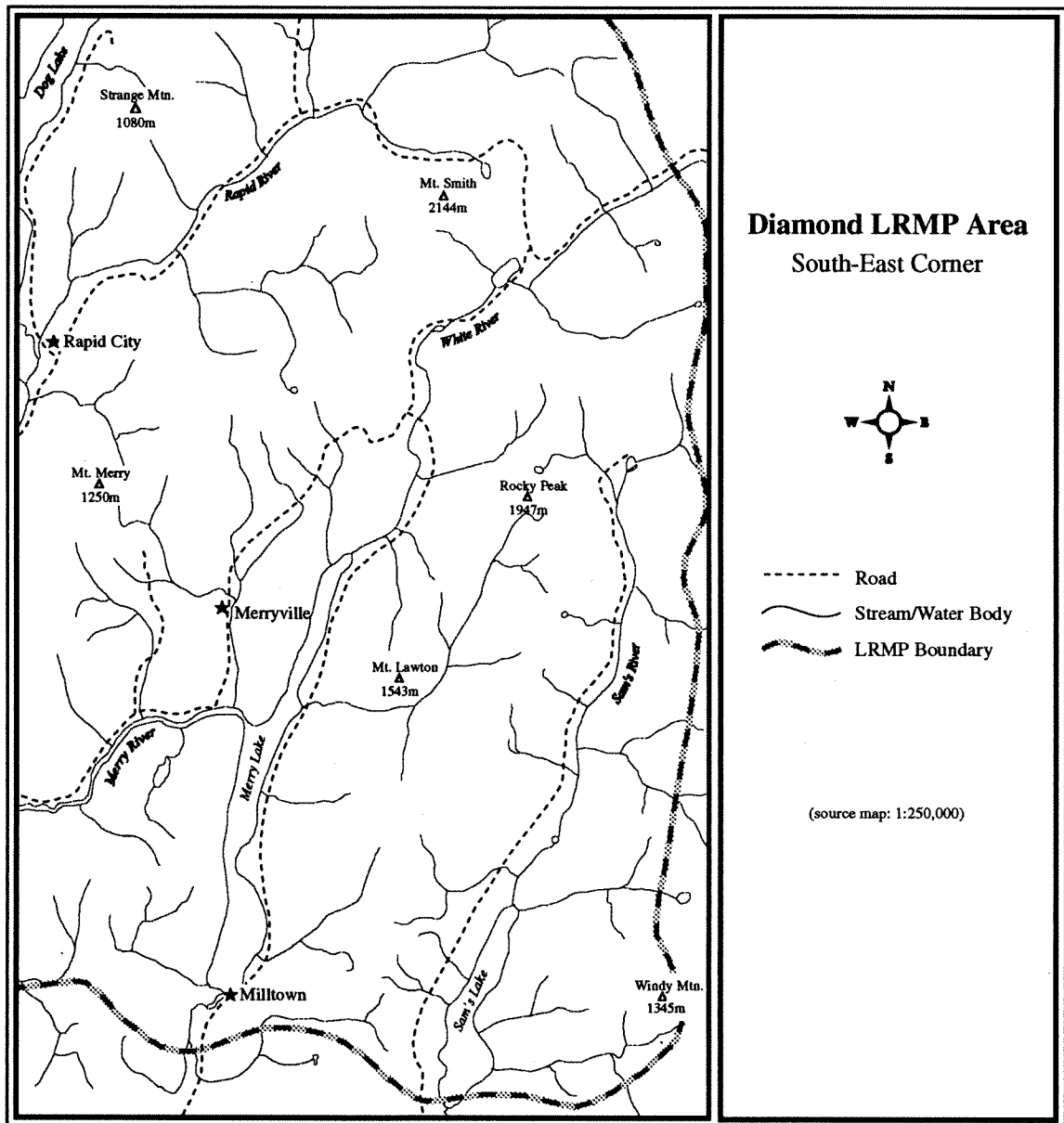


FIGURE 1. Diamond LRMP area, south-east corner.

1.3 Land use planning history

The history of Crown land use and resource management planning for the Diamond LRMP is similar to other Crown land in the province. While many government agencies are involved in all aspects of Crown land and resource management, the Ministry of Forests and the Ministry of Environment, Lands and Parks have most often taken lead roles in planning processes.

A Timber Supply Area Plan was completed by the Ministry of Forests in 1987, and provided general instructions for timber use to timber licensees in the area. This plan made limited references to the impacts of timber harvesting on other resource values such as wildlife and recreation.

The Protected Areas Strategy process has provided important information to the Diamond LRMP. Started in 1991 as Parks and Wilderness for the 90's, several public meetings were held in this area to solicit input on proposed protected areas. After receiving this public input, further technical analysis was completed and provided to the Diamond LRMP process participants so that they could recommend areas for protection.

Official Community Plans have been completed for three areas within the Highland Regional District.

Local resource use plans (LRUPs) have been completed for three areas within the Diamond LRMP and two plans are still in progress. The completed plans are: Dusty Plateau Coordinated Access Management Plan (Ministry of Forests, 1992), Long Lake LRUP (Ministry of Forests, 1990) and Rapid City Integrated Watershed Management Plan (Ministry of Environment and Ministry of Forests and Lands, 1989). The unfinished plans are: Rubytown Integrated Watershed Management Plan (Ministry of Environment, Lands and Parks and Ministry of Forests, due to be completed in 1995) and Merry Reach LRUP (Ministry of Forests, begun in 1993 and due to be completed in 1995). Both these planning processes are continuing at a slower pace, pending the approval and implementation of this LRMP.

The information gathered during the LRMP process and the management strategies provided in this plan will provide direction to both these local planning processes, and completed local plans will be reviewed to ensure that they are consistent with the sub-regional plan (see Section 3.0 Implementation).

The Diamond LRMP process was initiated in 1992 by the regional managers as a result of a regional review of planning priorities. The LRMP process addresses all resources in an integrated manner, is consensus-based and provides strategic land use and resource management direction to all operations on Crown land in this area.

1.4 Process

The following sections on vision and objectives are extracted from the *Terms of Reference* for the Diamond Land Resource Management Plan.

1.41 Vision

The vision of the Diamond Land and Resource Management Plan is to provide strategic direction to government agencies on land use and resource management in the Diamond region by involving all interested and affected people in a consensus-based planning process. Three key principles are to be respected in the Diamond Land and Resource Management Plan: sustainability of all resources; integrated resource management; and, maintenance or enhancement of local quality of life.

1.42 Objectives

In order to achieve this vision, the objectives of the LRMP process were:

- to provide all levels of government, the general public and First Nations opportunities for direct participation throughout the LRMP process. All participants will design and agree to follow a terms of reference that includes procedures for consensus-based decision making and conflict resolution;
- to assemble a knowledge base and conduct analysis which will support the LRMP table in identifying important areas for all resources and developing a consensus management direction. The knowledge base includes formal inventories, local knowledge and expert opinion and reflects environmental, social and economic values. If information is unavailable, then this will be noted and the process will continue to avoid undue delays;
- to divide the LRMP area into resource management zones that are based on a combination of resource use and bio-physical characteristics;
- to negotiate a consensus on resource management objectives and strategies for each resource management zone that conform to provincial legislation, policy and guidelines and that reflect the principles of sustainable development so as not to compromise the opportunities of future generations;
- to develop strategies based on careful review and consideration of multi-resource and socio-economic impact analyses; and,
- to work as a team where all participants' values are important and the final product is a plan that all participants support.

1.43 Timeline

- | | |
|----------------|--|
| March 1992 | • the Diamond regional managers approved the start of the Diamond LRMP process and appointed Pat Jones as the planner in charge of coordinating the process |
| April 1992 | • agencies formed an inter-agency planning team (IPT) and appointed Chris Hamoto as the chairperson |
| April 1992 | • first general public meeting where agencies solicited direct participation in the LRMP process |
| May 1992 | • first meeting of public representatives and the IPT, with an independent facilitator; Chris Hamoto is endorsed by all participants as chairperson of the Diamond LRMP Steering Committee (a combination of the IPT and public representatives) |
| August 1992 | • Terms of Reference approved by the regional managers |
| September 1992 | • the Tikwina'lan Nation agrees to send representatives to LRMP meetings and to provide information on aboriginal values to the process (the Dlanootga Nation chooses not to participate in the LRMP process, although they are repeatedly invited to attend during the following year and a half) |
| February 1993 | • base cases (social, economic and environmental profiles of the planning area) are presented to the steering committee for review; information assembly continues to help identify important areas for all resources |
| June 1993 | • a preliminary list of areas of agreement and areas of disagreement (based on resource management zones) is presented to the general public for review and comment at a series of open houses—public input is used to build scenarios |
| October 1993 | • final resource management zones with management objectives and strategies are agreed upon after considering the results of social, economic and environmental impact analyses |
| November 1994 | • general public comment on the consensus management direction is solicited at a public meeting and during individual appointments with various user groups |

- | | |
|---------------|---|
| January 1994 | <ul style="list-style-type: none"> the final draft of the consensus management direction is reviewed by the regional Inter Agency Management Committee (IAMC); it requests clarification of proposed management strategies for resource management zone #8 |
| February 1994 | <ul style="list-style-type: none"> the Diamond LRMP participants submit the requested clarification to the regional Interagency Management Committee; the review of the report is completed and comments are attached, and it is forwarded to the Assistant Deputy Minister, Land Use Coordination |
| February 1994 | <ul style="list-style-type: none"> the Assistant Deputy Minister, Land Use Coordination reviews the Consensus Management Direction and then presents it to Cabinet for decision (the area includes protected areas recommendations); Cabinet Ministers approve the report |
| March 1994 | <ul style="list-style-type: none"> government publishes the Diamond Land and Resource Management Plan and participants host several open houses to inform the general public of government's final decision |
| April 1994 | <ul style="list-style-type: none"> the participants establish a monitoring committee to monitor the implementation of the Diamond LRMP; copies of the final plan are distributed to all agencies, licensed resource users and interested members of the public |

1.5 Principles for participation

Key participants in the LRMP process were government agencies (federal, provincial and local), First Nations, local communities, special interest groups and resource users. The LRMP process was also designed and carried out to satisfy the needs of the general public. In order to ensure a credible process, all participants were treated fairly. This included ensuring ability to attend meetings, access to information, opportunities to express interests and influence final decisions.

To meet these principles, agency participants:

- asked all public interests how they wanted to be involved in the process before the terms of reference were established;
- provided limited funding to public participants to off-set travel costs to and from meetings and provide access to office services;

- ensured that decisions were consistent with the LRMP policy and that consensus was the ultimate goal (consensus was defined by all participants and is outlined in the Appendices);
- ensured that all participants had equal access to information;
- involved participants in the information gathering process, including the use of local knowledge and expert opinion; and,
- ensured that the process was consistent with the *LRMP Public Participation Guidelines*.

In addition to the above, the Diamond LRMP participants:

- provided encouragement to First Nations to participate throughout the LRMP process. First Nations participation in the Diamond LRMP process helped meet the objectives of provincial policies on interim measures; and,
- sought participation by First Nations without prejudice to aboriginal rights and interests and treaty negotiations.

The provincial government seeks to establish a new relationship with aboriginal people in British Columbia. This relationship is first and foremost a political one between the elected provincial government and the political organizations and associations representing the aboriginal people of British Columbia. It is characterized as being a government-to-government relationship with the First Nations of British Columbia and is based on a commitment to build a new, equal relationship with aboriginal people in the province; a relationship that is built on mutual trust and respect for aboriginal leadership and protocol, and recognizes that First Nations are not simply another interested public stakeholder.

A complete list of participants in the Diamond LRMP process is provided in the Appendix, Section 5.1. Section 5.2 describes their definition of consensus which was the basis for all decisions during the planning process.

2.0 Management direction

The following sections summarize the preliminary plan scenarios considered by the table, the consensus scenario, descriptions of each resource management zone, and present the objectives, strategies and future desired conditions for each zone that was defined during the course of the Diamond LRMP process. (This document only provides detailed information on the south-east portion of the full Diamond plan area. Further resource management zones may be developed in the future to illustrate other land and resource management issues.)

The recommended resource management zones and the specific objectives and management strategies for each resource management zone are the heart of the Diamond Land and Resource Management Plan. The objectives for each zone correspond to specific values that were articulated by the LRMP participants. The accompanying management strategies have measurable indicators that will help planners to monitor the effects of the plan over time.

Along with indicators, the plan describes a desired future state of resource values for each objective. The desired future state is a vision statement that illustrates land and resource conditions as management is changed over time. It is intended to help those people implementing the plan to understand the long-term land and resource use goals of the participants in the Diamond LRMP.

2.1 Base case and scenarios (analysis and assessment)

At the start of the analysis process, a base case of current environmental, economic and social conditions and trends was described. Concurrently, information on important areas for each resource (e.g., critical habitat areas, high mineral potential sites) was gathered and management objectives were discussed.

As the planning process proceeded, the base case was expanded to include a prediction of the future situation—projecting what would happen in the absence of an LRMP. This component of the base case reveals why an LRMP is needed (by identifying future conditions which do not meet sustainability objectives) and it provides a comparison point for the evaluation of alternative plan scenarios.

In the process of arriving at a consensus management direction, two different scenarios were created by LRMP participants to help explain the implications of the proposed land use designations and strategies for the planning area. The scenarios focused on areas that showed management priorities for more than one resource and that resulted in potential management conflicts.

Resource analyses (including resource impact assessment) and social, economic and environmental (SEE) impact assessments were then completed for these scenarios. This analysis assisted participants in reaching agreement on final resource management zone boundaries and strategies. After the consensus scenario was developed, another set of resource analyses and SEE impact assessments were performed to describe the possible impacts of the consensus. The preliminary scenarios as well as the final consensus scenario are described briefly in the next section.

A summary of the critical resource impact assessment and SEE impact assessment results are given in Appendix 5.5 to this plan. For further information on the base case, the resource analysis, or the SEE impact assessments, full documents relating to each of these subjects are available at the Government Agent's office in Rapid City.

2.11 Base case

The base case includes both a description of the current situation in the plan area ("status quo") and a forecast of the future ("status quo projection").

The description of the "status quo" presents information on the type and amount of resources, economic activities and social attributes that exist in the planning area at this time. In the analysis, the "status quo" is then projected 50–100 years into the future in order to portray the most likely outcomes under a continuation of current land and resource plans and policies in the absence of the recommendations of the LRMP process.

The "status quo projection" begins with an assessment of the anticipated physical changes in resources (e.g., X fewer hectares of roadless backcountry areas) in the absence of a land use plan. The resource impact assessment results are then used to generate predictions of social, economic and environmental conditions. The "status quo projection" provides the benchmark against which the outcomes of alternative land use patterns and management strategies can be compared.

The following material summarizes the existing resources and socio-economic situation in the planning area and identifies some important future concerns under status quo management.

The Diamond region supports a high quality natural environment. The plan covers a total area of 2,052,700 hectares. It includes four ecosections, five biogeoclimatic zones, two significant river systems and eight major community watersheds.

A wide array of fish and wildlife species are to be found in the area including a provincially significant population of rainbow trout, a rare species of stickleback, bighorn sheep, grizzly bears, burrowing owls and a number of sport fish and

game species. Approximately 103,000 hectares of high capability critical habitat have been identified, which includes habitat for threatened, endangered or sensitive species, winter range for white-tail deer, summer range for moose, wetlands and riparian areas. Under the base case projection, a loss of approximately 50 per cent of this critical habitat is anticipated.

There is one large protected area (86,000 ha) in the region. In addition, 2,230 ha are currently designated as a wildlife management area for bighorn sheep. The planning area contains significant portions of unroaded wilderness, totaling 720,000 ha (35 per cent of the land base). This is projected to decline to 450,000 ha (22 per cent) under the base case. Roadless natural areas below 5,000 metres are anticipated to decline even further (from 5 per cent to just under 2 per cent).

The area's rich wildlife resource, outdoor recreation features and scenic qualities attract a large number of tourists each year, resulting in an expanding hotel industry and growing adventure-tourism businesses. This sector provides employment to 1,190 people, including 40 guide-outfitters. Since many of these jobs are seasonal, total employment in tourism is 667 person-years of full time employment. Tourism jobs are predicted to increase slightly under the status quo, but much of the potential for wilderness tourism is not realized in the base case.

A visual quality objective (VQO) of modification (meaning that there are few restrictions on timber harvesting) along some portions of highway corridors has caused concerns, particularly with respect to the impact on local tourism opportunities. This has prompted a recent memorandum of understanding between the Ministry of Forests and Ministry of Small Business, Tourism and Culture allowing only selection harvesting in these corridors pending plan completion.

The 175 farms in the LRMP area employ 212 people full-time and support an additional 450 on a seasonal basis (the equivalent of 200 person-years). Agricultural development in the Homestead Valley has furthered the growth of an agricultural supply/service industry in Rapid City.

For the Diamond LRMP area, a total of 995,000 ha is considered to be net operable forest land available for timber harvesting. This figure reflects constraints legally required under the Forest Practices Code. The current allowable annual cut from this land base is 3.2 million m³/year. The long run sustainable yield for this region is estimated at 2.8 million m³/year.

Current direct employment in the forestry industry is 2,530 person years. The estimated employment at Long Run Sustained Yield is between 2,000 and 2,200. Approximately half of the timber harvested is processed within the plan area by three sawmills, a fiberboard processing plant and a cedar shake mill in Milltown.

This region offers an attractive lifestyle to the people in the planning area, although unemployment is a concern. The high quality environment, with good water and air quality, beautiful scenery, and abundant outdoor recreational opportunities is very important to local residents. Quality of life is anticipated to be reduced under the status quo due to diminished water quality and generally lower environmental quality for the region, and the loss of wilderness recreation opportunities.

Inability to find work is the principal concern and most common reason for leaving the area, particularly among the young. Access to higher education and better medical care are secondary factors. The base case results in people leaving the areas due to both job losses and reduced quality of life factors.

2.12 Scenario 1

This scenario emphasizes managing for biological diversity, greater protection for critical fish and wildlife habitats, water quality and quantity, and visual quality objectives.

In Scenario 1, the implications of setting aside five candidate protected areas are examined. Grazing is not permitted in any of these protected areas. In addition, a series of forest ecosystem networks are established to provide contiguous forest cover between lowland and high elevation areas and between protected areas. Riparian areas of this network, which exceed the width requirements as set out by the Forest Practices Code, remain largely intact. Upland areas of the network within the operable timber land base are available for harvesting only when adjacent previously harvested areas attain old growth characteristics.

Stream rehabilitation is proposed to restore some areas damaged through previous logging and other development activities.

For the visible areas adjacent to Highway 14 (to Rapid City), a visual quality objective of partial retention is used. Highway 65 (which cuts through a portion of the northern part of the plan area) is assigned a visual quality objective of retention.

2.13 Scenario 2

This scenario applies the same assumptions as those in Scenario 1 with the exception that only three of the five proposed protected areas are included and livestock grazing is allowed in two of these areas. Also, the implications of establishing two wildlife management areas are examined: a 2,500 ha area for elk and 15,000 ha area for grizzly bear.

2.14 Consensus scenario

The consensus scenario, as reflected in this document, was reached after participants reviewed the forecasted impacts of the three previous scenarios and negotiated a mutually acceptable management direction.

The LRMP participants believe that the consensus scenario provides the most acceptable balance in terms of environmental conservation and the protection of the industrial and other employment opportunities.

Although only one of two local First Nations participated directly in the planning process, separate discussions held with the Dlanootga Nation also indicated that the consensus scenario best provides employment opportunities for First Nations while retaining environmental values that are intricately linked to native spiritual, cultural and sustenance uses.

In this scenario, three protected areas are proposed. This results in a large increase in total protected area—from 86,000 ha to 255,000 ha.

Management for biological diversity is stressed throughout the planning area, but corridors in some ecosystem networks (particularly those in the high intensity resource development zones) are reduced in width (compared to scenarios 1 and 2) to meet, but not exceed, the standards of the Forest Practices Code. Compared to the base case, total area of critical wildlife habitat is reduced from 103,000 to 78,300 ha.

Stream rehabilitation will be undertaken to restore some areas damaged through previous logging and other development activities. This results in an increase in high capability stream habitat.

Existing livestock grazing tenures in the three protected areas will be continued. Agricultural expansion occurs in the Homestead Valley zone.

Management for visual quality in the plan area is significantly increased, except in high intensity resource development zones. The visual quality objective along major highway and river corridors is a combination of retention and partial retention.

Further expansion of tourism, particularly commercial backcountry recreation (river rafting, sport fishing, etc.) will be promoted through a program of active marketing. This is supported by an increase in protected areas. However, roadless natural areas below 5,000 m are reduced from 100,000 ha to 60,000 ha.

Approximately 14 per cent of the plan area is designated as high intensity resource development zones to promote resource industry stability and investment. The net operable forest land base is reduced from 995,000 ha to 927,400 ha (7 per cent). Total highly productive forest available for harvest is

decreased from 190,200 to 165,600. At the same time, the implications of an expanded botanical forest products and woodlot license program are examined to ensure sustainability of small scale forestry in this area.

2.2 General management direction

As noted in Section 1.4, three key principles are to be respected in the Diamond LRMP: sustainability of all resources; integrated resource management; and, maintenance or enhancement of local quality of life. The management objectives and strategies that follow in this section are based on these principles.

The Diamond Land and Resource Management Plan includes a wide array of geographical landscapes and ecosystems. Consequently, there are many different types of land use. In order to address this diversity, it is necessary to describe objectives and strategies for each resource management zone.

The Diamond LRMP participants agreed that there are some resource management objectives that should apply to all land and resources within the planning area. They are:

- to maintain or enhance biodiversity. Specific management will occur at the landscape level and will ensure conservation of a mix of major ecosystems over time;
- to maintain aquatic and terrestrial habitat and populations;
- to maintain the Agricultural Land Reserve;
- to optimize the use, at sustainable levels, of the food production resource base to supply food market demands;
- to ensure that a full range of outdoor recreation and tourism opportunities are available and that special recreation and tourism values are identified and maintained in all resource management zones;
- to maintain the land base best suited for timber production (site classes good and medium);
- to maintain views and air quality near facilities and areas identified as having a high-capability for tourism or recreational use;
- to ensure that air quality is protected for future generations;
- to protect quality and quantity of ground and surface water;
- to ensure that domestic water users have access to a continuous supply of clear and potable water. It is recognized that natural processes can occur that are beyond the control of resource managers, but that it is possible to minimize the impacts of resource development on domestic water supplies;

- to maintain access for exploration and development of mineral and petroleum resources across all resource management zones except protection; and,
- to ensure archaeological and cultural sites are not compromised by resource development. This includes making a continued effort to work with First Nations to locate those places that are historically or culturally important.

To achieve these objectives, all existing legislation, regulations and standards for Crown land and Provincial Forest management will apply, as well as the following resource management zone objectives and strategies.

2.21 Forest Practices Code

The Diamond Land and Resource Management Plan is a higher level plan as defined under Part 1 of the Forest Practices Code of British Columbia Act. As per Part 3 of the Act, all operational plans prepared pursuant to the Act must be consistent with this plan. The relationship between the Forest Practices Code and resource management zones described in this plan is presented in Section 3.1.

2.3 Resource management zone objectives and strategies

LRMP participants can use any combination of the six broad zones noted below to illustrate the general management regime for the plan area. One zone, low intensity resource development, is divided into three sub-categories that may be used to describe land use and resource management in greater detail.

1 Settlement

- currently used or proposed for settlement use by an Official Community Plan, Crown Land Plan or Land and Resource Management Plan;
- primarily planned and managed by local government under the *Municipal Act*;
- may include lands currently used for agriculture, water supply and forestry;

2 Agriculture

- lands in the Agricultural Land Reserve and other lands, including foreshore and water source and storage areas, currently used or proposed by a Land and Resource Management Plan for use for food production activities;

3 High intensity resource development

- those areas identified, on the basis of suitability, for intensive development of resources such as timber, minerals, petroleum and destination resorts;
- resource development activities are subject to all provincial regulations (e.g., the Forest Practices Code of British Columbia Act);
- guidelines for managing other resource values will be applied in a way that recognizes the resource development priority of the zone;
- investments in resource development and enhancement are encouraged;

4 General resource development

- these areas are to be managed for a wide array of resource values and permissible uses;
- guidelines for non-extractive resource values may modify resource development activities;
- investments in resource development and enhancement are encouraged where these do not conflict with other management objectives;

5 Low intensity resource development

- these are areas for which the conservation of one or more resource values, such as habitat, recreation, scenery and community watersheds, are a priority;
- resource development activities may be subject not only to provincial regulations and guidelines, but also to more comprehensive resource conservation strategies;
- these areas are frequently a high priority for the completion of more detailed local plans;

A Low intensity resource development – natural habitat

- areas with sub-regional to provincial significance for plant and animal habitat;

B Low intensity resource development – scenery and recreation

- areas with sub-regionally to provincially significant scenery and recreation values;
- does not include large areas where intensive commercial recreation use may occur—these areas are accommodated in either the high intensity or general resource development zones;

C Low intensity resource development – community watershed

- designated community watersheds are included in this category;

6 Protection

- areas protected for their natural, cultural heritage and/or recreational values as defined by the Protected Areas Strategy;
- logging, mining and energy exploration and development are prohibited; and,
- government is currently considering five sub-categories for this zone—preservation; wilderness; natural areas; cultural heritage; and, recreation.

In addition, each polygon is identified by a geographic label (i.e., Sam's River or Merry River).

A matrix of the RMZs and typical resource uses or activities is in the Appendix (Section 5.4). It illustrates the range of opportunities for each activity within each RMZ category. These activities or uses may also be further defined or constrained by the objectives and strategies for each RMZ described in the following sections of the plan.

The map on the next page illustrates the zone boundaries for the south-east corner of the Diamond LRMP area.

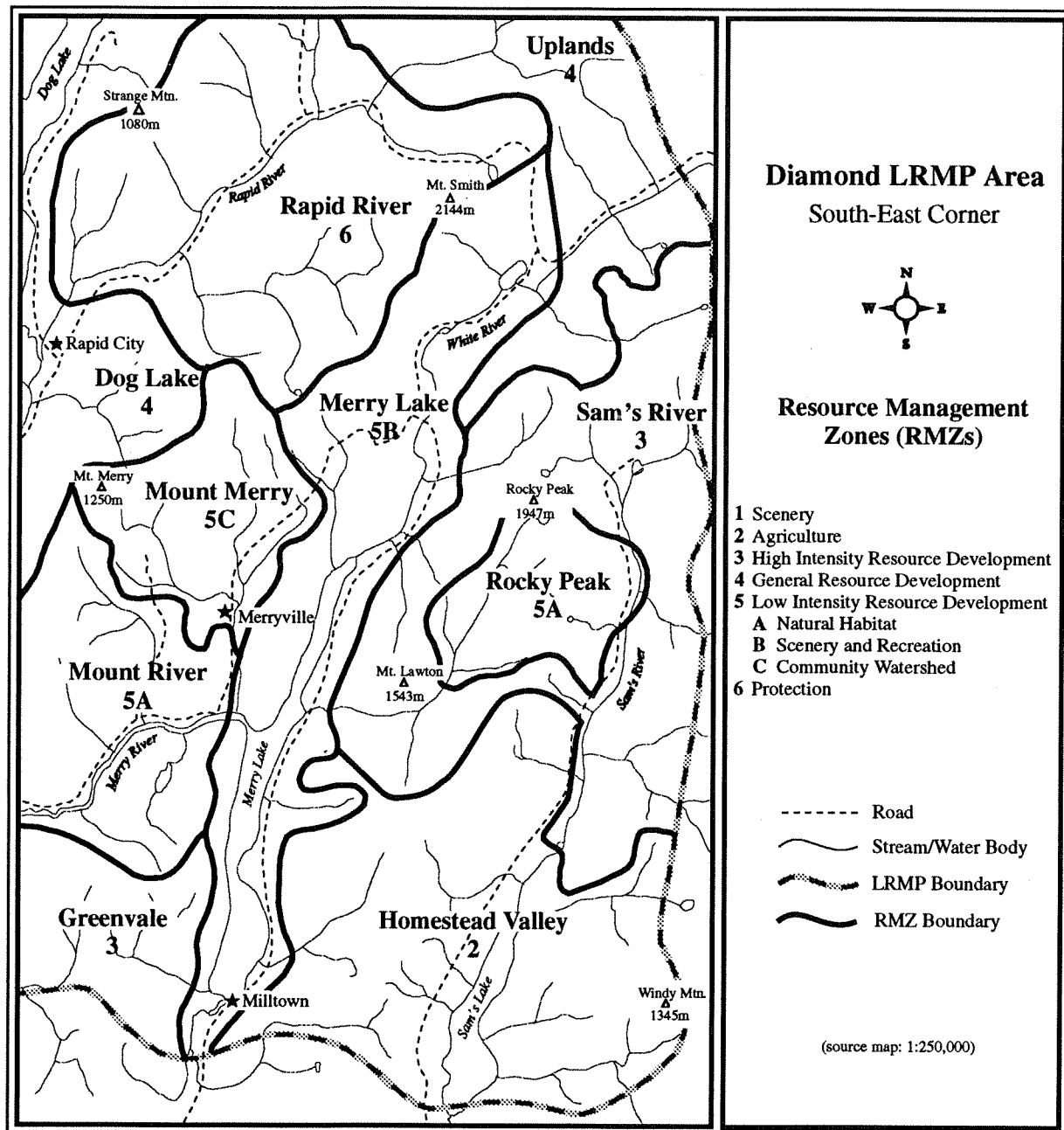


FIGURE 2. Resource management zones in the south-east corner of the Diamond LRMP.

The following sections describe management objectives and strategies for selected zones in the south-east corner of the Diamond LRMP area.

**2.31 Merry River (low intensity resource development
– natural habitat)**

2.311 Description

Approximately 22,300 hectares in size, this area contains the Merry River and its tributaries. These are identified by the Department of Fisheries and Oceans and the Ministry of Environment, Lands and Parks as regionally important steelhead habitat.

The northern and southern portions of this zone are bounded by watershed divides. In the north, the topography is moderately steep, with deep river and creek valleys that are susceptible to water erosion and landslides. The entire zone receives moderate rainfall.

Registered trap lines cover the zone and are actively used. Three guide outfitters also use this area. Seasonal range use occurs in the area south of Merry River.

In addition, the Merry River area is heavily used in summer months by outdoor recreation enthusiasts who enjoy fishing, hiking and camping. In the fall, hunters frequent the area and in winter snowmobilers enjoy the roaded access. While there are no major settlements in the zone, numerous seasonal recreational homes are scattered along the Merry River. Most of these are located on Crown land leases.

2.312 Resource management objectives and strategies

Primary objectives for the Merry River RMZ are to:

- maintain and enhance the wild steelhead population;
- maintain or improve habitat for aquatic furbearers;
- maintain water quality and quantity; and,
- maintain visual quality in areas of high scenic quality.

The following uses are permitted and encouraged so long as they do not have a negative impact on the primary objectives:

- access for recreational hunting and fishing, and all forms of non-motorized recreation;
- standard timber harvesting; and,
- mineral exploration and development.

The following table outlines the resource or value specific objectives for resource management in the zone and the strategies for achieving those objectives.

Summary objectives	Strategies
Maintain and Enhance Wild Steelhead Habitat	<ul style="list-style-type: none"> Establish and maintain riparian zones to the maximum standard set by regional guidelines and the Forest Practices Code Rehabilitate riparian zones that do not currently conform to these strategies Restrict residential, recreational and resource development in proximity to the Merry River and its tributaries
Maintain Visual Quality in Priority Areas	<ul style="list-style-type: none"> Identify areas of high scenic quality Apply landscape management and design criteria Areas of high visual sensitivity, such as travel corridors and recreation areas, will be managed to meet a mix of retention, partial retention and modification VQOs. Areas of high visual quality will be managed to meet more restrictive VQOs
Maintain Water Quality and Quantity	<ul style="list-style-type: none"> Maintain instream flow requirements for steelhead Restrict direct discharge of waste water into lakes and streams Monitor aquifer levels and quality of water
Maintain or Improve Habitat for Aquatic Furbearers	<ul style="list-style-type: none"> Note high-capability habitat areas and provide management direction in lower-level plans Ensure that trap-line license holders are consulted before development permits are issued
Encourage Non-motorized Recreation	<ul style="list-style-type: none"> Restrict access to riparian management areas to walk-in only Assess opportunities for interpretive programs on fisheries management in high-use recreation areas
Encourage Timber Harvesting Without Compromising Priority RMZ Objectives	<ul style="list-style-type: none"> All development plans and cutting permits must conform to existing standards, guidelines and the management strategies outlined for this zone No more than 20 per cent of zone can be in an equivalent clear-cut area Following timber harvesting, all roads must be deactivated by licensees and managed until visual green-up is achieved (three metres) Selection harvesting and other alternative silvicultural systems should be encouraged throughout the zone

2.313 Desired future state

Summary RMZ objectives	Year 2004	Year 2044	Monitoring indicator
Maintain and Enhance Wild Steelhead Habitat	<ul style="list-style-type: none"> intact riparian management areas 	<ul style="list-style-type: none"> same as 2004 	<ul style="list-style-type: none"> number of adults returning into river and streams width and habitat quality of riparian management areas
Maintain Water Quality and Quantity	<ul style="list-style-type: none"> adequate supply and quality for all designated water users 	<ul style="list-style-type: none"> same as 2004 	<ul style="list-style-type: none"> number of angler user days turbidity levels
Maintain Visual Quality in Priority Areas	<ul style="list-style-type: none"> minimum VQO of partial retention in areas of high visual quality 	<ul style="list-style-type: none"> minimum VQO of retention in areas of high visual quality 	<ul style="list-style-type: none"> visual impact assessment (per cent alteration, design criteria and existing visual condition)
Maintain or Improve Habitat for Aquatic Furbearers	<ul style="list-style-type: none"> continued occurrence of aquatic furbearers in zone 	<ul style="list-style-type: none"> increased occurrence of aquatic furbearers in zone 	<ul style="list-style-type: none"> number of active trap-lines annual royalties collected
Encourage Non-Motorized Recreation	<ul style="list-style-type: none"> all roads that were not used for management activities in 1994 are now closed and reclaimed new trails developed to access Merry River 	<ul style="list-style-type: none"> all recently deactivated sites have roads closed and reclamation is started increased opportunity for non-motorized recreation 	<ul style="list-style-type: none"> area of roads reclaimed number of km of new trail development
Encourage Timber Harvesting Without Compromising RMZ Objectives	<ul style="list-style-type: none"> increased harvest levels 	<ul style="list-style-type: none"> maintained harvest levels 	<ul style="list-style-type: none"> m³/hectare number of reported incidents of non-compliance number of returning steelhead adults in streams and rivers

2.32 Homestead Valley (agriculture)

2.321 Description

The Homestead Valley RMZ is located in the south-east corner of the Diamond LRMP. It is approximately 28,000 hectares with 60 per cent of the lands included in the Agricultural Land Reserve (ALR). Seventy-five per cent of the ALR is privately held and 25 per cent is Crown land. The combination of good soils, a favorable climate and water for irrigation results in this zone having very high agricultural capabilities.

The zone is predominantly benchlands that are remnants of an ancient lake bed. Its borders on the north and east sides consist of forested uplands and grasslands suitable for grazing. Principal topographic features include Sam's Lake and its tributaries and the Homestead Plateau. Bunchgrass areas provide seasonal habitat for bighorn sheep and numerous species of birds. The forested uplands include second growth Douglas-fir as well as some pockets of old-growth Engelmann-spruce.

Water quality and quantity are critical issues in this zone in order to support the agricultural industry, domestic use and fish populations. Currently, irrigation water sources consist of several water storage reservoirs located on Crown land.

The major commercial enterprise is cattle ranching which is dependent on Crown grazing leases and other range tenures within and outside the zone. Crown grazing is critical to ranching operations for spring, summer and fall pasture.

This zone supports a wide range of cropping enterprises including horticultural crops, grain and forage production. Livestock operations include beef, sheep, horse and fallow deer. Recently, several farms have diversified into ginseng production and commercial rainbow trout production. Timber production potential is also good in some areas.

Sam's Lake has wild populations of rainbow trout, kokanee, redbside shiners, largescale suckers and northern squawfish. These populations support a significant sport fishery enjoyed by locals as well as providing recreation for tourists. An extensive tributary drainage network provides spawning and rearing habitat. The primary sport fish, rainbow trout, require year round rearing in the tributary streams because of interactions with competitor and predator species.

Tourism has recently become an economic influence in the area. A number of farms and ranches are providing accommodation and recreation services. As well, there are many road-side stands catering to seasonal demands for fresh produce.

While no urban centres are located within this RMZ, over 100 farms of varying size are scattered throughout the zone. Ten woodlot licenses and two forest licenses also operate within the zone. Residents rely on Milltown to the east or Richmond to the south for most of their servicing needs.

2.322 Resource management objectives and strategies

Primary objectives for the Homestead Valley RMZ are to:

- maintain the limited supply of land having food-production capability;
- maintain and improve the quality and quantity of productive soils for current and future crop production;
- provide opportunities for the growth and expansion of agriculture, fisheries and food sectors; the predominant objective is to utilize at sustainable levels the capability of the food production resource base to supply current and future food market demand;
- enhance agriculture industry access and use of Crown resources including land, grazing and water tenures;
- provide opportunities for the growth of tourism; and,
- maintain the quantity and quality of water supplies required for current and future crops, livestock, fish (both farmed and wild) production as well as domestic use.

Secondary objectives include:

- to maintain and encourage timber management for small businesses and woodlot licensees.

Summary objectives	Strategies
Maintain Land Supply for Food Production	<ul style="list-style-type: none"> • Ensure the integrity of the ALR through the <i>Agricultural Land Commission Act and Regulations</i>
Conserve or Improve Soil Productivity	<ul style="list-style-type: none"> • Promote sustainable soil management practices through the Green Plan for Agriculture • Apply provisions of the <i>Soil Conservation Act</i> • Implement a benchmark soil survey to establish the current status and a periodic monitoring system to ensure conservation
Provide Opportunities for Growth of Agriculture	<ul style="list-style-type: none"> • Minimize impacts of other land and water use activities on agriculture and aquaculture • Apply provisions of the Agricultural Protection Section of the <i>Municipal Act</i> • In forested areas of low value for timber production, encourage conversion to range through clearing and prescribed burning or, where suitable, to crop production (as noted in Inventory Report #2) • Implement an industry/government food security public awareness program
Enhance Agricultural Access and Use of Crown Resources	<ul style="list-style-type: none"> • Apply range and livestock management techniques to ensure sustainability of browsing and forage resources • Promote range improvement projects including reseeding, fertilizer application, irrigation, fencing, weed control, livestock watering site, livestock enclosures and stock trails in areas identified as having high capability for forage production • Encourage integrated use of forest lands such as sheep and cattle grazing in recently logged areas • Promote botanical forest products enterprises such as commercial mushroom harvesting • Minimize conflicts with other land use activities which may negatively impact on range productivity and sustainability, such as ATV use in sensitive areas and the spread of noxious weeds, through community education and prescriptions in operational plans

Summary objectives	Strategies
Provide Opportunities for Growth of Tourism	<ul style="list-style-type: none"> • Ensure that areas of very high tourism capability are identified with notations of interest on Crown land maps • Promote development of agri-tourism business associations and linkages with other tourism associations and government programs • Conduct a market needs analysis for small business opportunities in agri-tourism such as bed and breakfasts, vacation and recreation services
Maintain Quality and Quantity of Water	<ul style="list-style-type: none"> • Continue to monitor aquifer levels and water quality • Establish land use regulations for activities in ground water recharge/discharge areas • Apply the Code of Agricultural Practice for Waste Management (1992) under the Agricultural Waste Control Regulation, B.C. Reg. 131/92 of the <i>Waste Management Act</i> • Retain a reserve of undisturbed vegetative cover along all streams on Crown land and encourage the retention of leave strips along streams on private land through tools available under the <i>Municipal Act</i> • Ensure appropriate application volumes/rates for fertilizers and pesticides • Enforce Forest Practices Code standards and guidelines for grazing adjacent to watercourses and waterbodies • Strictly enforce silviculture prescriptions for all licensees operating within the Sam's River, Sherry River and Manning Creek drainages • Ensure minimum flow requirement for maintenance of fish populations
Encourage Small Business/Woodlot License Timber Management	<ul style="list-style-type: none"> • Maintain or increase the number of businesses participating in the small business forest enterprise program in this zone • Promote the use of woodlot licenses when opportunities arise • Establish a community extension program in woodlot management, agroforestry and alternative silvicultural systems

2.323 Desired future state

Summary RMZ objectives	Year 2004	Year 2044	Monitoring Indicator
Maintain Land Supply for Food Production	<ul style="list-style-type: none"> 60 per cent of RMZ in ALR 	<ul style="list-style-type: none"> no change from 2004 	<ul style="list-style-type: none"> per cent of land base in ALR
Conserve Soil Productivity	<ul style="list-style-type: none"> 50 per cent reduction in soil erosion and organic matter loss 	<ul style="list-style-type: none"> no net loss of soil organic matter content 	<ul style="list-style-type: none"> total annual soil erosion and organic matter loss
Provide Opportunities for the Growth of Agriculture	<ul style="list-style-type: none"> 80 per cent of the ALR used for food production 	<ul style="list-style-type: none"> 100 per cent of the ALR used for food production 	<ul style="list-style-type: none"> number of hectares under cultivation
Enhance Agricultural Access and Use of Crown Resources	<ul style="list-style-type: none"> no increase in Crown land use conflicts more integrated management enterprises such as botanical forest products 20 per cent increase in Animal Unit Months 	<ul style="list-style-type: none"> same as 2004 an additional 20 per cent increase in Animal Unit Months 	<ul style="list-style-type: none"> number of new local planning processes number of letters of complaint regarding land use number of new Crown land management plans that incorporate botanical forest products total number of Animal Unit Months
Provide Opportunities for Growth of Tourism	<ul style="list-style-type: none"> maintain opportunities for tourism growth 25 per cent increase in number of agri-tourism enterprises 	<ul style="list-style-type: none"> maintain opportunities for tourism growth continued growth in agri-tourism sector 	<ul style="list-style-type: none"> number of hectares of land with notations of interest for very high tourism capability number of agri-tourism related business licenses

Summary RMZ objectives	Year 2004	Year 2044	Monitoring Indicator
Maintain Quality and Quantity of Water	• adequate supply and quality for all water uses	• adequate supply and quality for all water uses	<ul style="list-style-type: none"> • average seasonal water levels in major water courses and storage facilities • number of productive wells • turbidity levels • total bacteria and fecal coliforms
Encourage Small Business/Woodlot License Timber Management	• double the number of woodlot licenses	• stable woodlot and small business industry	<ul style="list-style-type: none"> • number of woodlots • volume and value of wood cut in small business and woodlot programs

2.33 Sam's River (high intensity resource development)

2.331 Description

This 24,000 hectare area constitutes the headwaters of the Sam's River. The topography is variable and consists of valley bottom lands altered through past glaciation periods, steep valley sides that are subject to water erosion and alpine forests and meadows. The valley bottoms are mainly in the Interior Cedar Hemlock Biogeoclimatic Zone and side slopes are in the Engelmann Spruce Subalpine Fir Zone. There are still large areas of mature timber within the zone. This area has high potential for long-term intensive timber management.

On the west face of Rocky Peak, several mineral claims have been noted as having significant potential for lead, silver and zinc. No development has yet occurred.

The Sam's River and its tributary lakes and streams contain salmon. Grizzly bear, black bear and moose are found in the valley bottoms, mainly in riparian and wetland areas. White-tail deer use the dry, south-facing slopes and ridges. Cavity-nesting birds such as hairy woodpeckers are abundant in mature forests.

Some hiking and camping takes place along the main road access and at Summit Lake at the top of the drainage. The extensive network of logging roads allows for access to hunting and fishing opportunities in the many small to medium size lakes.

Five archaeological sites have been mapped in the zone.

2.332 Resource management objectives and strategies

Primary objectives for the Sam's River RMZ are to:

- intensively develop and harvest timber; the predominant objective is to maintain a timber base for the forest industry on lands capable of growing well stocked timber, and on areas where soil productivity and slope will allow for timber harvesting without compromising the sustainability of the land;
- explore and develop mineral resources;
- provide access for recreational hunting and fishing, and motorized recreational pursuits; and,
- maintain a road network to minimize losses of forest resources to fire, insects and disease.

Secondary objectives include:

- to maintain visual quality and water quality in proximity to recreation sites and other important recreation features;
- to maintain healthy aquatic ecosystems and instream flow requirements for fish;
- to maintain wild trout populations;
- to maintain white-tail deer winter range; and,
- to maintain or enhance moose habitat.

The following table outlines the objectives for resource management in Sam's River RMZ and the strategies for achieving those objectives.

Summary objectives	Strategies
Intensive Timber Harvesting	<ul style="list-style-type: none"> • Unless otherwise noted below, the full range of silvicultural systems may be used as appropriate for specific site conditions. Maximum clear-cut size is 60 ha. Green-up provisions are the minimum required under the Forest Practices Code of British Columbia Act. • Group selection harvesting will be the preferred treatment in higher level elevation forests, and along riparian areas. • Promote stand tending for juvenile spacing of suitable stands to enhance the timber values.
Maintain Soil Productivity	<ul style="list-style-type: none"> • Protect soil productivity in accordance with Part 4 of the Forest Practices Code of British Columbia Act.
Mineral Exploration and Development	<ul style="list-style-type: none"> • Access will be allowed to all areas of the zone so long as all RMZ strategies are followed. • Following any exploration or development activity, all surface areas will be reclaimed to a state that supports free-growing native vegetation, including the original tree species • All exploration and development proposals shall conform with the surface objectives and strategies for the zone, while meeting all laws and regulations respecting exploration and development.
Encourage Access for Motorized Recreation	<ul style="list-style-type: none"> • Motorized vehicle use will be allowed on designated trails and existing roads. Designated trails will be maintained to a difficulty level that encourages motorized all-terrain vehicles. • River fishing opportunities should be made available at sites along the Sam's River Forest Service Road, and lake fishing opportunities at Sam's Lake. Priority should be given to maintaining overnight recreation sites in these areas. • All lower-level plans will address recreational access.
Maintain Water Quality in Recreation Areas	<ul style="list-style-type: none"> • Develop water quality objectives to protect water uses. • Maintain public access to waterbodies and shorelines where environmentally sustainable.
Maintain and Enhance Visual Quality	<ul style="list-style-type: none"> • Identify important and high-use recreation sites and exceptional recreation features where scenic quality is a vital factor. • Apply visual landscape management and design criteria to these areas. • Areas of high visual quality identified as a result of this process will be managed to meet more restrictive VQOs.

Summary objectives	Strategies
Maintain White-tail Deer Winter Range	<ul style="list-style-type: none"> Limited areas of important winter range will be maintained by providing thermal and hiding cover. Thus timber harvesting constraints in identified areas are: <ul style="list-style-type: none"> A maximum of 20% of the forest cover can be in a non-greened-up state. Green-up is achieved at three metres. A minimum of 30% of the forest cover must be maintained at all times in an old growth condition (above 140 years). Priority should be given to updating a population inventory.
Maintain Healthy Aquatic Ecosystems and Maintain Wild Trout Populations	<ul style="list-style-type: none"> Develop a fisheries management plan for the RMZ that addresses site-specific protection of critical habitats, aesthetic qualities and access. Ensure instream flow requirements are met.
Maintain or Enhance Moose Habitat	<ul style="list-style-type: none"> Winter range for moose in the valley bottoms will ensure that sufficient hiding cover and shelter will be maintained along riparian areas, swamps and wetlands along the Sam's River. Thus timber harvesting objectives are: <ul style="list-style-type: none"> Within 20 metres of the Sam's River and adjacent to any wetlands, harvesting will be prohibited. Within 50 metres adjacent to Sam's River, selection harvesting will be permitted. Priority should be given to updating a population inventory.

2.333 Desired future state

The following table presents the Desired Future State for the Resource Management Zone. As agreed to by the LRMP Working Group, the following resource conditions illustrate what the Sam's River RMZ will look like by the year 2004 and 2044, fifty years hence. All descriptions compare the future to the current resource description and inventories. To facilitate plan implementation, monitoring indicators have been identified.

Summary objectives	Year 2004	Year 2044	Monitoring Indicator
Encourage Intensive Timber Harvesting	<ul style="list-style-type: none"> less old growth timber lower total growing stock lower harvest level increased productivity of forest 	<ul style="list-style-type: none"> more balanced age class distribution higher total growing stock higher harvest level increased productivity of forest 	<ul style="list-style-type: none"> forest inventory age classes forest inventory age classes and volume estimates m³/hectare forest inventory estimates of site index
Encourage Access for Motorized Recreation	<ul style="list-style-type: none"> continued access to recreation sites and trails continued trail development new access to camping and fishing areas 	<ul style="list-style-type: none"> continued access to recreation sites and trails continued trail development new access to camping and fishing areas 	<ul style="list-style-type: none"> user satisfaction, kilometres of public forest roads user satisfaction, kilometres of new trails user satisfaction, number of recreation users, number of new sites
Encourage Mineral Exploration and Development	<ul style="list-style-type: none"> continued access to potential development opportunities development of economically viable deposits 	<ul style="list-style-type: none"> continued access to potential development opportunities development of economically viable deposits reclamation of completed development sites 	<ul style="list-style-type: none"> number of new exploration programs number of development permits satisfactory site inspection reports
Maintain Water Quality in Recreation Areas	<ul style="list-style-type: none"> adequate quantity and quality of water for all water uses 	<ul style="list-style-type: none"> adequate quantity and quality of water for all water uses 	<ul style="list-style-type: none"> turbidity levels number of recreation use days
Maintain and Enhance Visual Quality	<ul style="list-style-type: none"> minimum VQO of Partial Retention in areas of high visual quality near recreation sites and features 	<ul style="list-style-type: none"> minimum VQO of Partial Retention in areas of high visual quality near recreation sites and features 	<ul style="list-style-type: none"> visual quality assessment (% alteration, design criteria, existing visual condition)

Summary objectives	Year 2004	Year 2044	Monitoring Indicator
Maintain Healthy Aquatic Ecosystems and Wild Trout Populations	• no change from current condition	• no change from current condition	• area of timber harvesting operations occurring near lakes containing native fish stocks
Maintain White-tail Deer Winter Range	• 20 per cent reduction in winter range area	• 30 per cent reduction in winter range area	• habitat that meets forest cover objectives expressed by forest inventory age classes.
Maintain or Improve Moose Summer Range	• continued thermal and hiding cover along Sam's River	• continued thermal and hiding cover along Sam's River	• habitat that meets forest cover objectives expressed by forest inventory.
Maintain Soil Productivity	• no change from current conditions.	• no change from current condition	• total area in productive forest land base

2.34 Rapid River (protection)

2.341 Description

The Rapid River RMZ contains important ecological systems, wildlife populations, Tikwina'lan Nation cultural sites, dispersed and day-use recreation opportunities, mining heritage sites, dramatic old growth forested valleys and alpine scenery. It covers approximately 29,000 hectares.

Despite proximity to Rapid City, the area has had only minor modifications from its natural state. Human use has tended towards recreational pastimes and low-intensity commercial uses such as trapping, guiding and prospecting. A steep canyon six kilometres upstream of Rapid City has deterred road construction amenable to timber harvesting and other commercial development.

A tributary to the Rapid River, the Rainy River, provides reproductive habitat for a provincially significant population of large, rainbow trout. This unique life history type occurs only in association with eight large lakes in the province. Special management will be considered for the entire Rainy River watershed to ensure population maintenance.

The Rapid River area has been recommended and approved in principle by Cabinet for protected areas status. Reasons for recommending this zone for protected area status include: significant representation of the interior Douglas-fir

and Engelmann spruce sub-alpine fir biogeoclimatic zones; presence of a large number of endemic wildlife species; and, the provision of high quality recreation and tourism opportunities adjacent to Rapid City.

2.342 Resource management objectives and strategies

Detailed resource management objectives and strategies will be determined through the preparation of appropriate management plans following the designation process for protected areas. The LRMP suggests the following as primary objectives for this zone:

- to protect and manage for the natural (rainbow trout habitat, old growth forest, alpine meadows), recreational (river-based opportunities, hiking, camping) and cultural (First Nations and mining cultural/heritage sites) values of the area in recognition of their significance to the province and the region;
- to permit activities compatible with the wilderness setting and long-term protection of ecological values;
- to maintain present cultural use patterns and existing commercial activities of a low-intensity area, including their renewal and transfer of ownership; and,
- to provide for roaded access below the Rapid River canyon and interconnected trails upstream for enhanced day and multi-day recreational and nature education opportunities.

2.343 Desired future state

In the year 2044:

- natural processes dominate and are seen to dominate, with existing First Nations activities, commercial enterprises and recreational uses remaining subordinate to the visual landscape and complementary to the primary objectives;
- a variety of recreational experiences will be managed, that range in intensity of use, through a management plan (developed by the appropriate agency). Selective commercial tourism opportunities are offered that support the primary objectives and need for local economic diversification; and,
- the Rapid River Protected Area retains benchmark areas (>2500 ha) for scientific research and monitoring of the natural environment. This includes maintaining three unaltered watersheds without recreational development (trails) or commercial uses.

Indicators include:

- habitat richness and rarity (terrestrial and aquatic);
- critical habitats;
- water quality;
- recreation user days; and,
- area occupied by infrastructure, including roads, trails, campsites and interpretive centres.

2.35 Mount Merry (low intensity resource development – community watershed)

2.351 Description

The Mount Merry RMZ contains a mix of human settlement, overnight-use, alpine and river recreation opportunities and high timber production potential. Its area is approximately 11,500 ha.

The Town of Merryville (population 6,500) is situated along the banks of the Green River, immediately downstream of its confluence with Merry Creek. The Green River is an important historical and recreational focal point for the community. The water intake for the community's water supply is located five kilometres upstream on Merry Creek. Mount Merry provides a scenic backdrop to the community and is a popular destination in the summer months for alpine hiking enthusiasts.

Given its location within the 1:200 year flood plain, the community of Merryville is prone to periodic flooding and erosion from the Green River.

2.352 Resource management objectives and strategies

The primary objectives for this zone are to:

- maintain the community water supply, both in quality and quantity;
- protect life and property by minimizing damage due to flooding;
- maintain the integrated uses of the Green River corridor; and,
- maintain visual quality in areas of high scenic value

A secondary objective is to:

- promote standard timber harvesting practices without compromising the primary RMZ objectives.

The following table outlines and further elaborates on the objectives and strategies in this resource management zone:

Summary objectives	Strategies
Maintain Community Water Supply	<ul style="list-style-type: none"> Community Watershed Guidelines apply to all resource development activities Avoid development in sensitive areas such as in the vicinity of the Merry Creek water intake, unstable slopes and within riparian management areas A priority will be to develop a contingency plan in the event of damage to the water supply Implement watershed restoration in areas adversely impacted by past forest harvesting and range use (as noted in Inventory Report #3)
Minimize Loss of Life and Property Due to Flooding	<ul style="list-style-type: none"> Ensure Crown land leases specify building elevation and setback requirements consistent with provincial flood protection standards. No disposition of high hazard Crown lands for residential use will be permitted Encourage the municipality to plan and zone land uses away from flood prone lands, with the exception of parks and open space recreation; promote flood-proofing development on existing lots
Maintain Integrated Uses of River Corridor	<ul style="list-style-type: none"> Structural flood control measures will not obstruct fish passage, or result in net loss of or damage to fish and wildlife habitat Encourage municipality to designate a river recreation corridor in Official Community Plan, using tools available in the <i>Municipal Act</i> (Development Permit Areas for protection of natural environment)
Maintain Visual Quality in Areas of High Scenic Value	<ul style="list-style-type: none"> Undertake a visual landscape inventory Establish a minimum of partial retention VQOs in areas of moderate sensitivity; minimum of retention VQOs in areas of high sensitivity Ensure timber harvesting plans meet VQOs through visual impact assessments
Promote Standard Timber Harvesting	<ul style="list-style-type: none"> Community Watershed Guidelines apply to all resource development activities All operational plans must incorporate the management objectives outlined for this RMZ

2.353 Desired future state

Summary RMZ objectives	Year 2004	Year 2044	Monitoring Indicator
Maintain Community Water Supply	<ul style="list-style-type: none"> adequate supply and quality of water for all uses 	<ul style="list-style-type: none"> same as 2004 	<ul style="list-style-type: none"> average seasonal water levels in major water courses and storage facilities number of productive wells turbidity levels total bacteria and faecal coliforms
Protect Life and Property by Minimizing Flooding	<ul style="list-style-type: none"> no new lots created on flood plain development on existing lots is flood-proofed 	<ul style="list-style-type: none"> same as 2004 	<ul style="list-style-type: none"> number of building permits issued on flood-prone land number of Crown land dispositions issued on flood prone land flood damage costs to private and public property/land
Maintain Integrated Uses of River Corridor	<ul style="list-style-type: none"> no net loss of habitat new trail development along corridor 	<ul style="list-style-type: none"> same as 2004 	<ul style="list-style-type: none"> area of critical habitat maintained number of recreation user days
Maintain Visual Quality	<ul style="list-style-type: none"> minimal noticeable change from current condition 	<ul style="list-style-type: none"> minimal noticeable change from current condition 	<ul style="list-style-type: none"> area (ha) meeting retention and partial retention VQOs number or recreation user days recreation satisfaction index
Promote Standard Timber Harvesting	<ul style="list-style-type: none"> increased harvesting levels 	<ul style="list-style-type: none"> sustained harvest levels 	<ul style="list-style-type: none"> no measurable impact on other RMZ indicators m³ harvested per hectare

2.36 Merry Lake (low intensity resource development – scenery and recreation)

2.361 Description

Approximately 24,000 hectares in size, this area contains lands surrounding Merry Lake and most of the headwaters of Merry River. The area includes high use recreation in Merry Lake, visually sensitive areas on the slopes surrounding the lake, and backcountry recreation opportunities north of the lake in the headwaters of the Merry River. Other than five private lots along Merry Lake, the entire area is in provincial forests. The lodge on the lake is on private land, and the guide outfitter cabin along the upper Merry River is under a British Columbia Crown land lease. A gravel road follows along the eastern shore of the lake, but does not extend into the upper Merry River area.

The northwestern portion of this zone is bounded by the watershed divide of the upper Merry River, while the remainder of the zone is defined by its “viewshed”—the area that can be seen from either Merry Lake or along the upper Merry River. The entire zone has moderate to steep topography and moderate rainfall.

There has always been considerable recreation use in the Merry Lake area, but primarily from residents in the region. Recently, the lake area has been discovered by British Columbia residents, primarily from the lower mainland area. Use on the lake has traditionally been fishing and canoeing, but recently non-residents have been water-skiing and wind surfing. Lakeshore use includes picnicking, camping, and swimming. The area currently provides roaded natural recreational opportunities in that the surrounding visual landscape is dominantly natural appearing.

The backcountry area in the upper Merry River, and adjacent to the proposed Rapid River protected area has also experienced use increase. The upper Merry River provides one of the last local areas that can support a “wilderness” experience required by the guide outfitting industry. Motorized activities and access development potentially conflict with this resource use.

Commercial recreation use includes a lodge at Merry Lake, and a guide-outfitter whose operations include this zone. Recently, the guide-outfitter has provided non-hunting backcountry packing tours. Activities in this area include hiking, backpacking, horseback use, hunting, fishing and nature study including wildlife viewing in the summer, and snowmobiling and some cross country skiing in the winter. The area currently provides semi-primitive non-motorized recreational opportunities in the summer, and semi-primitive motorized and non-motorized opportunities in the winter.

The area surrounding Merry Lake is predominantly mature and old growth coniferous forest that provides habitat for many wildlife species that require old

forest characteristics. These species are an asset to wildlife viewing in conjunction with other recreational activities in the area.

Timber values are moderate around the lake and mainly low in the upper Merry River area. Some timber harvesting is planned around Merry Lake and much concern has been expressed about potential impacts on the area's scenery. No harvesting plans are intended for the upper Merry Lake area at this time. One forest licensee operates in the area. There are five mineral claims in the area.

The tributaries to Merry Lake, particularly the upper river, provide most of the spawning habitat for the trout that support the lake's fishery. These large spawning fish are vulnerable to poaching where access has brought people in close contact with these spawning areas.

2.362 Resource management objectives and strategies

The primary objectives for this zone are to:

- maintain high scenic values in the Merry Lake area (in the southern half of the zone) through the establishment of retention and partial retention visual quality objectives (VQOs);
- maintain roaded natural recreation opportunity spectrum (ROS) in the Merry Lake area, and semi-primitive ROS conditions in the upper Merry Lake area;
- promote adventure tourism operations in the area; and,
- maintain natural wildlife and fisheries populations.

The following uses are permitted and encouraged so long as they do not have a negative impact on the primary objectives:

- timber harvesting activities designed to meet the VQOs specified for the Merry Lake area;
- mineral exploration and development; and,
- motorized and non-motorized summer and winter recreation use in the Merry Lake area, and non-motorized summer use in the upper Merry River area (but maintaining motorized winter use opportunities).

The following table outlines and further elaborates on the objectives and strategies in this resource management zone:

Summary objectives	Strategies
Maintain high visual quality and roaded natural recreation opportunities in the Merry Lake area	<ul style="list-style-type: none"> • Undertake a detailed visual landscape inventory. • Establish retention and partial retention VQOs in areas of moderate and high sensitivity. • Ensure timber harvesting plans meet VQOs through visual impact assessments. • Maintain road access on the east shore of Merry Lake. • Reconcile potentially conflicting recreation uses on Merry Lake (i.e., canoeing/fishing vs. water-skiing) with user groups through further recreation zoning of the lake.
Maintain backcountry recreation opportunities in the upper Merry River area	<ul style="list-style-type: none"> • Maintain roadless backcountry quality of the area for the duration of the plan; any proposed road access (e.g., for mining or logging) must be tabled with planning committee. • Maintain semi-primitive non-motorized recreation opportunities for summer months (no motorized access or use). • Maintain semi-primitive motorized and non-motorized opportunities for winter months for snowmobiling and cross-country skiing and zone these areas with users groups. • Encourage low impact backcountry use and monitor backcountry conditions to ensure sustainable recreation use occurs.
Promote adventure tourism	<ul style="list-style-type: none"> • Complete a market needs analysis for this RMZ (a component of the marketing strategy for the Rapid River and Rapid City RMZs). • Ensure that lower-level plans note high or very high capability tourism features and provide management strategies that are mutually sustainable.
Maintain natural wildlife and fisheries	<ul style="list-style-type: none"> • Ensure recreational use of fish and wildlife is sustainable, and that recreational activities do not harass wildlife. • Deactivate unnecessary/disused roads; plan new roads to minimize impacts on wilderness/scenic resources; develop a Coordinated Access Management Plan. • Maintain 70 per cent of each forest ecosystem in an old growth state with a naturally occurring abundance of coarse woody debris and wildlife trees. • Fully protect rare habitats. • Plan roads to avoid important fish spawning areas (protection of vulnerable spawning stocks); monitor road networks for potential sediment sources to watercourses. • Develop baseline population of spawning trout and monitor abundance; adjust regulations/access as required to maintain numbers of spawners and the quality of the fishery.

2.363 Desired future conditions

Summary objectives	Year 2004	Year 2044	Monitoring Indicator
Maintain high visual quality and roaded natural recreation opportunities in Merry Lake area	<ul style="list-style-type: none"> minimal noticeable change from current condition 	<ul style="list-style-type: none"> minimal noticeable change from current condition 	<ul style="list-style-type: none"> area (ha) meeting retention and partial retention VQOs number of recreation user days recreation satisfaction index
Maintain backcountry recreation opportunities in upper Merry River area	<ul style="list-style-type: none"> no change from current condition 70 per cent of area in wilderness class of ROS 	<ul style="list-style-type: none"> no change from current condition 	<ul style="list-style-type: none"> campsite condition index number of recreation user days per cent of area in wilderness class of ROS
Promote adventure tourism	<ul style="list-style-type: none"> growth in adventure tourism sector 	<ul style="list-style-type: none"> continued growth in adventure tourism sector 	<ul style="list-style-type: none"> number of business licences issued per year (adventure tourism related)
Maintain natural fish and wildlife populations	<ul style="list-style-type: none"> 70 per cent of forests in old growth condition maintain spawners and fishery numbers 	<ul style="list-style-type: none"> same as 2004 same as 2004 	<ul style="list-style-type: none"> populations of marten, goshawks and pileated woodpeckers average number of spawners and angler days, catch per unit effort and trout size

3.0 Implementation

The Diamond LRMP is a working document and will be implemented by all provincial agencies through agency-specific management activities, lower level plans, resource development permits and land dispositions. The priority areas for lower level planning are outlined in this section, but it is also possible that other plans may be required in the future by resource agencies in order to implement the Diamond LRMP. In the absence of local or landscape-level plans, all resource-specific development plans or permits will conform to the resource management zone objectives and strategies described in the Diamond Land and Resource Management Plan.

All lower-level plans will include a section that describes the linkages to the Diamond Land and Resource Management Plan. This will include an explanation of how the lower-level plans meet the objectives and implement the strategies outlined in this plan. Conversely, it is recognized that the resource management zones, objectives and strategies outlined in the Diamond Land and Resource Management Plan may be amended in the future based on feedback from local or operational planning (see Section 4.0, Monitoring and Review).

An annual implementation and monitoring report will be approved by the regional inter-agency management committee. The Diamond LRMP process participants have established a monitoring committee that will assist the regional inter-agency management committee with writing this report. In addition, the monitoring committee will coordinate general public review of the monitoring report before it is published. This report will state how the objectives and strategies outlined in the LRMP are being met through agency-specific resource management activities, lower-level planning processes and resource development plans or permits.

3.1 Resource management zones and the Forest Practices Code

Resource Management Zones (RMZs) come into force in two different ways. One approach is illustrated by the zones in this plan and represents Cabinet-approved policy direction that guides the management of resources on all Crown lands in the LRMP area. The second approach is to legally establish RMZs through the Forest Practices Code of British Columbia Act.

The following zones are appropriate for establishment as RMZs pursuant to Section 3(1) of the Forest Practices Code of British Columbia Act:

Merry River – Low Intensity Resource Development – Natural Habitat;
Homestead Valley – Agriculture;
Sam’s River – High Intensity Resource Development;
Mount Merry – Low Intensity Resource Development – Community Watershed; and
Merry Lake – Low Intensity Resource Development – Scenery and Recreation.

RMZ objectives established pursuant to Section 3(4) of the Act must be consistent with the objectives and management strategies outlined in Section 2.3 of the Diamond Land and Resource Management Plan. In accordance with Section 3(3) of the Act and the Strategic Planning Regulations, further public review and comment on the establishment of RMZs is not required.

3.2 Agency roles

The following agency activities will, in part, implement the objectives and strategies outlined in this plan.

- The Ministry of Environment, Lands and Parks and the Ministry of Forests will review the Rapid City Integrated Watershed Management Plan and the Ministry of Forests will review the Dusty Plateau Coordinated Access Management Plan and the Log Lake Local Resource Use Plan to ensure that they are consistent with the Diamond Land and Resource Management Plan. If major amendments are necessary, the original steering committees will be consulted and general public review will be solicited.
- The Surveys and Resource Mapping Branch of the Ministry of Environment, Lands and Parks will continue to facilitate access to data through LandData B.C. and will provide technical support to the monitoring committee.
- The Ministry of Environment, Lands and Parks will ensure that appropriate air quality policies and monitoring information are available for review to ensure consistency with this plan.
- The Ministries of Forests and Environment, Lands and Parks, in consultation with recreation user groups, will develop a backcountry recreation strategy for the Diamond LRMP area. This will be completed over the next three years and will further refine recreation objectives for the resource management zones described in the Diamond LRMP.

- Interim management guidelines apply to all protection zones in the approved plan until the protected areas are designated by Cabinet. The protection zones will be subject to further planning by those agencies involved in the Protected Areas Strategy in order to decide their final status. Ultimately, they will be designated through Orders in Council under the appropriate Act. This process will be led by the Land Use Coordination Office and the regional Inter Agency Management Committee (IAMC). If designation is a Class A Park, then BC Parks will prepare a Master Plan. In the case of another designation, the responsible agency will prepare a management plan.
- The Forest Service's Chief Forester will, in reviewing the timber supply and establishing an appropriate allowable annual cut, consider the land use and resource management objectives outlined in this plan. The Chief Forester will complete this task in accordance with existing legislation.
- The Ministry of Forests' District Manager will ensure that approval of timber harvesting by licensees conforms to land use and resource management objectives outlined in this plan.
- The Forest Service will update the Visual Landscape Inventory and Smoke Sensitive Area designation of scenic areas adjacent to the Forest Service recreation sites and major highways throughout the plan area. The District Manager in consultation with the Visual Landscape Officer will try to finish this inventory by August 30, 1995. Subsequently, all managers and development proponents in the plan area will recognize these sensitive areas and follow the strategies in the LRMP regarding their management.
- The Highland Regional District aims to complete the Merry Lake Official Community Plan within 18 months. Development of the Official Community Plan will involve discussions with the Ministry of Health, the Ministry of Environment, Lands and Parks (regarding domestic water consumption and water quality) and the Ministry of Forests (regarding visual quality management).

3.3 Priorities for more detailed planning

The priority for conducting lower-level plans is outlined in the following table. Implementing these priority areas will be contingent on the ability of agencies to fund the processes. Note that lower level plans, particularly for landscape units, may involve areas that include more than one resource management zone.

Geographic area	Lower-level planning priority	Schedule
Sam's River/Rocky Peak South/Merry Lake (Lawton Creek drainage)	High	December 31, 1994
Mount Merry (community watershed boundary)	High	March 31, 1995
Rapid River (both within and outside protected area boundary)	High	June 30, 1995
Merry Lake (Highway #5 corridor and lakeshore area)	Medium	December 31, 1995
Homestead Valley (Sam's Lake viewshed)	Medium	December 31, 1995
Merry River (Merry River catchment area)	Medium	December 31, 1996
Rapid City (Rapid River area)	Low	December 31, 1998
Greenvale (Gerome Creek drainage)	Low	December 31, 1998

More detailed planning for most of these areas will be completed by the Ministry of Forests and Ministry of Environment, Lands and Parks using landscape units. Once objectives that are consistent with this plan are written for each landscape unit, then future development plans must also be consistent with these landscape objectives.

Lawton Creek on the east side of Merry Lake is recommended as the highest priority for landscape level planning. A landscape unit management strategy should be initiated immediately for the Lawton Creek area to resolve complex resource management issues concerning old growth, caribou habitat and riparian management. Lawton Creek will also provide a good template for this type of planning in the remainder of the LRMP area.

In addition to providing landscape level objectives, a Local Resource Use Plan will be completed for the Merry Lake area by the target date of December 31, 1995.

3.4 Economic transition

The following strategies are categories of opportunities. Implementation of these opportunities will follow at the field level.

Economic transition is linked to several provincial initiatives. These include the Forest Renewal Plan and Skills Now.

Both short-term and long-term targets are necessary in order to address economic stability. Some short-term strategies relate to possible changes in the timber supply whereas long-term targets relate to improving wood quality and quantity and increasing the labour content of all resource extraction activities.

3.41 Measures to off-set short-term impacts

The principal impacts of land use and resource management objectives in this plan primarily relate to forestry. Some categories of opportunities are:

- phased-in harvest reduction
- increased utilization opportunities
- incremental silviculture
- commercial thinning opportunities
- road and stream rehabilitation
- labour intensive harvesting
- increased timber operability and partitioned harvest
- review of forest management constraints
- inventory and research initiatives
- labour attrition and bridging to pension from loss of forestry jobs

(While the Diamond Land and Resource Management Plan does not explain the details for each category, these would normally be included in a final Land and Resource Management Plan).

3.42 Long-term development and diversification

- expanded value-added processing
- botanical forest products
- develop alternative solutions to forest management constraints
- forest tenure issues
- skills and training

3.43 Sources of transition funding

This section has not been completed for the Diamond plan. Many economic transition opportunities require no new funding, while some may need significant resources for implementation. Funding sources may include special government initiatives such as the Forest Renewal Plan and Skills Now or existing funding may be redirected to address regional needs. New funding sources may also be suggested, such as increased licencing or user fees.

3.44 Structures for transition delivery

This section has not been completed for the Diamond plan. An appropriate structure for delivering the mitigating measures listed in this section may be the monitoring committee. Alternately, a special group may be tasked with addressing employment creation and economic change. It is important to keep in mind that the structure must have the ability to provide expert advice as well as administrative functions such as receipt and disbursement of funds.

4.0 Monitoring and review

The Diamond LRMP participants have established a monitoring committee that will assist the regional interagency management committee with writing an annual monitoring report. In addition, the monitoring committee will coordinate general public review of the monitoring report before it is published. This report will state how the objectives and strategies outlined in the Land and Resource Management Plan are being met through agency-specific resource management activities, lower-level planning processes and resource development plans or permits.

Local or operational planning processes may, through more detailed mapping, research or public involvement, recommend changes to the Land and Resource Management Plan. This can be accommodated through application to the regional inter-agency management committee.

5.0 Appendices

5.1 Participants

The Diamond LRMP process is administered by a joint steering committee of agencies, First Nations and public representatives. Twenty-two people presently sit on this committee, with one 'open' chair available for special guests or an interested member of the general public.

Participation has been reviewed continually over the past two years, and some sectors have been added to ensure that all interests are represented. When necessary, special guests have been invited to meetings to present points of view that offer constructive information to a particular step in the planning process.

All participants attend all LRMP meetings. Sub-committees meet as necessary to address the information requests of the joint steering committee. If a joint steering committee member cannot attend a meeting, then a previously determined person fills their seat.

Each member is responsible for informing their constituency through direct mail-outs, phone calls or periodic meetings. They are also responsible for ensuring that the interests of their constituency are voiced at the joint steering committee meetings.

Joint Steering Committee Membership

Chris Hamoto – Chairperson (Ministry of Environment, Lands and Parks)

Pat Jones – Coordinating Planner (Ministry of Forests)

Stacy Rideau – BC Environment

Jo Malzeski – BC Lands

Val Speakeasy – BC Parks

Jamie Schmitt – Milltown Civic Advisory Group

Darjeet Thurman – Department of Fisheries and Oceans

Tracy McLain – Diamond Community Club

Jerry Wainright – Diamond Farmer's Institute

Lindsay Chipps – Environment Subcommittee

Clair Woodrow – Forest Industry Subcommittee

Jodi Simms – IWA Canada 1-212

Andie Vanderloos – Merry Lake Ratepayers Association

Lauren Warner – Ministry of Agriculture, Fisheries and Food

Alex Gold – Ministry of Energy, Mines and Petroleum Resources

Kim Paterson – Ministry of Forests
Garth Osborne – Ministry of Small Business, Tourism and Culture
Ron Choy – Outdoor Recreation Subcommittee
Masataka Shindawa – Range/Habitat Subcommittee
Bryn Markowitz – Rapid City
Shaun Sheehan – Highland Regional District
Darcy Gustafson – Tourism Subcommittee
Erin Calogero – Village of Scenicvale
Marie Smith – Tikwna'lan Nation

5.2 Definition of consensus

The participants in the Diamond LRMP process are committed to the goal of achieving consensus for all major decisions. Consensus is defined by these participants as the willingness to support the decision and remain an active member of the LRMP process.

When initial support for a decision is achieved, it is understood that some participants will have to take the content of the decision back to their constituencies or to a higher decision-making authority for ratification. It is also understood that support for a decision at the LRMP table carries an obligation that participants will strongly represent the benefits of any supported decision to their respective constituencies.

Participants will observe the following principles of consensus-building:

- the ultimate goal of the process is to reach agreement—this may be represented by general support for a decision by all participants;
- the participants agree to act in “good faith” in all aspects of the process;
- participants accept the concerns and goals of others as legitimate and will listen carefully, ask questions and educate themselves regarding the interest of others whether they agree with them or not;
- the focus of the process is on interests and concerns rather than positions and demands;
- participants commit to fully explore issues, searching for solutions in a problem solving atmosphere;
- participants agree to make a good faith attempt to share information in matters related to the shared decision-making process; and,
- all suggestions and offers will be regarded as tentative until full support is achieved in order to facilitate the broadest possible consideration of options and solutions.

5.3 List of related documents

Diamond LRMP Terms of Reference (August, 1992)

Resource Unit Summaries (November, 1993)

Social, Economic and Environmental Base Case (February, 1993)

Impact Assessment (October, 1993)

Public Responses to Consensus Management Direction (January, 1994)

Consensus Management Direction (February, 1994)

Inventory Reports 1-6

Maps:

- Resource Unit Boundaries (1:250,000)
- Resource Management Zone Boundaries (1:250,000)
- Resource Management Zone overlays showing compatible uses, if applicable (1:250,000)
- Resource Inventories (1:250,000 and 1:20,000 (generalized to 1:250,000), including Riparian Areas, Recreation and Tourism Use, Archaeological and Cultural Sites, Forest Cover, Range Use, Critical Wildlife Habitat, Licensed Resource Users, Mineral Potential, Watershed Boundaries and Protected Areas Strategy Areas of Interest.

5.4 Activity guide for resource management zones

This activity guide reflects the broad range of activities possible in any generic zone. The application of a zone category to a specific area of land may result in further restrictions on possible activities. For example, in a High Intensity Resource Development zone with a priority on timber management, opportunities for agriculture development may be limited.

Activity	RMZ 1	RMZ 2	RMZ 3	RMZ 4	RMZ 5A	RMZ 5B	RMZ 5C	RMZ 6
Agriculture	C	S	S	G	C	C	C	L
Aquaculture	C	S	S	G	C	C	C	L
Domestic Water Supply	G	C	C	C	G	G	S	see PAS policy
Fish/Wildlife Habitat Mgmt.	C	C	C	G	S	G	G	see PAS policy
Fishing/Hunting	C	C	G	G	L	G	L	see PAS policy

Activity	RMZ 1	RMZ 2	RMZ 3	RMZ 4	RMZ 5A	RMZ 5B	RMZ 5C	RMZ 6
Human Settlement	S	G	L	G	L	L	L	L
Mineral/Energy Development	L	C	S	G	C	C	C	L
Range Use	L	S	S	G	C	C	C	C
Recreation/ Tourism: low intensity	L	G	C	G	G	S	C	see PAS policy
Recreation/ Tourism: med. intensity	C	G	G	G	C	S	C	see PAS policy
Recreation/ Tourism: high intensity	G	G	S	G	L	C	L	see PAS policy
Scientific Research	L	G	C	G	S	G	S	see PAS policy
Timber Management	C	G	S	G	C	C	C	L
Transportation/ Utility Corridor	G	C	G	G	C	C	L	see PAS policy
Trapping	C	G	G	G	C	G	G	see PAS policy

RMZ 1 Settlement

RMZ 2 Agriculture

RMZ 3 High Intensity Resource Development

RMZ 4 General Resource Development

RMZ 5A Low Intensity Resource Development – Natural Habitat

RMZ 5B Low Intensity Resource Development – Scenery and Recreation

RMZ 5C Low Intensity Resource Development – Community Watershed

RMZ 6 Protection

S Specific Opportunity – There is a strong preference for this activity within the RMZ. Activities with this rating reflect the essential purpose of the RMZ. This activity is subject to the resource management and land use objectives and strategies outlined for the zone; however, special strategies may be effected to promote the activity within the RMZ.

G General Opportunity – There is a general acceptance of this activity within the RMZ, due to general compatibility with the intent of the RMZ. The activity is subject to normal conditions and requirements that are outlined in the plan for standard resource management purposes.

- C Conditional Opportunity** – There are important constraints on this activity within the RMZ. The activity may occur subject to special strategies aimed at promoting compatibility of the activity with the intent of the RMZ. Special strategies may be prescribed as a result of: resource values that are sensitive to other resource management activities; a subordinate planning process; a formal investigation of an individual proposal such as a major project review or an EIA process.
- L Limited Opportunity** – There is minimal or no likelihood of acceptance of this activity within the RMZ, due to: basic incompatibility of the activity with the intent of the RMZ, and limited potential to mitigate the incompatibility through management strategies; or, as a result of government policy (e.g., Protected Areas Strategy, Agricultural Land Reserve).

5.5 Resource impact assessment and social, economic and environmental (SEE) impact assessment summaries

The results of the resource impact assessment and social, economic and environmental (SEE) impact assessments provided participants with a better understanding of the future implications arising from the alternative scenarios and helped the table to build a consensus decision.

Resource impact assessment provides information on the changes to key resources in the region resulting from proposed land use and resource management decisions. SEE impact assessments complement and build on the resource impacts by estimating the importance or 'value' of projected changes in resources. Impact assessments are presented in the form of a multiple accounts analysis in order to lay out the full range of impacted values.

5.51 Resource impact assessment

Resource impact assessments were completed by each agency represented on the interagency planning team and presented to the table as a whole. The analyses were comprehensive in that they examined all key values with the best available information. Although data gaps existed, these did not prevent the planning table from developing scenarios and achieving consensus. It is recognized that as more information becomes available in the future, the plan may need to be revisited and amended.

A summary of the results for key physical attributes considered in the resource impact assessment is provided in the following table. More detailed information can be obtained from the analysis reports which are available at the Government Agent's office in Rapid City.

Summary of key resource impact assessment results

Resource	Indicator	Base case		Scenario 1	Scenario 2	Consensus scenario
		Status quo	Status quo projection			
Agriculture	Ha under agricultural cultivation	7,500	15,000	15,000	15,000	15,000
	Animal Unit Months for grazing	25,000	25,000	15,000	23,000	21,500
Biodiversity	Ha protected areas	86,000	86,000	340,000	262,000	255,000
		4%	4%	16.6%	12.8%	12.2%
	Ha roadless backcountry areas	720,000	450,000	550,000	580,000	580,000
		35%	22%	27%	28%	28%
	Ha roadless natural areas below 5,000m	100,000	35,000	75,000	60,000	60,000
		5%	1.7%	3.6%	2.9%	2.9%
	Ha habitat for red and blue listed species	33,000	6,000	27,000	22,000	22,000
Cultural heritage	number of historical and archaeological sites	2,300	1,900	2,300	2,200	2,200
Energy	Ha with high potential for oil and gas available for exploration	17,000	17,000	12,000	15,300	15,300
Fish	km high capability stream habitat	5,500	3,700	6,400	5,000	6,000
	number critical sites for important/rare fish stocks adequately protected	220	220	530	490	500
Minerals	Ha available for mineral exploration	1,800,000	1,800,000	1,546,000	1,624,000	1,631,000
		88%	88%	75%	79%	79%
Outdoor Recreation	Ha outstanding recreational features (land and water)	64,000	36,000	51,000	49,000	50,000
		3.1%	1.8%	2.5%	2.4%	2.4%
Timber	Ha of net operable forest land	995,000	995,000	920,000	953,000	927 400
		48%	48%	45%	46%	45%
	Ha of highly productive forest land (Site class 1 & 2)	190,200	190,200	142,300	157,400	165 600
		9.3%	9.3%	6.9%	7.7%	8%
Tourism	Ha in high visual sensitivity areas where VQO is Retention or Partial Retention	10,000	23,000	87,200	58,600	82,300
	Ha of high tourism capability land *	32,000	14,000	27,000	24,000	24,000

Resource	Indicator	Base case				Consensus scenario
		Status quo	Status quo projection	Scenario 1	Scenario 2	
Water	Number fully allocated major community watersheds	1	4	1	2	2
	% of major community watershed areas developed	20%	50%	22%	25%	27%
	% of observation stations meeting water quality standards	95%	70%	97%	90%	95%
	water supply/ water demand (supply = constant)	4	1	4	3.5	3.0
Wildlife	Ha high capability critical wildlife habitat	103,000	52,000	76,500	89,100	78,300
		5%	2.5%	3.7%	4.3%	3.8%

* This figure is based on existing and potential tourism activities, the location of natural and cultural resources, and available tourism infrastructure and facilities. There is some overlap between these areas and areas of outstanding recreational features.

5.52 Social, economic and environmental (SEE) impact assessment

As the scenario development phase approached completion, a multiple accounts analysis framework was applied to ensure a comprehensive approach to evaluating projected changes in social, economic and environmental values. The SEE impact assessment does not provide a “bottom line” of which scenario is preferred but rather indicates how the scenarios compare in social, economic and environmental values.

Some noteworthy points regarding the SEE impact assessment are provided below to assist in the interpretation of the results:

- SEE impact assessments always involve a high level of uncertainty. They are estimates of values based on anticipated resource impacts, and expected linkages between those impacts and the economy, environment and social conditions. The numbers for any jobs and dollar impacts are therefore presented as ranges in an effort to convey some of this uncertainty.
- In order to carry out SEE impact assessments it is necessary to assume the continuation of current trends and social values. A large number of other assumptions are also required concerning relationships between events such as the effect of diminished water quality on fish populations, lower harvesting levels on the number of forestry jobs, and so on. These relationships are often not clearly understood (frequently the case for environmental impacts) or they are subject to change significantly over time and consequently are very unreliable in the long term (which is the case for economic impacts). The numbers in the following table must be read with an understanding of these uncertainties.
- The framework and models for SEE impact assessments and multiple accounts analysis are still under development and are expected to evolve over time. New ways of portraying social and environmental impacts, in particular, are continually being explored. The measures used in this report do not fully represent the values which many table participants felt were important to the decision (e.g., no attempt is made to capture the intrinsic value of wildlife or the scientific value of biodiversity). It is hoped that in the future better models and measures can be developed to assist in this process.
- The linkages between environmental impacts and economic values are important but difficult to capture in this analysis. For example, improved management for biodiversity should maintain more productive and sustained ecosystems which can support a number of economic opportunities such as tourism, commercial fisheries, botanical forest products or new pharmaceuticals.

- The losses in forestry jobs are based on possible reductions in timber supply under the various plan scenarios and the status quo projection. These projections include the estimated effects of the Forest Practices Code and timber supply reviews. However, these figures do not include information on changes in employment trends in the industry due to restructuring (e.g., technological changes, industry rationalization, more value-added, etc.)
- Job projections for tourism, agriculture and mining are very uncertain as these jobs are less directly tied to changes in land use designations. Social and cultural factors, global prices, etc. play a large role in these sectors. The ranges given should be viewed as rough guesses on potential job gains or losses rather than “predictions” of likely outcomes.

Some key results of the social, economic and environmental impact assessment are indicated in the next table. A rating scale is used to communicate qualitative impacts. The scale is based on the following values:

- +3 excellent
- +2 very good
- +1 good
- 0 fair
- 1 poor
- 2 very poor
- 3 extremely poor

The status quo is also rated to give a benchmark of the existing quality of environmental and social factors. The status quo projection is rated in order to provide a comparison point for evaluating alternative scenarios.

Summary of SEE impact assessments

Account	Measure	Base case		Scenario 1	Scenario 2	Consensus scenario
		Status quo	Status quo projection			
Economic values – Regional	number forestry jobs	2,530	2000–2200 with FPC and at LRSY	1800–2000 at LRSY (2,330 in short term)	1950–2050 at LRSY (2,390 in short term)	1950–2010 at LRSY (2,350 in short term)
	number tourism jobs	667	some growth potential 680–720	moderate growth potential 750–800	significant growth potential 750–820	significant growth potential 790–850
	number agricultural jobs	412	some potential loss in ranching 330–380	some potential loss in ranching 350–400	some growth potential 410–440	some growth potential 410–430
	number mining jobs	196	some growth potential 190–230	some potential loss 170–200	potential for either loss or growth 180–220	potential for either loss or growth 180–220
	number mineral exploration jobs	45	some growth potential 45–50	some potential loss 35–40	stable or potential loss 38–45	stable or potential loss 38–45
	total direct regional employment income*	\$102m	\$85–94m	\$79–88m	\$85–92m	\$86–91m
	number woodlot licenses	10	12	12	17	20
	flood mitigation costs	\$100,000	200,000	50,000	70,000	70,000
Economic values – Provincial**	total direct provincial employment income	\$122m	\$102–112	\$95–106	\$102–110	\$103–109
	provincial government revenues	\$67m	\$56–60	\$52–55	\$54–58	\$53–58
Environmental values	biodiversity	very good – area is high in biodiversity + 2	poor – loss of habitat and species - 1	very good – protects most critical habitats +2	good – some loss of habitat +1	good – some loss of habitat +1
	fish	good – some degraded streams +1	fair – some negative impacts on fish habitats 0	excellent – high level of preservation and restoration +3	good – only minor impacts on fish habitats +1	very good – restoration of fish habitats +2
	wildlife	excellent – high value wildlife resources +3	fair – significant loss of habitat 0	very good – high level of preservation of critical habitats +2	good – preservation of critical habitats +1	good – preservation of critical habitats +1

Base case						
Account	Measure	Status quo	Status quo projection	Scenario 1	Scenario 2	Consensus scenario
	water (surface)	very good – good water quality and adequate flows +2	poor – quantity good but high sediment load -1	excellent – quality enhanced +3	very good – maintain quality and quantity +2	very good – maintain quality and quantity +2
	water (groundwater)	excellent – mostly untapped +3	good – quality affected by pesticide infiltration +1	very good – only minor impact to groundwater +2	very good – only minor impact to groundwater +2	very good – only minor impact to groundwater +2
	diversity of outdoor recreational opportunity	good – abundant outdoor recreation but some access limits +1	fair – impacts on fishery and loss of wilderness and scenic qualities 0	excellent – preservation of values and increased access +3	very good – maintain opportunities and increased access +2	very good – maintain opportunities and increased access +2
	outdoor recreational use – non consumptive	\$11.50/user day X 700,000 days = \$8.05m	500,000–600,000 days \$5.75–6.9m	1,100,000–1,300,000 days \$12.7–15m	900,000–1,000,000 days \$10.35–11.5m	900,000–1,000,000 days \$10.35–11.5m
	outdoor recreational use – consumptive	\$35/user day X 150,000 days = \$5.25m	90,000–100,000 days \$3.15 – 3.5m	250,000–270,000 days \$8.75–9.45m	200,000–220,000 days \$7–7.7m	200,000–220,000 days \$7–7.7m
Community characteristics and quality of life	population stability	fair – young people leaving for jobs and education 0	poor – population loss due to decline in both jobs and environmental quality -1	fair – some population loss due to limited number of jobs 0	fair – some population loss due to limited number of jobs 0	good – diversification of econ opportunities and maintain environmental quality +1
	social stress	fair – high unemployment and resource uncertainty 0	poor – higher unemployment and uncertainty -1	fair – higher unemployment but resource use certainty 0	fair – higher unemployment but resource use certainty 0	fair – higher unemployment but resource use certainty 0**
	lifestyle – environmental quality/recreation opportunity	very good – high quality environmental and recreation +2	fair – loss of environmental quality and wilderness recreation 0	excellent – high quality environmental and increased recreation +3	very good – high quality environmental and recreation +2	very good – high quality environmental and recreation +2

Account	Measure	Base case				Consensus scenario
		Status quo	Status quo projection	Scenario 1	Scenario 2	
Specific aboriginal community concerns	employment opportunities for aboriginal communities	poor – limited opportunities -1	poor – limited opportunities -1	fair – some opportunities in tourism 0	fair – some opportunities in tourism 0	good – opportunities in tourism botanical forestry products and woodlots +1
	aboriginal sustenance and spiritual use	good – sustenance resources and access to spiritual sites +1	poor – diminished sustenance and spiritual resources -1	very good – protection of sustenance and spiritual resources +2	good – protection of sustenance and spiritual resources +1	good – protection of sustenance and spiritual resources +1

* This figure is based on average (gross) wages in the Diamond region of \$30,000 in forestry, \$17,000 in tourism, \$18,000 in agriculture, \$30,000 in mining and \$35,000 in mineral exploration.

** It was recognized by participants that the gross employment effects of the proposed reduction in timber harvesting may be partially offset through programs outlined in the British Columbia Forest Renewal Plan. Moreover the identification of high intensity resource development zones should promote a stable and sustainable timber processing industry allowing for more intensive management in these areas and potentially offsetting losses in harvestable area.

5.6 Glossary

account: categories of information or decision factors that may be useful in evaluating a land use scenario.

agricultural land: land that is used for farming or land that has biophysical attributes that make it suitable for agricultural use. These include lands identified by the Canada Land Inventory agriculture capability classes 1 to 4, as well as unique lands that have a significant role in sustaining agriculture in a regional context.

Agricultural Land Reserve (ALR): land designated and reserved for agricultural purposes under the *Agricultural Land Commission Act* (the reserve covers about five per cent of the province and includes most of BC's highest quality agricultural land). It includes both private and public lands, and covers land being farmed and land with agricultural potential. Non-agricultural uses on the ALR are regulated.

animal unit month (AUM): the amount of forage required to feed a mature 1,000 pound cow with or without unweaned calf at her side, or equivalent, (one two-year old horse or five deer) for one month.

archaeological sites: locations containing or with the potential to contain the physical remains of past human activity. These sites are assessed through archaeological investigations.

biodiversity: the variety of plant and animal life within species (genetic diversity), among species (species diversity), and among ecosystems (ecosystem diversity). The latter includes the diversity of structure and function within ecosystems.

biogeoclimatic zone: a large geographic area with a broadly homogeneous macroclimate. Each zone is named after one or more of the dominant climax species of the ecosystems in the zone, and a geographic or climatic modifier. British Columbia has 14 biogeoclimatic zones.

clear-cutting: the harvesting of all trees from an area of forest land in a single cut. This method is preferred where the successful establishment of a species is dependent upon or favored by open, sunny locations.

consensus: an approach, defined by participants, to reaching agreement on a specific proposal or package of proposals. Participants in the Diamond LRMP process define consensus as the willingness to support the decision and remain an active member of the LRMP process.

critical habitat: areas considered to be critically important for sustaining a population and where development may cause an unacceptable decline in the population. A rating of the importance of the habitat (e.g., high, medium, low) may also be used.

ecosection: an ecological unit based on climate and physiography.

ecosystem: an interacting complex of living organisms (plants, fungi, bacteria, animals) and the physical environment (soil, air, water, bedrock) immediately affecting them.

IPT (Interagency Planning Team): committee of local resource managers from government agencies who initiate and provide technical support for the LRMP.

indicator: an attribute of a resource whose measurement reflects or indicates the condition or use of that resource.

integrated resource management (IRM): a process that identifies and considers all resource values, along with social, economic, and environmental needs, with the goal of resource stewardship guided by the principle of sustainable use.

landscape: a scale for mapping resource lands—usually defined based on ecological or physiographic features such as watersheds (see the Forest Practices Code of British Columbia Act). May also refer to scenic landscapes that are essential to the success of tourism, and/or are an integral part of recreation experiences, and/or are of public/community importance.

long run sustained yield (LRSY): a measure of land base productivity for specified management assumptions. LRSY is determined as the long-term sustainable level of the harvest forecast generated by a forest planning computer model. It is a function of the size and productivity of the land base, the current growing stock, the length of the planning horizon and the management assumptions.

LRMP (Land and Resource Management Planning): an integrated sub-regional consensus-building process that produces a Land and Resource Management Plan for review and approval by government. The plan establishes direction for land use and specifies broad resource management objectives and strategies.

minerals: mineral deposits having some resource value such as coal, sand and gravel, precious and semi-precious metals, fossils, and gem stones.

multiple accounts analysis: an assessment of the impacts of a course of action on the social, economic and environmental well-being of a community, region, or the province as a whole.

objective: an aim, goal or end of action.

old growth: forest that contains live and dead trees of various sizes, species, composition and age class structures. Old growth forests, as part of a slowly changing but dynamic ecosystem, including climax forests but not sub-climax or mid-seral forests. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another. Old growth characteristics begin to appear in most forests in the Diamond LRMP area at about 140 years.

range: any land supporting vegetation suitable for wildlife or domestic livestock grazing, including grasslands, woodlands, shrublands, and forest lands.

recreation areas: areas outside of parks that are used regularly for recreation, or areas that have recreation potential. These areas fall into one of five categories: primitive; semi-primitive non-motorized; semi-primitive motorized; roaded resource land; and, rural.

Recreation Opportunity Spectrum (ROS): types of recreational experiences, physical settings, structures and services, access, management settings and social settings that, in combination, describe the recreational opportunities in an area. The 5 ROS Classes are: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded resource land and rural.

resource analysis: the critical examination of resources and environment so as to support planning and decision-making. Resource analysis consists of:

- gathering, examining and interpreting relevant information;
- organizing and integrating information to assist in developing scenarios; and,
- assessing the impacts of a proposed course of action (scenario).

resource management zone: a division or zone of the planning area that is distinct from other zones with respect to biophysical characteristics, resource issues or resource management direction. Resource management zones (in LRMP, these include settlement, agriculture, high intensity resource development, general resource development, low intensity resource development and protection) may be drawn on a map to describe general management intent. The zones are usually further

defined using descriptive objectives and strategies to explain future land use and resource management activities.

scenario: a complete and workable set of resource management zones, objectives and strategies for the planning area.

selection harvesting: a silvicultural system in which trees are harvested individually or in small groups continuously, at relatively short intervals.

silvicultural system: a process following accepted silvicultural conditions whereby forests are tended, harvested and replaced.

strategies: specific management instructions to achieve an objective; should be measurable where possible.

sustainable: capable of being maintained indefinitely.

terms of reference: a document that outlines the general LRMP process for a particular project. It outlines the planning area, planning process, public participation process, preliminary objectives, project schedule, budget, and dispute resolution process.

timber: in terms of industrial logging, any trees or stands of trees, that are commercially valuable.

VQO (Visual Quality Objectives): a desired level of visual impact from a viewpoint based on physical and sociological characteristics of an area. It refers to the degree of acceptable change of the characteristic landscape. Five categories of VQO are commonly used: preservation; retention; partial retention; modification; and, maximum modification.

water: the supply (abundance) and quality of surface water, including fresh, marine, and groundwater.

watershed: an area of land that collects and discharges water into a single main stream through a series of smaller tributaries.

wildlife: populations, variety, and distribution of birds, mammals, reptiles, amphibians, invertebrates, and plants.

wildlife habitat: areas of land and water that support specific wildlife or groups of wildlife.