Morice Land and Resource Management Plan

Planning Handbook

Prepared by

Morice LRMP Government Team
MSRM, Skeena Region

January, 2003

BRITISH COLUMBIA

Table of Contents

Abbreviations

AAC	Allowable annual cut
BEU	Broad Ecosystem Unit
CORE	Commission on Resources and the Environment
FISS	Fish Information Summary System
FSSIM	Forest Service Simulator Modeller
GIS	Geographic information system
GTT	Government Technical Team
IAMC	Interagency Management Committee
IFPA	Innovative Forest Practices Agreement
IRM	Integrated resource management
LRMP	Land and Resource Management Plan
MOF	Ministry of Forests
MSRM	Ministry of Sustainable Resource Management
NTS	National Topographic System
SEEA	Socio-economic and environmental assessment
SELES	Spatially explicit landscape events simulator
SFM	Sustainable forest management
TFL	Tree farm license
TSA	Timber supply area

Section 1 About This Handbook

This Handbook is a reference source for participants on the Morice Land and Resource Management Plan (LRMP) process. The Handbook:

- ?? outlines background information on LRMPs, including provincial policy on land use planning;
- ?? houses key process documents such as the LRMP terms of reference, workplan, and ground rules; and
- ?? provides an overview of some of the significant elements of the planning process such as the LRMP framework, interest-based negotiation, data and resource analysis, implementation and monitoring, and technical support to the process.

The Handbook is produced in the form of a binder and is structured in Sections with tabs so that information can be added or changed as required. The Planning Handbook is one of a set of handbooks for LRMP participants. These include:

- ?? Morice Planning Area Background Report: *An Overview of Natural, Cultural, and Socio-Economic Features, Land Uses and Resource Management*; and,
- ?? Meeting Summary Binder – to house the LRMP meeting summaries and the resource analyses prepared by the government technical team.
- ?? A Map and Inventory Handbook, which contains examples of each of the core maps and descriptions.

Combined, these handbooks provide LRMP participants with quick references on the various aspects of the planning process as well as a place to file LRMP materials as they are distributed.

Section 2 Land and Resource Management Planning in British Columbia

In this Section:

1. What is Land and Resource Management Planning?

Land and Resource Management Planning works towards:

- ?? reducing and resolving land use conflicts;
- ?? ensuring sustainable resource management; and,
- ?? providing economic diversity and security.

It is a process where a broad range of stakeholders including the provincial government, First Nations, interested organizations, communities and individuals join together as a 'planning table' to determine how land and resources within a region or sub-region will be managed in the future. It is a form of 'strategic' land use planning that develops *broad* direction for land and resource management.

Future planning and resource management decisions are expected to be consistent with the direction provided at this strategic level. The outcome of the planning process is a set of recommendations in the form of written direction (e.g. goals, objectives and measures) and a description of how and where it applies to the plan area. These recommendations are made to government for approval.

2. Where do LRMPs Fit Within the Provincial Planning System?

As shown in Figure 1, LRMPs are at the 'upper' end of the continuum of land/ resource plans. This level provides general management direction to 'more detailed' plans for smaller areas. There is an expectation—and a legal requirement in some cases—that future, more detailed plans will be consistent with strategic plans. Strategic policies and plans are always being informed and refined by the practical reality of planning at more localized, detailed levels. Taken as a whole, the planning levels and the organizations responsible for planning complement and reinforce each other to provide a land use planning and decision-making system.

3. First Nations Involvement

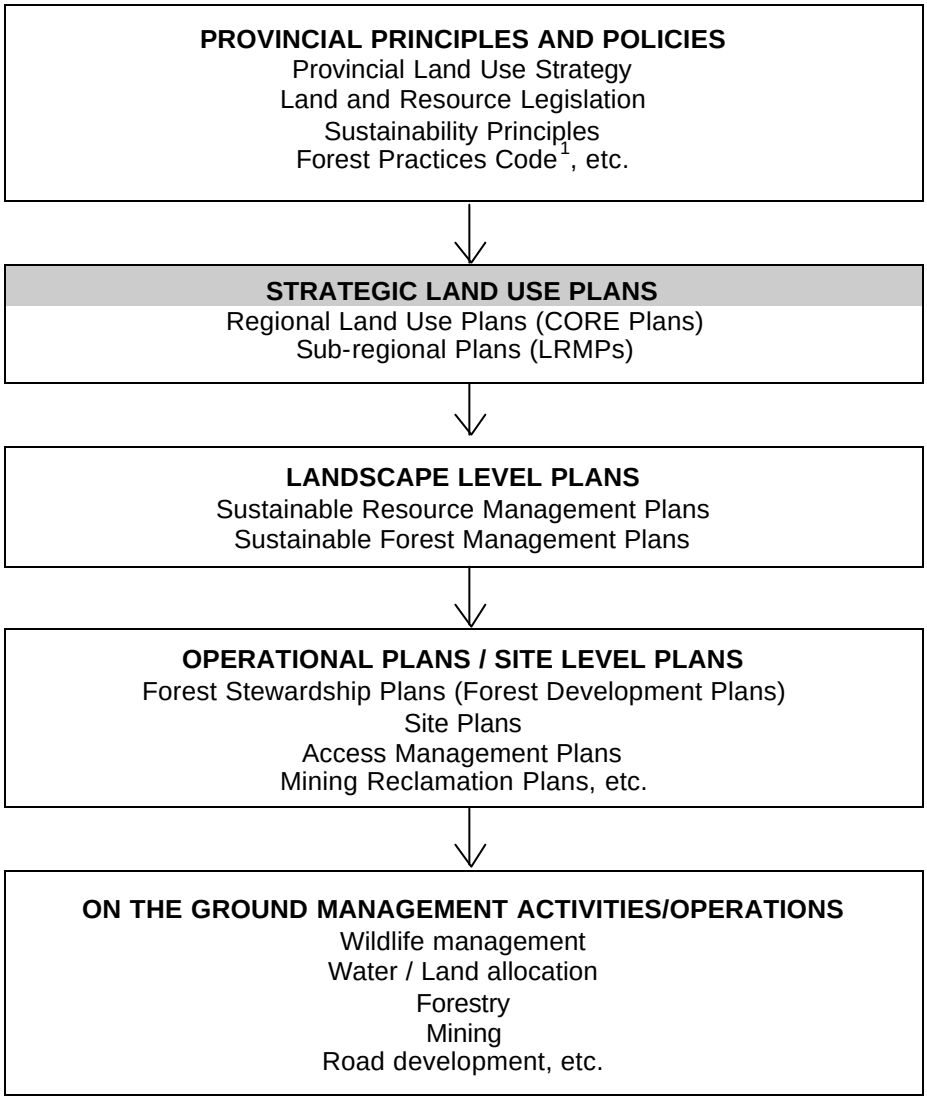
First Nations in the plan area are encouraged to participate in the LRMP to ensure that LRMP decisions are sensitive to First Nations interests. The LRMP process is consistent with the recognition of aboriginal title and the inherent right of aboriginal people to self-government.

The LRMP process is consistent with current policy in that a government-to-government relationship between First Nations and the provincial government has been established.

4. What is the Status of Land and Resource Management Planning in BC?

As of December 2002, regional and subregional land use plans are approved or being developed for more than 80 per cent of BC. Fifteen LRMPs and four Regional Land Use Plans have been approved and are being implemented and monitored. The provincial goal is to have strategic land use planning complete by March 2004.

Figure 1. Provincial Planning Hierarchy



[1] The *Forest Practices Code of BC Act* is curently being amended and will be replaced by the *Forest and Range Practices Act.* Changes to the legislation and regulations can be found at: http://www.legis.gov.bc.ca/legislation/index.htm and http://www.for.gov.bc.ca/tsab/legsregs/amendlog.htm

5. What are the Main Characteristics of LRMPs?

?? LRMPs cover large geographic areas and use small-scale mapping (e.g., 1:250,000) to provide broad land allocation and resource management direction.

?? LRMPs provide participants with a vehicle to bring interests and perspectives together. In this context, LRMPs are integrated resource management plans. They provide a forum for increased communication and knowledge using a process of consensus to develop agreements.

?? The Morice LRMP covers approximately 1.5 million hectares, including 36,455 hectares of private land that are not included in the LRMP plan area. In order to plan for such a large area in the limited time available, the process needs to stay relatively general yet focused. LRMPs provide broad direction to future planning where more specific resource management direction is developed for smaller areas using more detailed information.

?? During the planning process it may be necessary, from time to time, to examine certain elements at a more detailed level (e.g. 1:100,000 or 1:50,000 scale) to analyze or validate information that cannot be appreciated at a broader scale.

?? LRMP wording must balance the need to provide clear resource management direction with the need to provide flexibility for those responsible for implementing the plan. LRMP goals, objectives, and measures provide direction for on-the-ground management of land and resources. In order to be able to assess how well the plan is being implemented, objectives need to be measurable.

Table 1. Scope of the LRMP

LRMPs deal with:	LRMPs do not deal with:
Terrestrial land management planning (how to best use and manage land and resources).	Tenuring (determining who receives licenses or leases on Crown land).
Integrating First Nations' interests as they relate to land use and management.	Treaty issues (First Nations rights and title are addressed through tripartite treaty processes).
Foreshore issues including: ✍ Log dumps; and, ✍ Marine conservation areas associated with terrestrial parks.	Marine planning.
Policy considerations (LRMPs can recommend changes to policy where it can be demonstrated that existing policy strongly conflicts with the social choice objectives.)	
Providing guidance to statutory decision-makers.	Statutory decisions (e.g. setting Allowable Annual Cut).
Identifying economic opportunities and providing strategies for promoting investment and business development based on the identified opportunities.	

6. Emerging Direction for Land Use Planning

5.1 Sustainable Resource Management Planning (SRM planning)

Sustainable Resource Management planning is a consolidated approach to planning at the landscape level on provincial Crown lands. SRM planning will allow the Ministry of Sustainable Resource Management (MSRM) to implement land use plans, identify economic opportunities, design and promote sustainable development opportunities and conserve environmental values. In contrast to Land and Resource Management Planning that occurs at the scale of 1:250,000, SRM planning typically occurs at 1:50,000 to 1:100,000 and focuses on medium sized watersheds (50,000 to100,000 hectares).

SRM planning has the following goals:

- ?? provide one window for strategic plan development at the landscape scale;
- ?? provide one window for retrieval of strategic information and management direction (e.g. LRMPs);
- ?? provide a comprehensive approach to landscape planning;
- ?? foster planning partnerships with the private sector and other interests; and,
- ?? foster economic development while sustaining a healthy environment.

SRM planning provides a vehicle for integrating Sustainable Forest Management Plans (SFMPs) into the provincial planning hierarchy. The landscape level objectives (criteria and indicators) for forest management, set out by SFM planning for certification, may become legally established elements of a SRM Plan[2].

7. For More Information on LRMPs…

Section 13 contains the following provincial publications:

- ✍ *"Land and Resource Management Planning: A Statement of Principles and Process"*[3] which provides an overview of the provincial policy direction for LRMPs; and
- ✍ *"Higher Level Plans: Greater Strength for Land Use Objectives"*

[2] For more information on forest certification and SFM planning, see http://www.for.gov.bc.ca/het/certification/

[3] Significant policy changes have taken place since the Statement of Principles and Process was first published in 1993, however this document still provides a useful overview of the provincial policy direction for landuse planning. The policy direction provided in the participants handbook and to the LRMP table, through the Morice LRMP process, should be considered current.

Section 3 Morice LRMP Terms-of-Reference and Ground Rules

Inserted Documents:

- "Morice LRMP Terms of Reference"
- "Morice LRMP Ground Rules"

Insert 3-1:

"Morice LRMP Terms of Reference"

Insert 3-2:

"Morice LRMP Ground Rules"

Section 4 Work Plan

In this Section:

✍ Work Plan Table

The work plan details the steps that are required to complete the Morice LRMP process. The work plan is an extension of the 'milestones' described in the Terms of Reference (Section 3). It is important to recognize that some steps in the process are not as linear as they appear. The work plan provides a guide on how the process will proceed, but it may change in response to the needs of the planning process.

The work plan is structured to show tasks that are the responsibility of the government team, the Table, and the economic development working group at each stage of the planning process. The planning process will rely on the main Table to undertake substantive discussions and negotiations. The government technical team (GTT) will provide neutral and scientific data and analysis of data to the main table to support the process, as described in Section 5.

Meeting #	Meeting Objectives	GTT Activities	Main Table Activities	Economic Development Working Group
1 **Oct 4/5 2002**	**Convene planning table** Introductions LRMP approach and work plan Principles of interest based negotiation Develop process ground rules Review issues and interests Introduce economic development framework	Present Background Report	Terms of reference (TOR) presented Confirm LRMP approach and work plan Introduction to the concept of interest based negotiations Brainstorming vision and goals Review ground rules and work plan Brain storming issues and interests	
2 **Nov 14/15/16 2002**	**Confirm vision and approach** Finalize ground rules Confirm work plan Establish economic development working group Identify issues and develop visions and goals Begin work on GMD Prepare for cross cultural training	Resource overview presentation Presentation on "The provincial context of the Morice plan area" Results based code presentation Resource theme overview presentations for: ?? Timber ?? Protected areas ?? Settlement ?? Cultural heritage	Endorse ground rules Confirm work plan Confirm vision and goals Interest statements/facilitated discussions of interests for: ?? Timber ?? Protected areas ?? Settlement ?? Cultural heritage	Establish economic development working group and plan first meeting

Meeting #	Meeting Objectives	GTT Activities	Main Table Activities	Economic-Development Working Group
3 **Dec 6/7 2002**	**Develop General Management Direction (GMD) objectives and economic development action plan** Continued work on GMD ?? Resource theme overview presentations ?? Interest statements / facilitated discussion of interests ?? Resource analyses and GMD presentations Continued development of an economic development action plan	Present resource analyses and draft preliminary GMD for: ?? Timber ?? Protected areas ?? Settlement ?? Cultural heritage Resource theme overview presentations for: ?? Subsurface resources ?? Agriculture/Range ?? Botanical forest products	Interest statements/facilitated discussions of interests for: ?? Subsurface resources ?? Agriculture/Range ?? Botanical forest products Review resource maps and background reports	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.
4 **Jan 17/18 2003**	**Develop (GMD) objectives and economic development action plan** Continued work on GMD ?? Resource theme overview presentations ?? Interest statements / facilitated discussion of interests ?? Resource analyses and GMD presentations ?? Finalize draft GMD from meeting #3 Continued development of an economic development action plan	Present resource analyses and draft preliminary GMD for: ?? Subsurface resources ?? Agriculture/Range ?? Botanical forest products Resource theme overview presentations for: ?? Recreation ?? Tourism ?? Fish/aquatic habitat ?? Visual Quality	Interest statements / facilitated discussions of interests for: ?? Recreation ?? Tourism ?? Fish/aquatic habitat ?? Visual Quality Finalize draft GMD from meeting #3 Review resource maps and background reports	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.

Meeting #	Meeting Objectives	Government Technical Team (GTT) Activities	Main Table Activities	Economic-Development Working Group
5 **Feb 14/15 2003**	**Develop GMD objectives and economic development action plan** Continued work on GMD ?? Resource theme overview presentations ?? Interest statements / facilitated discussion of interests ?? Resource analyses and GMD presentations ?? Finalize draft GMD from meeting #4 Continued development of an economic development action plan	Present resource analyses and draft preliminary GMD for: ?? Recreation ?? Tourism ?? Fish/aquatic habitat ?? Visual Quality Resource theme overview presentations for: ?? Wildlife ?? Biodiversity ?? Riparian ?? Hunting/guide outfitting/trapping ?? Access ?? Water (quantity & quality) [4]	Interest statements / facilitated discussions of interests for: ?? Wildlife ?? Biodiversity ?? Riparian ?? Hunting/guide outfitting/trapping ?? Access ?? Water (quantity & quality) Finalize draft GMD from meeting #4 Review resource maps and background reports	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.
6 **March 7/8 2003**	**Develop GMD objectives and economic development action plan** Continued work on GMD ?? Resource theme overview presentations ?? Interest statements / facilitated discussion of interests ?? Resource analyses and GMD presentations ?? Finalize draft GMD from meeting #5	Present resource analyses and draft preliminary GMD for: ?? Biodiversity ?? Wildlife ?? Riparian ?? Hunting/guide outfitting /trapping ?? Access ?? Water (quantity & quality)	Finalize draft GMD from meeting #5 Review resource maps and background reports	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.

[4] The water resource will be incorporated within other resource themes; management direction will be developed as required within those themes. The purpose of including water as a separate resource theme at this stage is to ensure that all issues related to water are addressed in an integrated and comprehensive manner.

Meeting #	Meeting Objectives	Government Technical Team (GTT) Activities	Main Table Activities	Economic-Development Working Group
7 **April 4/5 2003**	**Scenario Development** Finalize draft GMD from meeting #6 Introduce discussion on area specific direction Build agreement on draft GMD	Introduce single scenario concept and area specific management direction[5].	Finalize draft GMD from meeting #6 Review resource maps and background reports Review and refine draft GMD, including area specific management direction	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.
8 **May 9/10 2003**	**Scenario Development** Build agreement on area specific direction Build agreement on draft GMD	Continue scenario development and analysis, including area specific management direction.	Review and refine draft GMD, including area specific management direction	Build economic development action plan and forward recommendations to LRMP for integration into land use direction.
9 **June 20/21 2003**	**Scenario Development** Present LRMP base case[6], including socio-economic analysis Present draft economic-development action plan Finalize draft package on GMD, including area specific management direction	Continue scenario development and analysis including area specific management direction. Present LRMP base case including socio-economic analysis	Finalize draft package on GMD, including area specific management direction	Draft economic-development action plan
Summer Break, July/August – Scenario Analysis				

[5] Area specific management includes management of protected areas.
[6] The LRMP base case is the default land and management regime that is most likely to be in place in the absence of a strategic plan.

Meeting #	Meeting Objectives	Government Technical Team (GTT) Activities	Main Table Activities	Economic-Development Working Group
10 **Sept 12/13 2003**	**Negotiate agreement**	Present scenario analysis	Discuss and review draft package of GMD, area specific direction and protected areas in light of summer scenario analysis	
11 **Oct-Dec 2003**	**Negotiate agreement**	Public review (October)	Undertake discussions leading to ratification Participate in public review	
12 **Nov 14/15 2003**	**Negotiate agreement**		Undertake discussions leading to ratification	
Dec 5/6 or 12/13 2003	**Negotiate agreement**		Undertake discussions leading to ratification	
14 **Feb 2004**	**Ratify Agreement** (hold meeting if needed)			
March 2004	**Public review** (open houses)			

Section 5 Roles and Responsibilities of Government Agencies

1. Structure of the Government Team

In this Section:

Structure of the Government Team

- Process Team
- Communications Team
- Economic Development Team
- Structure of the Government Technical Team

Inserted Documents:

- Morice LRMP Preparatory Phase Project Overview
- Morice LRMP Sector Guidelines
- Morice LRMP Steps for Sector Organization

The Ministry of Sustainable Resource Management will be responsible for leading the Morice LRMP process. This role will include:

- project leadership;
- provincial government liaison;
- technical advice;
- information coordination and management;
- public and stakeholder communication;
- management of the partnership agreement with Innovative Forest Practices Agreement (IFPA) license holders;
- management of participation agreements with First Nations;
- management of the stakeholder participation process;
- representation of provincial interests; and
- preparation of the LRMP planning document.

A government team has been assembled to oversee and support the Morice LRMP process. As shown in Figure 2, the government team is comprised of a process team, a technical team, a communications team and an economic development team under the leadership/direction of a process manager. The government team members are listed in Table 2.

Figure 2. Make up of the Government Team

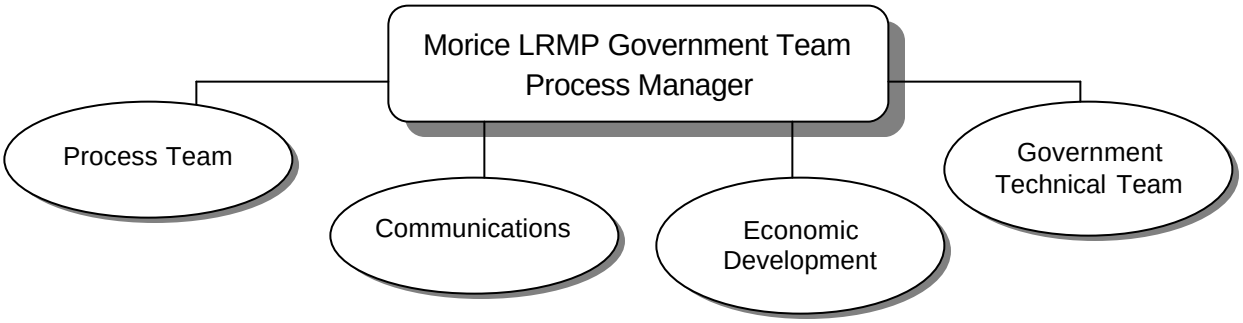


Table 2. Government Team Members

Member	Role
Shelley Browne	Communications coordinator
Bob Copley	Mapping and Inventory/Visual Resource Specialist
William Elliott	GIS Analyst
Bobby Love	Economic Development Officer
Mary Lou Mallot	Minerals/subsurface Resource Specialist
Sharon Marr	Forestry Specialist
Ian Mclachlan	Economist
Geoff Recknell	Technical Team Coordinator
Dave Riendeau	Agriculture/range Specialist
Anna Regnier	Planning Specialist
Liz Saunders	Inventory Specialist/logistics
Jim Senka	Tourism and Recreation Specialist
John Stadt	Wildlife and Biodiversity Specialist
Elizabeth Zweck	Process Manager

Process facilitation is provided by Stuart Gale and Gary Runka.

1.2 Process Team

The process team will design and manage the process including the public planning component. The team will be responsible for the following:

?? consulting with First Nations, local government and stakeholders in designing the public participation model[7];

?? developing participation agreements with First Nations, developing partnerships with the Morice IFPA;

?? preparing the terms of reference (Section 3);

?? developing the process work plan (Section 4); and

?? managing the public communication process.

1.3 Communications Team

The communications team has developed a Communication Strategy to keep the general public apprised of the LRMP. Communications may occur through a web site[8], occasional articles in the media both within the plan area and in adjacent communities, publication of a

[7] Design of the public participation model is described in three separate documents: *Morice LRMP Preparatory Phase Project Overview (May 14, 2002), Morice LRMP Sector Guidelines (June 4, 2002)* and, *Morice LRMP Steps for Sector Organization (June 24, 2002)* – these documents are included at the end of this section.

[8] The Morice LRMP web site can be found at: http://www.luco.gov.bc.ca/lrmp/morice/

newsletter that is distributed within the plan area and in adjacent communities, and/or open houses at key points during the planning process.

1.4 Economic Development Team

The economic development team is responsible for coordinating the activities of the economic development working group. The economic development working group will work in parallel with the LRMP Table to develop and economic development action plan for the Morice plan area.

1.5 Structure of the Government Technical Team (GTT)

The Government Technical Team (GTT) is largely composed of members from the Ministry of Sustainable Resource Management and from other ministries with jurisdiction and/or technical expertise and knowledge of agency policy, legislation and management practices related to management of land and resources within the Plan Area. The GTT, through a Technical Coordinator reports to the LRMP Process Manager.

The GTT is an integral part of the LRMP process. Its members support decision-making at the table through provision of neutral scientific, technical and policy analysis. Information generated by the GTT will be provided through the public process to all governments and stakeholders involved in the LRMP.

GTT are not members of the planning table but may be asked to participate in LRMP Table meetings to provide technical advice and assistance in support of consensus building.

The primary responsibility of the GTT is to provide neutral scientific, technical and policy analysis to all participants at the LRMP Table and to support First Nations in their related planning activities. In order to achieve this, the GTT will:

- Undertake research and analyses that includes a partnership with the Morice IFPA and liasing with the Multiple Accounts consultants to ensure provision of comprehensive inventories, socio-economic and natural resource analysis, spatial analysis of the plan area, and environmental risk assessment.
- When requested by the planning Table, respond to questions of a technical or analytical nature.
- Liase with other resource agencies on policy issues and stakeholder interests.
- Develop draft planning products required by the Table for review and discussion by Government and the Table.
- Undertake special projects as requested by the Process Team or the Table.
- Provide a final resource analysis of LRMP recommendations to be used by Government in the approval of the LRMP.
- Work together to ensure a corporate understanding of issues (as they relate to information and analysis) prior to taking information to the LRMP Table.

The GTT will maintain ongoing contact with other technical planning processes that are providing information to the LRMP Table. The GTT will also facilitate additional information development by coordinating and collating analyses provided by the IFPA, First Nations and stakeholders.

Insert 5-1:

"Morice LRMP Preparatory Phase Project Overview"
May 14, 2002

Insert 5-2:

"Morice LRMP Sector Guidelines"
June 4, 2002

Insert 5-3:

"Morice LRMP Steps for Sector Organization"
June 24, 2002

Section 6 LRMP Information and Analysis

1. Introduction

In this Section:

- Introduction
- Building the Knowledge Base, Maps and Reports
- Resource Analyses and Socio-Economic and Environmental Assessment
- LRMP Decision Support

Although LRMPs are focused largely on social choices, there exists a strong technical component that supports the recommendation arising from the planning table. LRMPs are intended to be, science-based and consistent with the principles of integrated resource management. Information and analyses provide the basis of technical support to an LRMP table. Two key aspects of technical support are to:

?? provide LRMP participants with a familiarity about the landbase ('building a knowledge base'); and,

?? conduct analyses to estimate the implications of the table's recommendations as compared to the current situation.

2. Building the Knowledge Base: Maps and Reports

Because it is impossible for LRMP participants to review all studies and reports that are relevant to the Morice, the Government Technical Team is taking steps to streamline the amount of information that table members are expected to review and apply.

The GTT will use the following objectives as guidelines to streamline the amount of information to the Table:

?? make available a comprehensive information base;

?? ensure that the right type of information, in the proper amount is made available;

?? ensure technical work is transparent and, if possible, reviewed by internal, external and independent experts;

?? ensure information brought to the Table is easily verified;

?? present information in a consistent format; and,

?? use language that is readily understood and present technical material appropriate to the audience.

Figure 3. Links between LRMP technical support and the steps in the planning process.

Planning Phases	Technical Support
Confirm Process	**Information Assembly** - Assess information and data needs - Prepare maps - Write reports
Get Ready to Plan	**Convene Planning Table** - LRMP approach and workplan - Develop/confirm process ground rules - Establish economic development working group
Develop GMD	**Prepare LRMP Base Case** - Description of current conditions - Analysis of Mountain Pine Beetle risk and implications of management scenarios to address risk - Implications in terms of social, environmental and economic conditions based on current management **Draft General Management Direction** - Management direction that applies to the entire plan area for each resource theme
Scenario Development	**Analytical Support to Scenario Development** - Address area specific issues - Future projections based on proposed management scenarios
Scenario Analysis	**Mid-Process Analysis of the Proposed Management Scenario** - Address area specific issues - Future projections based on proposed management scenarios
Negotiate Agreement	**Prepare SEEA of Final LRMP Recommendations** - Future projections based on final LRMP recommendations - Compare to base case - Includes implications for social, environmental and economic conditions

Table 3. Maps and reports for each step in the process.

Planning Stage	Information	Supporting Analysis
1. Early in the process: Assess the current state of the land and resources	?? Morice Planning Area Background Report ?? Resource Background Reports on various topics	
	?? Resource Maps (map atlas)	
	?? Base Case Resource Analysis Reports	?? GIS area statistics ?? Resource analyses: projections of the base case (expert knowledge) ?? Environmental risk assessment ?? Timber supply analysis
	?? Base Case Socio-economic Analysis Report	?? Socio-economic and environmental assessment of the base case
	?? Mountain pine beetle risk and management scenario analyses	?? Spatial-temporal modelling
2. Midway through the process: Scenario development	?? Supporting Information: resource library, bibliography, presentations to the Table ?? Plan scenario	?? GIS area statistics, themeing and queries ?? Analysis of management scenario
3. At the end of the process: Negotiating an agreement	?? LRMP Recommendations Package: Analysis Report	?? Socio-economic and environmental assessment of final agreement

One of the first steps in the planning process is to have participants familiarize themselves with the current state of land and resources in the plan area. This includes a snapshot of the existing state of resources as well as estimations of how the future would look if management continues as it is today.

For the most part, the current state of land and resources in the Morice LRMP area will be assessed with resource maps and background reports. Additional information will also be available to participants through the following sources:

?? *LRMP Resource Library*: contains LRMP reports and summaries as well as copies of key references on resource topics. There is a resource library in the MSRM Skeena Region office, in Smithers.

?? *Presentations to the LRMP Table*: on various topics presented by experts from within and outside of the LRMP area

2.1 Morice Planning Area Background Report

The Morice Planning Area Background Report[9] provides an overview and summary of information describing the natural, cultural, and socio-economic features of the plan area.

[9] The Morice Background Report can be found at: http://www.luco.gov.bc.ca/lrmp/morice/

The information in this report is intended to provide a picture of the conditions and characteristics of land use and resource management in the plan area. The key components of the document are as follows:

?? description of the plan area, including social, economic and environmental attributes;

?? overview of resource uses and associated strategic planning issues;

?? description of existing and proposed land management zones, including protected areas;

?? history of planning in the area; and,

?? summary of provincial government agencies, their mandates and current initiatives related to strategic land use planning.

This report was completed in anticipation of the Morice LRMP and is current to May 2000.

2.2 Resource Maps

Core maps that are central to negotiations will be produced at 1:250,000 scale and will be posted at each LRMP meeting. Reference maps are available as needed and will be produced at 1:750,000 scale. Each LRMP participant will receive a Map Handbook with a sample of the core maps and description of each (e.g., source, scale of data assembly, age and reliability). The Map Handbook also contains a description of the base inventories (forest cover inventory, watershed atlas, and fisheries information summary system) that are used to produce maps for the Table.

A resource map portrays the location, significance, and distribution of a resource. Resource maps rely on comprehensive inventory data and are available for a number of resources in the LRMP area[10].

2.3 Resource Background Reports

Background Reports will be prepared for resources where the information and associated issues are complex and where a summary document of available literature on the resource is not already available. Examples of background reports prepared for the LRMP may include reports on fish, mineral and energy resources, and various wildlife species.

A Resource Background Report describes:

?? where the resource is found;

?? how much there is or might be;

?? provincial and regional context;

?? how it is managed; and,

?? strategic planning issues that might be addressed by an LRMP.

[10] See Map and Inventory Handbook.

Already-published reports that provide a useful overview on a resource will also be made available to the planning Table.

3. Resource Analyses and Socio-Economic and Environmental Assessment

Information is combined with analyses to provide the planning Table with an idea of the implications of their management recommendations. Base case analysis is undertaken early in the planning process to act as a benchmark upon which future-planning scenarios can be compared. As the process proceeds, ongoing 'resource analyses' of proposed scenarios allow Table members to see the potential implications of their recommendations on a range of resource values. At the end of the process, a thorough analysis is undertaken to assess the social, economic and environmental implications of the recommendations package, as compared to the base case.

There are two levels of analysis that will support the planning process. The first level of analysis is 'resource analysis', which identifies biophysical resource values and their spatial distribution. This analysis may project the resource condition over time. These resource analyses are taken to a second level of detail by applying additional analysis factors to derive a 'socio-economic and environmental assessment' (SEEA), also called the 'multiple accounts analysis'. The socio-economic and environmental assessment calculates impacts to the biophysical resource values resulting from land use or resource management practices. Because the SEEA is complex and costly, it only occurs twice over the course of the LRMP, at the beginning for the base case and at the end to assess the implications of the final plan recommendations.

3.1 Assessing Current Management: Base Case Analysis

One of the first steps in the technical preparation for an LRMP is to undertake a 'base case analysis'. The base case provides an overview of the current situation in the plan area – the resources and environmental conditions, land use designations, and social and economic conditions. The base case also projects current land use patterns, management strategies and trends into the future to assess the implications of current management over the long term. This lets the planning table know how the future might look in the absence of an LRMP and provides a benchmark against which to compare alternative planning scenarios.

For the Morice LRMP, the government technical team has separated the base case into two sets of information: the Base Case Resource Analysis Report and the Base Case Socio-Economic Analysis Report.

3.1.1 Base Case Resource Analysis Report

The *Base Case Resource Analysis Reports* describes what would likely happen if status quo management continues (such as in the absence of an LRMP). Future projections may be developed based on resource analyses carried out for each resource. Analysis indicators are selected for the analyses. These indicators are sensitive or responsive to management actions and will therefore show trends over time as conditions change.

These indicators are used to provide an estimate of the 'baseline land use scenario' against which the implications of eventual LRMP scenario(s) are compared.

Once the Base Case Resource Analysis Reports are completed, independent consultants take the results and apply tools to estimate the socio-economic and environmental implications of the changes in terms of jobs, social well-being, and environmental risk as part of a SEEA (also called Multiple Accounts Analysis). The product of the analysis is the *Base Case Socio-Economic Analysis Report*.

3.1.2 Base Case Socio-Economic Analysis Report

The *Base Case Socio-Economic Analysis Report* will be presented in two phases to the Table. *Base Case 1*, which includes the economic and social accounts but not the environmental account, is scheduled for delivery to the Table in April 2003 - prior to the start of the scenario development process phase. By not including the environmental account it is possible to provide the table with the *Base Case Socio-Economic Analysis Report* earlier.

Base Case 2, which includes the economic, social and environmental accounts and a sensitivity analysis of mountain pine beetle risk and management scenarios, will be delivered to the Table in June 2003.

Various analysis tools are used to estimate how resource values will change over time under current management (e.g., GIS, computer models, and professional judgement. See Analysis Tools below). The analyses involve a number of assumptions and uncertainties that need to be made explicit in the report.

3.2 Analysis to Support Development of Plan Scenarios:

Once LRMP participants have a grounding in the current state of resources in the plan area and General Management Direction has been drafted, they move on to address site specific areas that require additional analysis and specific management direction.

As the scenario development stage progresses, ongoing ad hoc resource analyses will be carried out to assess the short and long-term implications of the various management alternatives put forward by the planning Table. This stage of the planning process will be supported by:

- having real-time GIS support at the table meetings to answer simple questions; and,
- completing ad-hoc analysis between table meetings to address more complex issues.

During the summer break (July – August 2003) the GTT will complete an analysis of the plan scenario developed by the Table. The scenario analysis will provide a general qualitative analysis of the plan in addition to focusing in greater detail on specific key issues that are

important to the planning Table such as the timber harvest forecast and the forest age class distribution.

3.3 Assessing the LRMP Recommendations Package: The Analysis Report

In the final phase of the planning process, participants reach agreement on a set of management recommendations in the form of goals, objectives, and measures. These recommendations are subject to a thorough analysis to assess their social, economic, and environmental implications compared to the base case (current management).

Independent consultants assess the socio-economic and environmental implications of the final LRMP recommendations package, and prepare a comprehensive report that provides an independent interpretation of resource analysis results and anticipated future trends and implications. Results are compared to the base case analysis and will generally use the same indicators and analysis methods.

The final socio-economic and environmental assessment helps the Table to identify any unforeseen implications and inform government and the public about the expected implications of adopting the final recommended plan.

4. LRMP Decision Support

There are a number of analysis tools that support Table negotiations. Analyses aim to provide a rigorous and transparent assessment of the current situation and of the implications of management alternatives. Collectively, these analysis tools comprise a 'decision support system' for the LRMP.

Some analysis tools are simpler and track a change in a single aspect of a resource while others are quite complex. More complex analytical tools are required where resources interact in complex ways over space and time. As a general principle, resources are analysed using the simplest analysis tool available to provide reliable and timely information to the planning Table.

The following analysis tools are available to support the LRMP process.

4.1 Professional Judgement

Experts provide their professional opinion as to the potential effects of management actions. The LRMP Table will seek advice, as needed, from a range of experts from agency resource professionals and government researchers to experts from the private sector and academic institutions. Local expert knowledge, including traditional ecological knowledge, is also an important part of this process. Expert opinion is also included in other forms of analysis.

4.2 Simple Spreadsheet Analysis

One of the least complex tools for quantitative analysis is a simple spreadsheet. Specialists can assess non-spatial data in various ways using computer software such as Microsoft Excel.

4.3 Geographic Information System (GIS) Area Analysis

It is possible to quickly generate statistics on the distribution of resources in the plan area using GIS technology. GIS area analysis summarises mapped information describing the state of a resource at a 'snapshot in time'.

Area-based statistics may be generated for the entire LRMP area or for defined management areas. For example, GIS analysis can quantify the percentage of the land base that is recommended for protection, or the amount of landbase available for timber harvesting. GIS area analysis can also assess the relationships between resource values by overlaying two or more layers of data and quantifying the areas of spatial overlap (e.g. the amount of each biogeoclimatic sub-zone that is represented in existing and recommended protected areas).

It is important to note that GIS area analysis differs from landscape modelling in that GIS does not project changes in resource values over time.

4.4 Computer Modelling

Computer models are valuable analysis tools for addressing complex problems. They can simulate and assess an array of ecological and resource-related variables. They can track impacts over large areas and long time periods. The outputs of the models are used in preparing Resource Analysis Reports and providing an additional layer of technical rigour to the assessment of resource values.

The LRMP process will benefit from the computer modelling outputs provided by SELES landscape model and the FSSIM timber supply model.

4.4.1. Landscape Modelling Using SELES

Landscape models depict when, where and how landscapes will change in response to land use scenarios. They help to characterize impacts on forest age and structure and related economic and environmental values. Such analysis will provide an important platform for discussion.

Landscape models combine maps (and related data) of current forest conditions with formal predictions about the consequences of land management activities and ecological processes to create 'projected maps' of the future forest. Landscape models typically simulate landscape change over a period of approximately 200 to 500 years (the 'planning horizon'), because forested ecosystems respond to management over this period.

Spatially Explicit Landscape Event Simulator (SELES) software is suitable for strategic level planning for several reasons (See shaded box at the end of this Section). SELES combines a spatial database (for storing maps) with a landscape modelling language to allow rapid development of landscape simulations.

The spatial database consists of a series of grid-based maps. Each cell of the grid stores a code describing a mapped feature. The modelling language allows formal predictions about disturbance (e.g. road development, harvesting, mass wasting, windthrow) and

stand growth (e.g. changes in timber volume and stand structure). Formal predictions may include probabilities that management activities and ecological processes occur. Probabilities allow ecologists and land managers to explicitly express uncertainty in their formal predictions.

The products of SELES are maps and graphs. Maps depicting predicted future conditions may be viewed directly, but a large number of maps would be required to characterize changes over the planning horizon. Thus, SELES calculates statistics describing the abundance and distribution of planning indicators (landscape features associated with some broader value) at specified intervals during the planning horizon. Sampled statistics are graphed to show changes in planning indicators over time, characterizing the costs and benefits of land use decisions.

SELES projects typically use a collaborative model development approach. Because ecology and issues differ regionally, a new landscape model (at least partially) must be developed for each land-use problem. To develop the formal predictions that underpin all landscape models, SELES projects rely on contributions from three groups:

- topic experts (e.g., in ecology, forestry, and mining);
- planning participants (i.e., LRMP Table members); and,
- modellers.

Topic experts develop formal predictions. Planning participants focus the model on key issues and challenge formal predictions. Modellers help topic experts and decision-makers express ideas in a way compatible with analysis. Collaboration among the three groups promotes a common understanding of important issues and assumptions.

One of the key factors in using a landscape model in the LRMP process is to ensure transparency in its development and use. LRMP table members need to understand and have input into the components and assumptions that went into model development. They also need to be informed as to how the outputs of the model are interpreted.

Not all resources need to be analysed using SELES. Wherever possible, the simplest analytical tool will be used to assess a resource. The GTT has identified biodiversity, grizzly bear habitat, and timber values as priority topics for landscape modelling. Other resource values may be identified as the planning process proceeds, although they should only be considered for modelling if they meet the following criteria:

- complex interactions;
- large spatial scales;
- long timeframes;
- high degree of controversy or impact; and,
- lack of support for expert conclusions.

4.4.2 Timber Supply Modelling Using FSSIM

Timber supply modelling is a process that explores the effects on timber supply of existing or possible forest management strategies and alternative timber harvesting levels.

A computer model is constructed that reflects the species and age class distributions for various parts of the forest.

The model describes how different parts of the forest grow and how they are expected to respond to changes, such as timber harvesting. The model categorizes areas according to whether or not they are available for harvesting and what kinds of management requirements might be applied to the areas. The BC Forest Service uses the Forest Service Simulator (FSSIM) to do timber supply modelling. FSSIM is used to forecast how the forest changes, decade by decade, over long time horizons (typically 250 years) in response to different harvest levels and management actions and requirements. This makes it possible to compare how alternative management strategies affect forest structure and timber production over time.

FSSIM is usually used to build 'aggregated models', where areas with similar species, age, growth and management characteristics are grouped together. This means that individual stands are not tracked in the model. This approach helps to simplify the analysis and better addresses uncertainty in the inventory data.

FSSIM cannot model spatial relationships explicitly, such as stand adjacency, because it has no information about which stands are adjacent. Instead, proxies such as number of harvest passes are used to approximate spatial management requirements. These proxies may over- or under-estimate the true effect of these requirements, depending on the spatial structure of the forest and the history of logging.

Factors Considered in Selecting SELES for Landscape Modelling

The GTT chose SELES as a modelling tool because it meets the following criteria for a landscape model for the LRMP:

- ?? is able to track a range of environmental variables such as seral stage and stand structure in different ecological units (e.g., subzone);
- ?? is able to model complex habitat relationships;
- ?? is able to model events that occur randomly over time based on probabilities of occurrence;
- ?? can model over a variety of scales, modelling larger areas (e.g., the entire LRMP area) with reasonable resolution;
- ?? is flexible and capable of modelling a variety of issues (as opposed to models that address a single issue e.g., timber or environmental analysis);
- ?? can interact with other models e.g., the FSSIM timber supply model;
- ?? has rapid turnaround time; and
- ?? is transparent.

Section 7 Economic Development

In this Section:

✍ To be added

Section 8 Interest-Based Negotiation

In this Section:

- What is Interest-Based Negotiation
- Principles of Interest-Based Negotiation
- Basic Steps and Concepts of Interest-Based Negotiation
- Alternatives to Interest-Based Negotiation

1. What Is Interest-Based Negotiation[11]

Interest-based negotiation is an approach to finding solutions to problems. It is based on parties in the negotiation making an explicit commitment to seek mutually acceptable solutions, as opposed to bargaining for win-lose outcomes. The same principles are embodied in processes called principled negotiation, and integrative bargaining.

Interest-based negotiation is based on a set of principles and steps that incorporate and integrate the content of the negotiation with a structured process and ongoing attention to maintaining a constructive relationship between negotiating parties.

2. Principles Of Interest-Based Negotiation

2.1 Constructive Win-Win Solutions

Win-win solutions are mutually acceptable agreements that contain benefits for all parties. Interest-based negotiation is based on principles that link the long-term success of such agreements with improved working relationships among the negotiating parties. This results from an agreement between all parties to collaborate and treat others in a respectful and constructive manner.

2.2 Transparency

Transparency means making a commitment to clear communication. In win-lose bargaining people try to keep their 'cards close to their chests' and not give away what they are thinking. In interest-based negotiation participants clarify for others what their interests are and try to understand the core issues and interests relevant to others. Understanding the interests that each party has in addressing and resolving the issue promotes transparency. This requires continuous, high quality communication between parties.

2.3 Responsibility

Participants in interest-based negotiation must accept the responsibility for being constructive in negotiations, being transparent about their own interests, and seeking win-win solutions.

[11] Interest-based negotiation has been popularized through the Harvard University Negotiation Project and the books written by Roger Fisher and William Ury. The most well known book by these authors is *Getting to Yes: Negotiating Agreement Without Giving In,* first published in 1981. Interest-based negotiation is widely taught throughout BC in colleges that collaborate with the Justice Institute of British Columbia.

2.4 Accountability

Individuals or groups that are negotiating in an interest-based way must be committed to the process of negotiation and to the outcomes and agreements that result. Where parties are representing larger groups, it is also assumed that individuals participating in negotiations will be accountable to communicate clearly and fully about developments with other negotiation parties and their own group.

3. Basic Steps and Concepts of Interest-based Negotiation

There are a number of concepts or steps in interest-based negotiation that create a process for development of mutually acceptable agreements and sound working relationships. While there is a natural progression to these steps, in any negotiation it is necessary to move through the steps and then return through them again to clarify and fine-tune the negotiation agreements.

Table 4. Steps in Interest-Based Negotiation

Steps in Interest-Based Negotiation
?? Agreement to Collaborate
?? Identification of Issues
?? Clarify and Separate interests from Positions
?? Create Scenarios that Allow for Mutual Gain
?? Use Objective and Mutually Acceptable Criteria Based on Interests
?? Reaching a Negotiated Agreement

The details of these steps and how they apply in the context of LRMP are provided below.

3.1 Agreement to Collaborate

In order to engage in interest-based negotiation there is a need for each party to recognize and acknowledge the other's connection to an issue or problem. Following this, parties must agree to a process of working together and make a commitment to the agreed on process.

3.2 Identification of Issues

Interest-based negotiation strives to be clear and transparent. A first step in clarifying what will be negotiated is making sure that issues are identified as separate from the personalities, bargaining positions and interests of the negotiating parties. Finding language to state issues in terms that are neutral is the starting point for an agenda that can be agreed to by all parties.

Stating issues in neutral terms requires people to work together to clarify views about what needs to be, and can be, negotiated. Doing this exercise at the beginning of a negotiation process fosters an atmosphere of collaboration among negotiating parties. It should allow parties to reach a point where they can say "*These are the issues that are important for both/all of us" and "These are the things we need to reach agreement about*." Before negotiations begin, all parties should be satisfied the issues on the agenda are comprehensive and reflect their interests.

Examples of questions that can be asked to get at core issues and examples of different types of issues statements are provided in the shaded box at the end of this Section.

In the Context of LRMP	LRMP processes have been done throughout the province during the past decade. Based on this history and the experience gained in applying interest-based negotiation to the objectives of land and resource planning a number of issue categories commonly arise in LRMP processes. These issues are confirmed with the participants and then form the framework for the planning process. Within these broad issue categories there is a need to tailor issues to the geography and resource base of the area. There is also a need to identify local issues based on the interests and needs of those who use and care about any specific plan area. One of the principles of LRMP that is directly linked to interest-based negotiation is balance and inclusivity in the make-up of the planning table. A concerted effort is made by government to ensure all parties that might be affected by planning decisions are involved in negotiations about how to manage the plan area. This is a way of ensuring that all issues are discovered and addressed by the plan and that all parties are comfortable with and committed to the outcomes.

3.3 Clarify and Separate Interests from Positions

'Interests' and 'positions' are terms that are commonly used in interest-based negotiation. The distinction is made to allow negotiating parties to move away from positional or win-lose bargaining and to allow them to find ways to integrate their values and interests into solutions that are mutually acceptable.

Positions are statements, stands or solutions proposed by an individual or negotiating party that serve their needs but which do not readily indicate that positive outcomes for others are also possible. Positions are often linked to personalized or subjective assessments of an issue.

Interests are linked to the concerns, hopes and underlying values of parties in relation to an issue. They are the aspects of an issue that are truly motivating actions or reactions, they are at the core of ***why*** a person or group has a specific desired outcome. The goal of exploring interests of all parties is to discover what common interests exist that may form the basis for mutually acceptable agreements.

It is useful to consider examples of positions and interests to help clarify what they are:

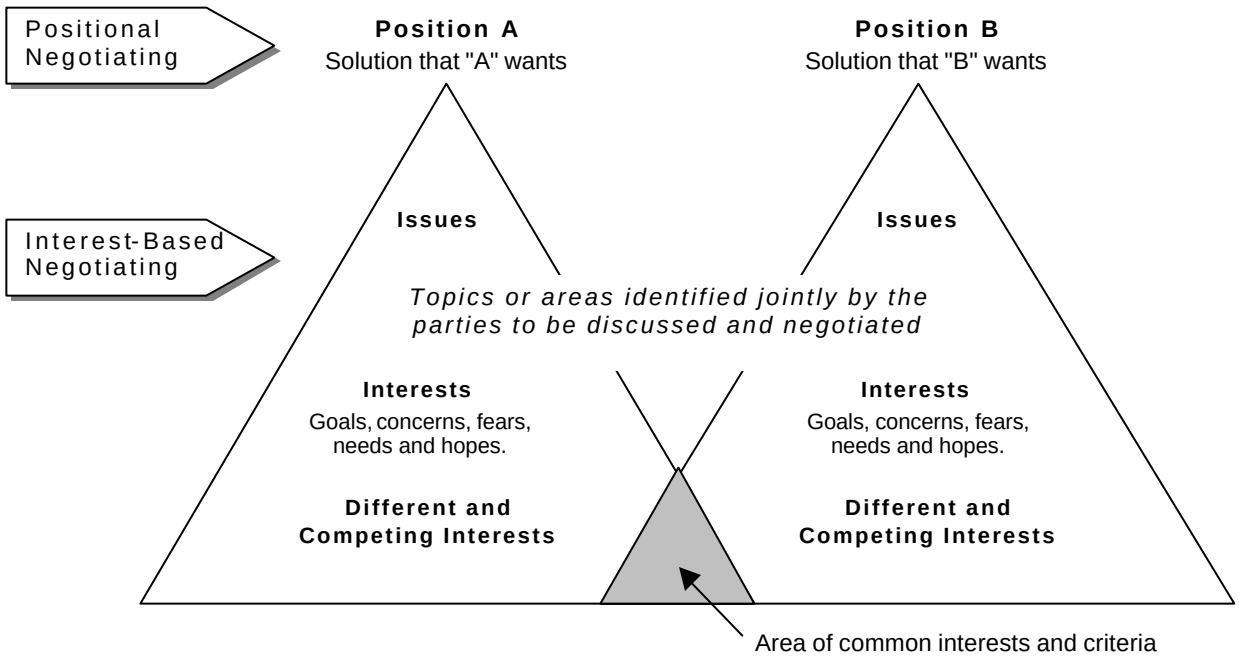
A positional statement would be *"I would like to be the only person leading this project"* as compared to an interest statement *"Being the only person leading this project is important to be because I feel I have relevant experience and can make a unique contribution."* It is then possible to understand that the person is motivated by an interest to make a positive contribution and apply their experience.

Another comparative example is a position statement *"You need to finish that report by Friday"* versus *"Having that report finished by Friday is important because our company's reputation is built on meeting our customers needs for quick turn around of products."* Clarifying the interest in meeting customer need for timeliness makes it easier to understand what is motivating the speaker's demand or position in the first sentence.

Interests are often concealed or masked by positions. In interest-based negotiation the focus is not on positions, but on moving beyond positions to explore and clarify the interests of all parties. This can be done through a process of clarification and questioning – each party questioning not only the other negotiating parties but also themselves. Questions that are useful in uncovering interests are discussed in the shaded box at the end of this Section.

The Justice Institute of BC and others use the diagram of two triangles (Figure 4 below) to clarify how interests and positions co-exist. It illustrates how – despite the fact that parties may have competing interests, may hold different values, and often have very different positions on an issue – a base of common interests can be uncovered, from which options can be created and solutions can be drawn.

Figure 4: Relationship Between Interests and Positions



In the Context of LRMP:	Exploration and maintaining a focus on interests is a key component of the LRMP negotiation process. Stakeholders are asked to present a statement of their overall interests (in the plan area and specific resources) to the planning table as a first step in negotiation. Interests of different parties can be compared and discussed to identify common ground and shared values that may lead to future agreements. As planning progresses and a range of issues are under discussion, interests are revisited to explore acceptable options that will lead to planning recommendations that are made by the LRMP Table to government.

3.4 Create Scenarios That Allow For Mutual Gain Based on Interests

Creativity is essential for finding solutions to issues that are being negotiated. Without creativity people get bogged down, irritated and often become confrontational. Multiple options for creative solutions can initially be developed using a process of brainstorming.

Brainstorming is an exercise where parties agree that all judgements about the value and feasibility of options will be temporarily suspended to create an environment that is conducive to getting as many ideas as possible 'on the table.' Once options are developed they can then be examined through a lens of objective criteria and standards before selecting a final course of action.

Rules for productive brainstorming include:

- allow ideas to be raised without evaluation or judgement;
- record every idea regardless of whether it seems to make sense or be relevant;
- generate as many ideas as people can think of; and,
- encourage people to build on each other's ideas.

Due to the emphasis on creative exploration of a range of possible interest-based solutions, with contributions made by people holding a range of interests, choices reached through using these techniques should be better for more people than alternatives that can be reached without a focus on interests, respect and creativity.

In the Context of LRMP:	There are two levels of brainstorming commonly used in an LRMP. The first level is simple brainstorming around a particular issue that is up for discussion, usually done in small groups. The second level is a more formal and staged process of exploring different management or land use scenarios. Note that this is different than designing 'options' which implies that one or another will be selected.

3.5 Use Objective and Mutually Acceptable Criteria

Legitimate outcomes are more likely if all parties agree on the criteria used to measure or gauge the merits and risks of different options. All parties must perceive criteria as objective and fair. Criteria must also be linked to and support the interests of the negotiating parties.

Defining objective criteria may require scrutiny of, and agreement on, the qualifications of 'experts' to be consulted and definitions of criteria and indicators that will be used to make final selection of the options included in the final package of agreements.

In the Context of LRMP:	For individual issues, if the table cannot reach agreement, the Process Team and Government Technical Team can try to identify objective criteria and specific indicators that could be used by the Table to assess a specific situation, measure potential results and lead to a fair solution. Criteria are linked to the values and interests of the Table are generally developed through both independent sources and in consultation with the LRMP Table. These are used to assess the extent to which plan agreements meet the stated interests of negotiating parties. For example, if there is an interest expressed by stakeholders related to 'jobs for the community,' each scenario can be assessed to make sure it considers how changes to resource management plans would impact employment. Examining and understanding resource planning related employment issues becomes a stated criterion of the planning process that must be applied objectively. Indicators are specific tools, numbers or formulas used that measure the extent to which criteria are being met. Employment and income indicators identified as being neutral and commonly accepted can be used as objective measures that allow a more detailed application of the criteria for examining employment impacts.

3.6 Reaching a Negotiated Agreement

Agreement at the end of a negotiation is built on the steps outlined above. Options that have been identified are analyzed using criteria and indicators that are accepted as objective and fair. Options that are selected must be perceived as valid and realistic to all parties and meet their interests. All parties should also agree that the negotiated solution is better than any other alternative solutions they could reach away from the negotiation.

An agreement package is usually made up of a number of agreed on options that address the range of issues that were identified at the outset of negotiation. A key step in drawing up the final package of agreements is to identify implementation and monitoring responsibilities and time frames so that expectations about what will happen after negotiations finish are clear.

In the Context of LRMP:	Consensus agreement on a final package of recommendations to government is the final product of an LRMP. Members of the planning Table formally endorse this package. The package will address all the issues identified by the planning table through management objectives and strategies. The agreement will also include recommendations about how to implement and monitor the plan over specified periods of time. Because LRMP's are very complex, the table will be asked to develop a series of 'working agreements,' which are slowly integrated into a 'package.' Final consensus, and the test of whether the package is 'win-win' is based on the total package of combined agreements.

4. Alternatives to Negotiated Solutions

Interest based negotiation processes encourage participants to understand and be clear about what will happen if they decide not to participate in or agree to a negotiated solution. Participants are also strongly encouraged to try and understand their own options and those of the other negotiating parties.

Assessing alternatives makes people and groups aware of their relative power within negotiations and can assist them in ensuring that they make the most of their assets and get the best possible agreement in relation to their needs.

Jargon used in Interest-Based Negotiation refers to understanding Best Alternative to Negotiated Agreement. It is the best thing you can be sure of if you do not negotiate. The Worst Alternative to Negotiated Agreement is the worst thing that might happen if you do not negotiate. Often understanding these alternatives requires exploring assumptions about what we think will happen – to make sure they are accurate – and researching the potential of options that are outside the scope of negotiation.

Key Skills Used in Interest-Based Negotiation

1. Communication Skills

All interest-based negotiation concepts are linked to the need for communication and the use of good communication skills. These skills are learned through awareness and practice. The sections below all refer to how different communication skills can be applied to interest-based negotiation.

Communication skills include:

- Listening and reflecting back what has been heard to the person speaking to confirm understanding.
- Speaking clearly in plain, neutral language without jargon that is non-judgmental, not defensive, and acknowledges feelings and emotions so the person listening can understand what is really meant.
- Questioning with open-ended phrases that allow full exploration of what is being discussed and restating what has been heard to ensure both parties have the same understanding.
- Summarizing and synthesizing ideas and issues that have come up to ensure both parties are clear as a discussion progresses.

There will be specific training for the table on the communication skills that are required to work through the steps of interest based negotiation. This training will be provided through short focused workshops and in and ongoing way in the context of the overall planning process.

2. Identification of Neutral Root Issues

It is useful to use a process of open-ended questioning and paraphrasing to identify the basic issues that can be neutrally described and placed as topics on the agenda for discussion in an interest-based negotiation. Paraphrasing should aim to weed out subjective language and get perspective on the 'big picture' of the topic or issue area. Once the larger issues have been clarified, sub-issues or components of the main topic can be identified and an agenda can be designed that will allow a sequence for negotiation of all major and minor issues. Examples of open-ended questions and paraphrasing that can be used to identify issues are provided below.

Open-ended questions/ statements and paraphrasing

- "I am interested in knowing more about what you mean by biodiversity…"
- "What do you think is important about stable communities…?"
- "Can you tell me more about your views on riparian management…?"

Paraphrasing

✍ "So in other words, what you are saying is…"

✍ "Just let me check, it sounds like your main points are…"

The following are examples of an issue stated from two different parties' personalized perspectives and then from a neutral viewpoint.

Personalized issue statement:

✍ "The issue to be discussed is that we need to be able to stay out until midnight"; or

✍ "The issue to be discussed is that we have the same curfew rules for everyone."

Neutral issue statement:

✍ "It sounds like the main issue to be discussed is the terms of curfew."

3. Distinguishing Interests from Positions

Separating interests from positions can also be done through open ended questioning as above and through 'reframing' another parties statement to clarify if the listener understands what the underlying interest is. This can be done in response to either position or interest statements. Types of reframing statements that can be used to move from positions to interests include:

Position: "We can't change the project at this late date."

Reframed statement focusing on interests: "So you are concerned about the amount of time and energy that has already been applied to the project".

Position: "We don't want to see taxis zooming up and down this street, somebody is going to get run over."

Reframed statement focusing on interests: "So it sounds like the main concern here is safety."

The following lists outline some key guides to identifying positions and interests.

A Position:

✍ is a proposed solution to a problem;

✍ does not relate to the interests of others; and,

✍ tends to be framed as a negative ("There shouldn't be any more…").

An Interest:

✍ is a core concern about an issue that creates a position or a decision about an outcome;

✍ can define and provide context about a problem; and,

- is a positive way of stating why people are afraid of, or insistent on, a specific outcome.

4. Being Constructive and Maintaining a Positive Relationship

Establishing and confirming constructive and collaborative working relationships are key aspects in developing, workable and lasting solutions. Viewing a negotiation as a way of solidifying relationships between parties who share interests in dealing with particular issues can also contribute to commitment to the implementation of agreements.

Relationships with other negotiating parties, and the dynamics of maintaining relationships, should be kept separate from the substance of what is being negotiated. If two parties do not agree on an issue today it would not be useful for them to end their relationship. Doing so would prevent them from possibly finding a solution the next time they meet. Continuing to act in ways that strengthen their relationship, despite the quality of progress on substantive negotiation, will benefit both parties in the short and long term.

Learning to use communication skills effectively, dealing with others in an open and straightforward way, seeing issues from other perspectives, managing anger and conflict, and accumulating skills to influence others without causing them to lose face, all contribute to building effective negotiating relationships that will contribute to creative solutions and strengthen commitment to outcomes.

5. Being Prepared and Keeping Track of What Has Taken Place

Doing one's 'homework' or research in advance and reflecting on each step of negotiation as it takes place contributes to the success of negotiated outcomes.

Key preparation steps that enhance the effectiveness of negotiation include systematically considering and clarifying:

- one's own issues and interests;
- assumptions about what others want and what their interests are so those assumptions can be communicated and double checked;
- where common interests exist; and,
- what alternatives are available for each of the parties if a negotiated agreement is not reached.

Reflecting on what has happened after negotiation session is also a useful activity. This reflection can be done to assess both what has been achieved on substantive issues and to assess how well the relationships and dynamics among parties are being managed. Clarifying perspectives on these issues individually allows parties to come back to the table with a clear understanding of:

- what they could have done better;
- where they still need to influence change; and,
- where they want to go next in negotiation.

Section 9 Reconciling Competing Land/Resource Goals and Objectives

Introduction

A main aim of consensus-seeking LRMP process is to develop agreement on the future uses of land and resources in the planning area. Another aim is to prepare a plan document that's meaning is clear, so that the plan can be implemented in the longer-term without controversy about its intent.

In this Section:

- Adopt Some Guiding Principles
- Develop Integrated Management Strategies
- Expand the 'Planning Currency'
- Summary

The stage in the planning process where these two aims come sharply into focus is when the participants develop a first draft 'land use scenario'. A land use scenario is a description of the desired future condition of the lands and resources in the plan area (i.e., resource *objectives*), and a description of how that condition will be achieved (i.e., resource *strategies*). A land use scenario will often be accompanied by a map showing various resource management zones or land use designations.

Developing an initial land use scenario can sometimes be challenging because it is often the first time in the planning process that participants turn their attention to defining specific resource management priorities for particular areas of land. Not surprisingly, competing perspectives on how particular land areas should be used will arise during these planning negotiations. It's therefore important to be aware of some general planning techniques that can be applied, to provide a basis for developing a draft plan that enjoys the highest possible level of support.

The following sections describe some key planning techniques.

1. Adopt Some Guiding Principles

Developing an initial land use scenario can be approached in a number of ways, and each planning Table must determine its own approach. For example, Table participants can break the plan area up into 'bite size' planning units (e.g., landscape units), and proceed to define resource objectives and strategies for each of those units. Or, a land use zoning designation system can be adopted and criteria defined for locating the designations on the land base. The Table may choose to do this work itself, or assign it to a technical team or sub-committee, subject to Table review and approval.

Regardless of the approach taken, a helpful first step is to adopt a set of over-arching principles that will be applied when developing an initial land use scenario. Table agreement on some guiding principles for scenario development can increase the potential that the initial

scenario that is developed will come 'close to the mark' of meeting most participants' primary interests. The principles can be used not only to shape the design of the land allocation and management strategies that comprise the scenario, but also as a general "check list" to qualitatively assess the basic adequacy of the scenario after it is developed. Some of these may, in fact, parallel goals described in the LRMP terms-of-reference (See Section 3) or the LRMP planning framework.

Although it would be up to the planning Table to define the specific principles that would guide the scenario development phase, some examples of principles that Tables may wish to consider include:

Consider Legislation and Policy — any land use scenario that is developed should be generally consistent with relevant resource management statutes and regulations and corporate provincial policies.

Consistent with Vision Statement and Plan Goals — these are the fundamental outcomes that the plan will try to promote through its more detailed and prescriptive objectives, strategies, zones, etc. Agreement at the outset that any plan scenarios that are developed must faithfully reflect the plan area vision and goals will ensure that the scenarios represent an *integrated balance*.

Conforms to Ecosystem-based Management Concepts — up-front Table acceptance of the ecosystem-based planning principle is apt to have a visible impact on any plan scenarios that the Table develops.

Reflects Biophysical Capability — adopting this principle would mean that plan scenarios would reflect the biophysical realities of the land base.

Addresses Uncertainty — an accepted response to scientific uncertainty is to practice "adaptive management". Other approaches could include identifying research or inventory measures to reduce uncertainty. Following the precautionary principle is another approach

Equitable Distribution of Benefits and Costs — if the planning Table determines, in principle, that plan scenarios must not produce an inequitable distribution of costs and benefits, then this should guide the development of land use plan scenarios that represent a rough balance or fairness in the distribution of benefits and costs.

2. Develop Integrated Management Strategies

Integrated resource management (IRM) is a management approach for which the underlying intent is to share and coordinate among a broad range of values and interests when developing plans or policies. IRM strategies attempt, as much as possible, to blend land and resource uses in efforts to maximize environmental, economic and social opportunities and benefits — within the limits of maintaining ecological integrity. Naturally, this is important in consensus-based planning processes because the more opportunities that are created for satisfying interests, the greater likelihood that the plan outcome will enjoy wide support.

The key to implementing the IRM philosophy is to identify ways to prevent or minimize undesirable impacts of land uses on each other. There are a number of ways to achieve this, as follows, when developing land use plan scenarios.

Manage the Type and/or Intensity of Activities — This approach seeks to prevent or minimize undesirable impacts (and thus overcome resource conflict) by directing how resource development activities are conducted. The aim is to adjust the way in which a resource use activity occurs in order to make the activity more compatible with other objectives.

For example, overlaying a map of high visual importance with a map of high timber values may show areas of overlap and potential conflict between these resource values. To address the conflict using an IRM approach, the Table may decide to allow timber harvesting to occur in the overlap areas, subject to the requirement to maintain a relatively high percentage of forest cover, or to construct logging roads so that they are not visible from certain viewpoints. As another example, if an area has extremely high potential for mineral and forestry development, but is also un-roaded habitat for sensitive wildlife resources, a strategy could be adopted to allow a road to be developed into the area at some point in the future, subject to: (1) restrictions on the alignment of the road corridor, (2) limitations on who can use the road, and (3) removal of the road following time-limited economic activity.

Managing the type / intensity of resource use activities — be they industrial, commercial or public recreation activities — is often a preferred IRM strategy because groups are not being totally prevented from accessing the land base in the areas that the strategies applies. An attempt is made to *combine* land use activities by adopting specific measures to reduce land use incompatibility.

Separate Conflicting Uses in Time — This IRM approach allows incompatible uses to occur on the same piece of ground, but prevents them from coming into contact with each other at the same time. It involves a 'temporal restriction' of a particular activity in a particular location.

For example, if there was concern about water quality impacts from seasonal resource development (e.g., road construction, timber harvesting, mineral exploration) in coastal areas with steep slopes and unstable terrain, you could adopt a strategy for those areas that prohibits these activities during wet winter months when erosion and sedimentation risks are greatest. If there was concern in a watershed with an important fish run about potential water flow (hydrology) impacts associated with clear-cut harvesting, a strategy could be adopted to prevent harvesting adjacent to harvested areas until the harvested stands in that watershed have 'greened-up' to a 5 metre tree height.

Separate Conflicting Activities in Space — This approach seeks to group compatible land use activities together, geographically separate from incompatible uses. The aim is conflict / impact avoidance through spatial isolation.

For example, to mitigate potential resource development impacts on aquatic systems, a riparian buffer zone can be established where certain activities are prohibited in the zone. Or, motorized recreation uses may be prohibited in certain areas due to potential impacts on wildlife resources or other non-motorized recreation uses. Hunting or fishing closures in specified areas is another common example of this strategy.

Redress or Compensate Impacts — This option allows an undesirable conflict and impact to occur at an approved level, subject to rehabilitation of the impact at a later time, or compensation for the impact through some means.

For example, a temporary logging road may be permitted into a previously undeveloped area with high wildlife habitat values, provided that the area is replanted and the road removed immediately after the first harvesting pass, and the area left alone for a specified number of years / decades. Or, coastal aquaculture activities may be allowed in an area that has high capability for that use, but also contains sensitive marine fish habitat, provided that habitat enhancement is undertaken elsewhere as compensation for expected habitat loss.

3. Expand the 'Planning Currency'

There are ways to achieve stated plan goals and to address land use conflicts other than through the conventional definition of land allocation and IRM strategies per se. To reach agreements on the land uses that will be permitted in various areas and the conditions that those uses will be subject to may require planning participants to incorporate various policy, program or process strategies into the plan. Integrating these elements into a plan may provide additional options or opportunities for satisfying participants' interests and, therefore, can increase the potential for a consensus outcome.

Some examples of other 'currencies' that may be considered for incorporation into the plan include:

Initiatives to Fill Information / Knowledge Gaps — It may be that the planning Table is able endorse a particular land use(s) for a given area, subject to an initiative to enhance the level of understanding of the implications of that land use. For example, this might involve a commitment to upgrade a particular resource inventory for a given area; or to conduct some research or focused monitoring, as a basis for confirming or adjusting the approved land use for an area. These would essentially be plan strategies for addressing uncertainty.

Subsequent Planning Priorities — It may be possible to achieve agreement on general land / resource management direction for one or more areas, subject to a commitment to engage in more detailed planning for those areas within a specified timeframe. For example, a LRMP Table might advise on landscape unit planning priorities, or the priorities for subsequent coastal zone planning.

Community Adjustment Initiatives — In some cases, a LRMP scenario may imply changes in existing use patterns and rights of access to resources, with associated short-term socio-

economic implications for local communities, businesses and workers. A consensus outcome will, of course, depend significantly on the adequacy of the plan's response to the expected effects. Potential adjustment initiatives may include: skills training, community economic development planning, value-added manufacturing opportunities, and resource enhancement and rehabilitation programs.

First Nations Initiatives — There may be opportunities to achieve a consensus LRMP outcome that includes the agreement of First Nations participants if certain provisions regarding First Nation roles and responsibilities in land and resource management are accommodated in the plan. For example, the plan might identify the elements of an interim management strategy that would be agreed upon separately between First Nations and government.

Plan Implementation Mechanisms / Institutions — One means of ensuring ongoing representation of sector / stakeholder interests following plan approval is to create some permanent advisory structures that are capable of promoting integrated and balanced decision-making. A particular pattern of land use might be agreeable, subject to the adoption of a multi-stakeholder plan implementation / oversight group with powers to review implementation issues and advise on how plan objectives should be interpreted and carried out.

SUMMARY

Conflicting values and viewpoints on how to use land and resources is not uncommon in a planning process — in fact, it is to be expected. After all, the basic job of a planning process is to reconcile competing goals and objectives to arrive at a plan for guiding future land and resource use in a given area.

This section identifies some planning techniques for reconciling competing goals and objectives. In the end, however, there is no 'right' or 'wrong' plan outcome because there is no technical way of measuring right or wrong. There is only 'good' or 'poor' planning *process*. If the process is inclusive and equitable, incorporates the best possible information and methodologies, and identifies and assesses a range of options for achieving goals and interests — then the planning outcome will be the best one possible.

Section 10 LRMP Products[12]

1. What Basic Questions Should an LRMP Answer?

In this Section:

- What Basic Questions Should an LRMP Answer?
- Ways to Express Resource Management Direction in an LRMP.
- What does a Typical LRMP Contain?
- Things to Keep in Mind When Writing an LRMP.

The Planning Table provides land and resource management recommendations to government. Once approved, the tangible outcome of an LRMP process is a report that is referred to as 'the plan'. Examples of LRMP plans for other areas in BC are viewable at http://www.luco.gov.bc.ca/lrmp/index.htm

Although there is no right or wrong way to write an LRMP plan, there are a number of elements that should be included in a plan to ensure that the plan's intended resource management direction is clear. To be complete, LRMPs should answer five essential questions about land and resource use in the region:

What goals and objectives (desired future conditions) are appropriate for the planning area, and what types of management actions are appropriate for achieving the goals and objectives?

Where in the planning area do the goals, objectives, and management actions apply?

When will the plan's provisions have effect?

How will the plan's provisions be undertaken?, and

Who is responsible for carrying out the plan?

2. Ways to Express Resource Management Direction in an LRMP

Answering these five questions in a plan will provide the *resource management direction* that is needed to guide future; more detailed planning, and day-to-day resource management decision-making. The main tools that are available for expressing resource management direction are described below. Most LRMPs employ all or most of these tools. Typically, however, most of a LRMP's content is taken up with resource *objectives* and associated resource *strategies* — see below.

2.1 Goals

?? describe a future vision;

?? are worded generally to establish broad aims;

[12] Refer to the MOF document, "Guide to Writing Resource Objectives and Strategies" for information on the recommended content of land and resource management plans, and writing style.

?? may reflect / parallel stakeholder “interests”;

?? are not normally stated in quantitative terms;

?? have no specific timeframe for their achievement;

?? often apply to the whole planning area, as opposed to portions of it; and,

?? are referred to as the plan’s "general management direction” in some LRMPs.

Examples of LRMP Goals are as follows:

✍ maintain ecological integrity in the region;

✍ provide for stable and diverse communities; and,

✍ protect cultural heritage values in the region.

2.2 Objectives

?? outline end results that will achieve the plan’s broader goals (i.e., they are more specific than goals);

?? describe desired future conditions for individual resources or resource uses;

?? are measurable, either directly or indirectly;

?? are time specific; and,

?? are geographically specific – can apply to the whole plan area or specified parts of a plan area

2.3 Indicators

?? are descriptors that are assumed to be representative of a larger set of conditions or values;

?? are used during planning to evaluate implications of alternative management actions / scenarios; and following plan implementation to assess progress towards plan goals and objectives;

?? existing lists of indicators (e.g., CSA indicators of sustainable forest management) may be used as sources for indicator selection;

?? a combination of different types of indicators may be selected, as follows:

- ?? *Pressure Indicators* — measure the extent of human activities that affect the state or condition (sometimes called stress indicators, and are relatively easy / inexpensive to measure);
- ?? *State indicators* — measure the ultimate condition or outcome (usually the most expensive / difficult to measure); and,
- ?? *Response indicators* — measure the type and intensity of actions (outputs) taken to address a particular issue, in efforts to change the state (usually easy / inexpensive to measure).

?? to be effective, indicators should be:

?? *Relevant* — to issues or values that matter;

?? *Measurable* —must be able to measure an indicator, preferably quantitatively;

?? *Data* — must be readily available or attainable through cost-effective measuring / monitoring and data interpretation activities;

?? *Reliable* — you must be able to trust the information that the indicator is providing;

?? *Repeatable* — you should be able to replicate the measurements to identify trends over time;

?? *Understandable* — audiences, including non-technical audiences, should be able to readily appreciate the meaning of measurement results, even if the methodology behind the indicator is more complicated; and,

?? *Responsive* — indicators should be sensitive in the short-term to enable early detection of changes or problems.

2.4 Resource Management Zones

?? portrayed in map form (often at a scale of 1:250,000);

?? used to communicate a management priority for particular resource objectives in the area covered by the zone; and,

?? a number of zoning system options are available. Traditional LRMP zoning categories include protected, special management, integrated/general, enhanced, agricultural and settlement. Alternative approaches are to zone "planning units" or "issue areas". Planning Tables determine the zoning approach that is relevant to their planning areas.

2.5 Inventory Maps

?? portrayed in map form; and,

?? used to link individual resource management objectives and strategies to particular:

?? Biophysical or ecological sub-units (e.g., biogeoclimatic zones, natural disturbance types, sub-drainages);

?? Land or resource capability or suitability classes (e.g, "high" tourism potential, critical ungulate winter range);

?? Resource sites or features (e.g., historic trail, avalanche chutes); and,

?? Administrative boundaries (e.g., TSA boundary, First Nation traditional use areas).

3. What does a Typical LRMP Contain?

A LRMP often contains the following sections:

Introductory Section — describing the plan area, the issues that the process addressed. Some plans also describe how the planning process was structured.

Statement of General Management Direction — containing broad goals for various topics. They may be organized under environmental, social and economic headings. These normally apply to the whole plan area. An overarching vision for the plan area may also be stated.

Objectives and Indicators — Resource management objectives and indicators are defined for spatially defined areas. Indicators are identified for measuring progress towards the objectives. These elements are often arranged in a table format than enables them to be linked together (see example below). This section of the plan usually includes numerous cross-references to maps showing the locations of resource management zones, or maps showing the extent of resource values.

Table 5. Example of Resource Management Objectives, Strategies and Indicators

Objective	Potential Indicators
Maintain the functional integrity of critical moose winter habitat shown on Map 5.	?? Percent of mapped winter range retained in thermal cover ?? Density of browse species ?? Stocking ratios ?? Moose populations
Maintain the functional characteristics of high value (class 1 and 2) grizzly bear habitat in areas of known high and moderate grizzly bear density, as shown on Map 2.	?? Percent of mapped class 1 and 2 grizzly bear habitats that are harvested ?? Road density in mapped class 1 and 2 grizzly bear habitats
Apply intensive forestry practices in the Danberry Creek watershed in efforts to enhance timber supply opportunities.	?? Amount of intensive silviculture activity conducted ?? Hectares of commercial thinning ?? Volume of timber extracted

Plan Implementation and Monitoring — contains descriptions / guidance on how the plan should be implemented (e.g., through legal land use designations, subsequent planning processes, adaptive management trials, etc.); and provisions for monitoring the plan's effectiveness in achieving it's goals / objectives over time.

4. Things to Keep in Mind When Writing an LRMP

?? Consider government legislation and policy that provides important context and direction for the plan.

?? Take account of existing resource management direction (from previous planning in the area).

?? Be internally consistent, so that the plan's goals and objectives do not conflict with one another.

?? Make sure the goals and objectives in the plan are achievable — technically, financially, and administratively.

?? Ensure that the plan addresses the issues that were identified at the outset of the planning process.

?? Distinguish between goals and objectives; objectives are more specific than goals and are measurable.

?? Include supplemental descriptions (using narrative text, graphics, illustrations or modelled renderings) of the “desired future condition” if it will help communicate the plan’s intended meaning.

?? Focus plan content mainly on defining objectives and measures that guide how future on-the-ground resource management activities will occur, rather than developing a plan that is dominated by provisions that direct future process.

?? Identify roles and responsibilities for carrying out particular objectives where it would not otherwise be clear who has 'ownership'.

?? Provide as much detailed resource management direction as is reasonable, given such things as:

- ?? limitations imposed by the broad scale of inventory mapping that is being used;
- ?? whether or not resource inventory information is current and complete;
- ?? the need to address resource conflicts that require specific direction on which resource values shall receive priority / emphasis; and,
- ?? whether or not standard Forest Practices Code requirements are being modified.

?? Write plans clearly and concisely and 'say what you mean'.

Section 11 Plan Implementation and Monitoring

1. LRMP Implementation

In this Section:

- LRMP Implementation
- LRMP Monitoring

LRMP implementation begins after the Minister of Sustainable Resource Management approves an LRMP and Cabinet approves the protected areas. Individual agencies with the authority to deliver programs and make resource management decisions are responsible for ensuring that their programs and decisions are consistent with LRMPs. Regional inter-agency management committees (IAMCs), comprising senior staff from all the main resource agencies, oversee LRMP implementation.

Although each LRMP includes its own unique implementation strategies, some common ways that LRMPs are implemented include:

Legal Land Use Designations – LRMP recommendations to create new protected areas are implemented by Cabinet level decisions to establish new parks, normally under the *Park Act*. Ensuring that forest practices conform to LRMP direction is achieved by establishing appropriate portions of LRMPs as a "higher level plan" under the *Forest Practices Code of British Columbia Act*.[13] Other purpose-specific designations for particular lands within the LRMP may be established under various statutes to ensure that resource managers observe certain procedures or undertake particular land use activities in the designated area (e.g., Wildlife Management Area, Wildlife Habitat Area, Scenic Area, Forest Land Reserve, Conservation Area, etc.)

Subsequent Resource Planning – more detailed, local level planning offers important opportunities for translating the broad resource management direction in a LRMP into more tangible, site-specific resource management prescriptions. A variety of resource planning processes may be relevant for assisting with LRMP implementation, including: landscape unit planning, total resource plans, local resource use plans, coordinated access management plans, and tree farm license management plans.

Filling Information / Knowledge Gaps – LRMPs may contain strategies for addressing uncertainties that the plan has uncovered. These may include adaptive management experiments to test alternative management policies / practices, or more traditional research or resource inventory initiatives.

Most LRMPs contain a chapter that defines the key methods and timing for plan implementation, as well as roles and responsibilities for implementation. Strategic land use

[13] For further information on higher level plans see the MOF Brochure, "Higher Level Plans: Greater Strength for Land Use Objectives", located in Section 13 of this binder.

plans are intended to help resource management agencies set their individual program and funding priorities[14].

2. LRMP Monitoring

LRMP monitoring occurs after the plan has been implemented for a few years. Two types of monitoring are normally done:

Implementation monitoring — determines how agencies are progressing in implementing the commitments contained in the LRMP *(to determine if we did what we said we would do)*. Periodic public reporting on implementation status is aimed primarily at ensuring the accountability of agencies that are responsible for implementing the LRMP.

Effectiveness monitoring — assesses the extent to which the LRMP's goals and objectives (i.e., the desired outcomes) are being achieved *(to determine if what we are doing is effective)*. Various indicators defined during the planning process are measured periodically to assess plan effectiveness. Based on effectiveness monitoring results, the LRMP may be reinforced / continued if it is effective, or revised if it is not. The feedback information provided by plan monitoring allows for learning and ongoing improvement.

Similarly, if an LRMP, in efforts to address uncertainty, has identified specific experimental trials in a given location, monitoring results can shed important information on the applicability of the trial strategies for other locations. Monitoring at this level is an essential part of adaptive management.

Identifying indicators, monitoring them to assess performance and adjusting management practices on the basis of monitoring results can contribute significantly to successful forest certification.

Implementation and effectiveness monitoring are typically overseen by a LRMP monitoring committee comprising government and stakeholder representatives. Public monitoring reports are normally issued every three to five years.

The provincial government has developed a comprehensive policy and procedure for LRMP implementation and effectiveness monitoring. These materials may be viewed at the following Website: http://www.luco.gov.bc.ca/lrmp/lrmppolicy.htm

[14] See *LRMP Statement of Principles and Process* located in Section 13 of this binder for further information on implementation.

Section 12 Commonly Asked Questions

1. *LRMPs and Provincial Policy*

In this Section:

- LRMP and Provincial Policy
- LRMP Mandate and Issues
- Information and Analysis
- Public and Stakeholder Participation in the LRMP
- Participation of the Local, Provincial and Federal governments and First Nations in the LRMP
- Plan Approval and Implementation
- Process Logistics

1.1.1 To what extent is the Morice LRMP required to be consistent with provincial policy?

?? Policies are not laws. They carry a great deal of weight in determining how Government will approach issues, but there is a measure of flexibility in their implementation. The Morice LRMP will need to be developed in an awareness of existing provincial policy, but will not be constrained by that policy in the recommendations that are put forward for approval.

1.1.2 What kind of flexibility will the Morice LRMP have for recommending new protected areas since the province has essentially accomplished the 12% target?

?? The 12% target is just that: a target. LRMP tables have the ability to recommend however much of their landbase as they deem appropriate to be in protected areas, recognizing that final protection decisions will be made by Government in consideration of the range of ecological, social, cultural, and economic values represented at the planning table. Also within the LRMP boundaries, some areas are under-represented based on ecosection and biogeoclimatic units and there are additional special features, recreation values and local ecosystem values that will be considered. The table is also encouraged to consider designations other than protected areas that would enable the conservation of resources being examined.

1.1.3 What is the connection between the Allowable Annual Cut (AAC) and the LRMP?

?? AACs are determined for Timber Supply Areas (TSAs) and Tree Farm Licences (TFLs) every five years by the Chief Forester based on an assessment of social, environmental, economic and operational considerations. The most recent AAC for the Morice TSA was determined in 2002.

?? It is not within the mandate of the LRMP to make recommendations to the Chief Forester on the Allowable Annual Cut. However, the outcomes of the LRMP could have implications for the amount of harvestable timber, which would be incorporated into future AAC determinations. An analysis of the short- and long-term impact of plan recommendations on timber supply is a standard component of the LRMP analysis process. The Chief Forester may undertake an unscheduled adjustment of the

AAC following LRMP approval if the LRMP results in substantive changes to the THLB.

2. LRMP Mandate and Issues

1.2.1 What happens to development activities during the LRMP? Will there be a moratorium on development?

?? There will be no blanket moratoria on development activities during the LRMP process. Individual ministries may decide that it is in the better interests of the process and their mandate to provide moratoria on specific resource activities for specific areas. This is to maintain options for resource use and management while the LRMP is underway. Timber harvesting is deferred from Goal 1 and 2 Study Areas, which are the areas identified by the Regional Protected Areas Team as candidate protected areas.

3. Information and Analysis

1.3.1 Can anyone bring technical information to the planning table for consideration (i.e., not just government)? What is the process for bringing technical information to the table?

?? Yes, anyone is welcome to bring technical information to the planning table for consideration. The information should be brought forward to the process team (process coordinator or facilitator) prior to the LRMP meeting. Any information package should note the source and age of the information and who submitted it to the LRMP. It is also helpful to other table participants to be explicit as possible concerning methodology, assumptions and reliability.

?? In addition, there is an open seat at the Morice LRMP table that allows non-planning table members a time-limited opportunity to address the planning table concerning their issues or interests within the Morice LRMP area.

1.3.2 How do I know that the information being brought to the planning table is accurate and reliable?

?? As mentioned above, any information brought to the planning table should be explicit re source, age, methodology, any assumptions, and reliability. Information provided by the government technical team will be as transparent as possible on these features.

?? It may be necessary to consult additional references to establish the accuracy and reliability of some information. Government technical team members can provide this follow-up information upon request. Table members are also welcome to provide their own verifying information.

1.3.3 How can long-term decisions be made when there are major information gaps?

?? As part of the preparation for the LRMP, the government technical team has worked hard to assemble a comprehensive set of information for the planning table. The GTT put up-front effort into identifying existing information gaps and trying to fill them before the onset of the planning process. However, there will always be gaps in our information base.

?? When there are important information gaps the GTT will assess options for moving forward including: undertaking the necessary inventory project; identifying an effective surrogate to fill the gap; or assessing whether the table can move forward in the absence of the information. Where major information gaps occur, there may be an opportunity for First Nations, stakeholders, or the public to bring information forward that will allow negotiations to proceed.

4. Public and Stakeholder Participation in the LRMP

1.4.1 Who can participate in the LRMP? Who decides?

?? The participants of the LRMP have supported a sectoral model of public and stakeholder participation at the planning table. According to this model there are sixteen sectors represented at the planning table. Each sector will be composed of the organizations and individuals with similar interests, as defined by the sector titles. It is the sectors themselves that decide who will represent them at the planning table[15].

1.4.2 How can members of the general public provide input into the LRMP process?

?? It is imperative that members of the general public are kept aware of the progress of the LRMP and are provided ongoing opportunities for comment. The communications team has developed a Communication Strategy to keep the general public apprised of the LRMP. These include a web site, occasional articles in the media both within the plan area and in adjacent communities, publication of a newsletter that is distributed within the plan area and in adjacent communities and open houses at key points during the planning process. The public can provide their comments via the Website, by contacting the Process Coordinator, or by attending meetings and open houses. There will be time set aside at each LRMP meeting for outside observers to provide comments. In addition, there will be an open seat at the planning table that will allow non-planning table participants a time-limited opportunity to address the planning table concerning their issues or interests.

?? Information on the Morice LRMP is available through the Houston Public Library. The library houses an LRMP reference and map library and is equipped with a computer to allow interested parties to visit the web site and associated sites.

?? Local government representatives involved in the LRMP can also be contact people for the general public and asked to bring forward the views of their constituents.

[15] For more information see Section 3 in this binder (Terms of Reference).

1.4.3 What kind of role will people have who don't live in the area?

?? The LRMP recommendations will have interest and implications, not only for residents of the plan area itself, but also for people who live outside of the area. As mentioned above, the LRMP Communications Strategy includes distribution of information to communities adjacent to the LRMP area. Local government in these communities will be provided with ongoing updated about the process and invited to comment.

1.4.4 There are some issues that I cannot compromise on. How can I participate in a consensus process in good faith? (For example, no lost local forestry jobs.)

?? The LRMP process is based on a process of interest-based negotiation. Interest-based negotiation assumes that under every strong position such as no logging or no lost jobs, there are a number of underlying interests that can be discussed and negotiated. One of the tasks of the process facilitator will be try to draw out the underlying interests of people during the negotiations and attempt to bring people to common ground.

?? Interest-based negotiation seeks to develop mutually beneficial solutions to problems. One of the basic codes of conduct at the LRMP table are the ability to negotiate in good faith and to work cooperatively to achieve consensus on issues. There may however be instances where groups or individuals find that their alternatives to negotiation are better than a negotiated solution that can be reached within the LRMP. IBN encourages groups to understand all available alternatives and to choose the ones that are most appropriate for them in the short and long term.

5. Participation of the Local, Provincial and Federal governments and First Nations in the LRMP

1.5.1 What is the role of First Nations?

?? There are several First Nations with traditional territories in the plan area (Office of the Wet'suwet'en, Wet'suwet'en First Nation, Lake Babine Nation, Cheslatta First Nation). Each First Nation community will decide on how they will participate in the LRMP and how they will bring information forward to the planning table. First Nations participation in the planning process is based on a Government-to-Government relationship between the Province and First Nations in recognition that First Nations have a distinct interest in the land and resources in their traditional territories.

1.5.2 Why proceed with LRMP while the treaty process is on going?

?? Ultimately it will be the treaty process that decides on the allocation of land and resources within the traditional territories of First Nations in the LRMP area. In the interim, First Nations may be interested in participating in the LRMP process to ensure that their long-term interests in the plan area are represented in the final plan.

The LRMP process is consistent with the recognition of aboriginal title and the inherent right of aboriginal people to self-government.

1.5.3 There are several local governments in the plan area. How are they involved in representing local viewpoints?

?? Local governments at the regional and municipal level are recognized as an order of government and their participation on the planning table is encouraged to ensure that land use decisions are sensitive to community interests. Participation will be guided by the Policy for Local Government Involvement in Land and Resource Management Plans.

1.5.4 What is the role the provincial government in developing consensus recommendations?

?? The role of the provincial government at the planning table is to participate in consensus building without blocking or impeding consensus; to provide technical expertise and agency-specific information on legislation, policy and programs; and, as the future implementers of the plan, to ensure that planning recommendations can realistically be carried out[16]. Government will not serve as advocates for a resource. In their role at the planning Table, the government representative will engage in discussions in a manner respectful of other interests and will actively assist the planning Table in moving towards agreement. Government staff must abide by the Terms of Reference for the planning process and the Ground Rules.

1.5.5 Are there circumstances where government staff could "block" consensus and, if so, what are they?

?? Technically, there should be no circumstances where government staff can block consensus i.e., be the deciding vote against an agreement. Government staff are required to keep their ministries informed of the progress of negotiations and of any critical issues that may be of concern. If there are issues that a ministry has concern about, government staff are beholden to bring those concerns to the planning table in a timely manner.

6. Plan Approval and Implementation

1.6.1 Does the final plan have to have the agreement of everyone present before it can go to government for approval?

?? Ideally, the final plan will represent the consensus agreement of all of the participants at the planning table. Consensus is generally defined as there being no substantial disagreement with a decision. In the event that the planning table is unable to come

[16] See Section 5 in this binder (Roles and Responsibilities of Government Agencies).

up with a consensus agreement, they will present options to Government, who will make a decision based on an assessment of the pros and cons of each option.

1.6.2 What assurance is there that the LRMP will actually be implemented as written?

?? The Minister of Sustainable Resource Management has final approval responsibility for the Morice LRMP. The LRMP table provides recommendations to government on their vision of land use and management for the plan area. While government is the final decision-maker on these recommendations, if the plan represents the consensus agreement of all participants, then government is unlikely to ignore the recommendations. If the table presents options to government, then Cabinet will make a decision on which option, if any, they choose to follow.

1.6.3 What will happen to the plan if the provincial government does not agree with the recommendations?

?? If Government determines that some of the recommendations put forward by the LRMP table are not in the best interests of the people of British Columbia, then they may choose to not approve those specific recommendations. However, they do so in awareness that they are going against a consensus agreement developed through hard work by a balanced table of stakeholders and they must provide a rationale for their decision.

1.6.4 How will the government compensate companies who lose rights through the LRMP?

?? There are no set policies in place with regard to compensation of companies who lose their tenure rights through the LRMP. Each case will need to be dealt with on an individual basis.

7. Process Logistics

1.7.1 Where and how often will meetings be held?

?? Meeting logistics need to be discussed with table participants. The current thought is to hold meetings every four weeks. Meetings will primarily be held in Houston, although some meetings may also be held in outlying communities such as Granisle.

1.7.2 How are people reimbursed for their expenses to attend meetings?

?? Participants are asked to keep receipts for travel expenses (hotel, travel costs). There is a standard expense form that needs to be filled out and submitted to the Process Manager after every meeting. Participants are reimbursed for standard travel costs and receive a per diem for meals.

1.7.3 Is there compensation for volunteers who must take time off of work to attend meetings?

?? It is the policy of government not to reimburse people who voluntarily take time off from work to attend meetings. Meetings during working hours will be minimized, being held on evenings and weekends wherever possible, although it will be necessary to have some daytime meetings during the week.

Section 13 Further Reading

In this Section:

- List of Further Reading

Inserted Documents:

- "Land and Resource Management Planning: A Statement Principles and Process"
- "Higher Level Plans: Greater Strength for Land Use Objectives"

Guide to Forest Land Use Planning, West Coast Environmental Law Association, November 1999 (updated March 2001). Available at www.wcel.org/frbc/

Guide to Writing Resource Objectives and Strategies, Ministry of Forests, December 1998. Available at http://www.luco.gov.bc.ca/lrmp/lrmppolicy.htm

Higher Level Plans: Policy and Procedures. Ministry of Forests. June 1996. Forest Practices Code. Available at http://www.for.gov.bc.ca/tasb/legsregs/fpc/hilevel/hlp-toc.htm

Integrated Land Use Planning for Public Lands in British Columbia. Available at www.luco.gov.bc.ca/rpts/

Land and Resource Management Planning: A Statement of Principles and Process", Integrated Resource Planning Committee, 1993. – Included in Section 13 in this Binder. See also http://www.luco.gov.bc.ca/lrmp/lrmppolicy.htm for additional technical references on land and resource management planning, and examples of completed plans.

Strategic Land Use Planning Source Book, March 1996. Commission on Resources and Environment. Available from Ministry of Sustainable Resource Management.

Insert 13-1:

"Land and Resource Management Planning:
A Statement of Principles and Process".

Insert 13-2:

"Higher Level Plans – Greater Strength for Land Use Objectives."

Section 14 Glossary

Adaptive Management — a proactive and systematic approach to managing uncertainty about the consequences of alternative resource management actions. Experimental trials are designed, implemented and monitored as a basis for learning and applying that learning in the form of revised / improved resource management actions.

Account - In multiple accounts analysis, accounts are the broad theme areas that form the basis for examining alternatives. Currently in the BC government the theme areas are economy, environment and community although in some cases First Nations issues are placed in a separate account (see also evaluation accounts).

Age class - An interval into which the age range of trees, forests, stands, or forest types is divided for classification. Forest inventories commonly group trees into 20-year age increments up to age 140 years, then a single class for trees between 141 and 250 years old, and a single class for those older than 250 years.

Agricultural land - Land that is used for farming, including ranching, and land that has biophysical attributes that make it suitable for agricultural use. The latter includes lands identified by the Canada Land Inventory agricultural capability classes 1 to 5, as well as unique lands that have the capability to sustain agriculture.

Agricultural Land Reserve (ALR) - Land designated and reserved for agricultural purposes under the *Agricultural Land Commission Act* (the reserve covers about five percent of the province and includes most of BC's high 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.

Allowable annual cut (AAC) - The allowable rate of timber harvest from a specified area of land. The chief forester sets AACs for timber supply areas and tree farm licences in accordance with Section 7 and/or Section 170 of the *Forest Act*. The district manager sets AACs for woodlot licences. May also refer to a portion of the total AAC for the management unit (i.e. TSA) partitioned to a single harvesting agreement (i.e. forest licence, timber sale licence).

Base Case — the environmental, social and economic conditions that can be expected to occur in the future if existing policies, plans and practices are followed. The base case description is normally used as a point of comparison (benchmark) for judging the desirability of alternative land use plan scenarios.

Biogeoclimatic ecosystem classification - A hierarchical classification scheme having three levels of integration: regional, local and chronological; and combining climatic, vegetation, and site factors.

Biogeoclimatic zone - A 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 (e.g., Interior Douglas Fir). British Columbia has 14 biogeoclimatic zones.

Biological diversity - The diversity of plants, animals and other living organisms in all their forms and levels of organization, including genes, species, ecosystems, and the evolutionary and functional processes that link them.

Blue-listed species - Sensitive or vulnerable species as identified by the Ministry of Environment, Lands and Parks. Blue-listed species are considered to be vulnerable and "at risk" but not yet endangered or threatened. Populations of these species may not be declining but their habitat or other requirements are such that they are sensitive to disturbance. The blue list also includes species that are generally suspected of being vulnerable, but for which information is too limited to allow designation in another category.

Botanical forest product - Non-timber based products gathered from forest and range land. There are currently seven recognized categories: wild edible mushrooms, floral greenery, medicinal products, fruits and berries, herbs and vegetables, landscaping products, and craft products.

Capability (land) - The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at given levels of management intensity. Capability depends upon this set of conditions and site conditions such as climate, slope, landform, soils, and geology.

Consensus — general agreement on a package of provisions to the extent that, although parties to the agreement may not agree to *every* aspect of the package, they do not disagree enough to warrant their opposition to the overall package.

Coarse filter approach - An approach to maintaining biodiversity under the forest practices code that involves maintaining a diversity of structures within stands and a diversity of ecosystems across the landscape. The intent is to meet most of the habitat requirements of most of the native species (see also fine filter approach).

Criteria and Indicators — performance objectives and standards of sustainable forest management. A criteria is a forest management goal or value that you want to achieve, an indicator is what you measure to assess whether or not you are achieving the criteria.

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.

Cumulative effects - Effects on biota of stress imposed by more than one mechanism (e.g. stress in fish imposed by both elevated suspended sediment concentrations in the water and by high water temperature).

Decision Support Systems — analytical tools (e.g., computer models) that aid decision-making by providing information on the projected implications of alternative management actions.

Ecological classification - An approach to categorizing and delineating, at different levels of resolution, areas of land and water having similar characteristic combinations of the physical environment (such as climate, geomorphic processes, geology, soil and hydrologic function) and biological communities (plants, animals, micro-organisms and potential natural communities).

Ecosystem-based management — an approach to resource management that is aimed at ensuring the long-term co-existence of healthy, functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics and processes of whole ecosystems such that component species and human social, economic and cultural activities can be sustained.

Economic impact analysis - Analytical techniques that estimate the economic effects of management scenarios on income, revenues and employment within specific communities, regions or the province as a whole.

Ecosystem - A functional unit consisting of all the living organisms (plants, animals and microbes) in a given area, and all the non-living physical and chemical factors of their environment, linked together through nutrient cycling and energy flow. An ecosystem can be of any size - a log, pond, field, forest or the earth's biosphere - but it always functions as a whole unit. Ecosystems are commonly described according to the major type of vegetation, for example, forest ecosystem, or range ecosystem.

Ecosystem integrity - The soundness or wholeness of the processes and organisms composing the ecosystem. To maintain ecosystem integrity one must maintain functioning, self-sustaining ecosystems with characteristics similar to the original ones.

Ecosystem management - A strategy or plan to manage ecosystems to provide for all associated organisms, as opposed to a strategy or plan for managing individual species.

Environmentally sensitive area (ESA) - An area identified during a forest inventory that is sensitive to disturbance and/or is significantly valuable for fisheries, wildlife, water and recreation resources.

Equivalent clearcut area (ECA) - The area of a cutblock weighted to estimate an equivalent effect on snow hydrology as the area of a clear-cut unregenerated block. As examples, a ten-hectare clear-cut unregenerated block has an ECA of ten hectares; if a fully stocked stand has regenerated to a height of six metres, the block now has an ECA of five hectares. If, instead of being clear-cut the block was selection logged with thirty percent volume removal, the ECA is estimated to be three hectares.

Forest Certification — independent verification that a forest area is being managed according to sustainable forest management standards, as set by a forest certification

organization (e.g., Canadian Standards Association, Forest Stewardship Council systems of certification).

Fine filter approach - An approach to maintaining biodiversity under the forest practices code that is directed towards particular habitats or individual species whose habitat requirements are not adequately covered by the coarse filter guidelines. These habitats may be critical in some way and the species threatened or endangered (see also coarse filter approach).

Forest land - Land classified under Section 4 of the *Forest Act* that the chief forester considers will provide the greatest contribution to the social and economic welfare of the Province if predominantly maintained in successive crops of trees or forage, or both, or maintained as wilderness.

Forest Land Reserve (FLR) - Land designated under the *Forest Land Reserve Act*. This land includes private land within a tree farm licence and private land classed as managed forest land under the *Assessment Act*, as well as designated Crown land in the Provincial forest. Removal of land from the Reserve is restricted, as is use and subdivision of the land. The purpose of the Reserve is to maintain the commercial working forest of British Columbia.

Forest licence (FL) - An agreement entered into under Part 3, Division 2 of the *Forest Act*, which grants the rights to harvest timber on Crown land. A forest licence has a term not exceeding 20 years, usually specifies an allowable annual cut (a portion of the total AAC for the timber supply area) and requires a management plan.

Forest and Range Practices Act – A forest and range planning and practices framework that will promote a results-based regime. The Act is anticipated to come into force in April 2003 and will replace the *Forest Practices Code of BC Act.* Associated regulations will be developed to support this legislation and will come into force at the same time. Additional information can be obtained at:

Acts and regulations - http://www.for.gov.bc.ca/tasb/legsregs/comptoc.htm
Questions and Answers – http://www.for.gov.bc.ca/hfd/training/training.htm

Forest Stewardship Plan – The cornerstone operational plan for forest licensees under the results based code. The forest stewardship plan identifies the area of operation, and measurable and enforceable results or strategies to achieve the objectives set for the forest values. The forest stewardship plan must be consistent with the standards to protect biodiversity and species at risk, and must be consistent with approved land use plans.

Geographic Information System (GIS) — a computerized information system that uses a spatially referenced database to provide answers to geographic queries through a variety of manipulations.

Government Technical Team — government staff that provide technical advice and support to the North Coast LRMP Planning Table. The team is composed of a number of agency staff in a variety of roles.

Ground Rules — the terms, conditions and procedures that consensus-based planning participants agree upon for governing the planning process.

Habitat - The place where an organism lives and/or the conditions of that environment including the soil, vegetation, water and food.

Habitat management - Management of the forest to create environments which provide habitats that meet the needs of particular organisms.

Habitat rarity (scarcity, uniqueness) - Refers to the relative abundance of the habitat type (target species or species groups).

Identified wildlife - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as those species at risk that the Deputy Minister of Environment, Lands and Parks or a person authorized by that deputy minister, and the chief forester, agree will be managed through a higher level plan, wildlife habitat area or general wildlife measure.

Impact assessment - A study of the potential future effects of a resource development option on other resources and on social, economic and/or environmental conditions.

Indicator — a parameter that is measured / monitored to indicate progress towards a stated goal or objective.

Innovative Forest Practices Agreement (IFPA)-- an agreement between government and a licensee or a group of licensees designed to improve forest management, resource stewardship and employment opportunities through emphasis on innovative forestry practices. Examples of innovative forestry practices include:

- Alternate harvest or silviculture systems that increase the amount of available timber.
- Stand rehabilitation or silvicultural treatments of immature stands designed to increase yield.
- Collection and analysis of new data to provide more accurate predictions of forest growth.
- Activities that will enhance and protect other resource values such as water, fisheries, recreation, and biodiversity.

Inoperable areas - Defined in the Forest Practices Code Timber Supply Analysis as areas unavailable for harvest for terrain-related or economic reasons. Characteristics used in defining inoperability include slope, topography (e.g., the presence of gullies or exposed rock), difficulty of road access, soil stability, elevation and timber quality. Operability can change over time as a function of changing harvesting technology and economics.

Integrated resource management (IRM) - A land management regime that identifies and considers resource values, in the context of social, economic and environmental objectives.

Interest-based Negotiation — an negotiation approach to solving problems where the parties make an explicit commitment to seek mutually acceptable solutions, as opposed to bargaining for win-lose outcomes.

Inter-agency Management Committee — senior regional managers of government agencies with land or resource management responsibilities. The committee is responsible for setting priorities and implementing land use planning in north-western BC.

Land and Resource Management Plan (LRMP) — the sub-regional integrated resource planning process for BC. LRMP considers all resource values and requires public participation, inter-agency coordination and consensus-based land and resource management decisions.

Local planning - A term describing a variety of resource planning initiatives undertaken to develop integrated approaches to resource use and development. Typically they have been undertaken to resolve potential land use conflicts in local areas smaller than LRMPs.

Local resource use plan (LRUP) - A plan approved by the district manager for a portion of the Provincial forest that provides area-specific resource management objectives for integrating resource use in the area. These plans are prepared pursuant to Section 4(c) of the *Ministry of Forests Act*. Also referred to as local plans. These plans are to be consolidated under SRMPs

Multiple accounts analysis (MAA) - An analytical technique that specifies a framework of evaluation accounts under which management scenarios can be systematically assessed in terms of their social, environmental and economic impacts. It is flexible and often utilizes non-monetary valuations of the likely effects.

Natural disturbance types - A term used to characterize areas with different natural disturbance regimes. Five natural disturbance types are recognized as occurring in B.C.:

- NDT1 Ecosystems with rare stand-initiating events
- NDT2 Ecosystems with infrequent stand-initiating events
- NDT3 Ecosystems with frequent stand-initiating events
- NDT4 Ecosystems with frequent stand-maintaining fires
- NDT5 Alpine Tundra and Sub-alpine Parkland ecosystems.

Objective - An aim, goal or end to an action. Objectives and associated strategies contained in plans provide direction on land use and resource management for the plan area.

Old growth attributes - Structural attributes and other characteristics of old growth forests, which may include: large trees for the species and site; wide variation in tree sizes and spacing; accumulations of large dead standing and fallen trees; multiple canopy layers; canopy gaps and understory patchiness; elements of decay such as broken or deformed tops or trunks and root decay; and the presence of species characteristic of old growth.

Operational plan - The *Forest Practices Code of British Columbia Act* states that within the context of area-specific management guidelines, operational plans detail the logistics for development. Methods, schedules, and responsibilities for accessing, harvesting, renewing, and protecting the resource are set out to enable site-specific operations to proceed. Operational plans include forest development plans, logging plans, access management plans, range use plans, silviculture prescriptions, stand management prescriptions and five year silviculture plans.

Planning Table — the planning participants that are representing their "sectors" / constituencies in negotiations to develop a land and resource management plan for the Morice TSA.

Polygon - A closed geometric entity used to graphically represent area features with associated attributes.

Process Team — government staff that sponsor / manage the LRMP process. The team is composed of the Project Manager, Government Team Leader, process facilitator(s) and mediator.

Protected Areas Strategy (PAS) - The Provincial government strategy in place to meet BC's commitment to develop and expand the protected areas system to protect 12 percent of the province by the year 2000. The goals of the strategy are to protect viable, representative examples of natural diversity in the province, and special natural, recreational and cultural heritage features.

Provincial forest - Crown forest land designated by the Lieutenant Governor in Council under Section 5 of the Forest Act.

Qualitative measures - Measures generally expressed in non-numeric terms.

Quantitative measures - Measures generally expressed numerically.

Range - Any land supporting vegetation suitable for wildlife or domestic livestock grazing, including grasslands, woodlands, shrublands and forest lands.

Range development - Defined in the *Forest Practices Code of British Columbia Act* as

a) a structure or excavation related to the management, for range purposes, of range land or livestock; and.
b) a practice, excluding grazing, that is designed to improve range conditions or facilitate more efficient use of range land for range purposes.

Range land - Defined in the *Forest Practices Code of British Columbia Act* as Crown range and land subject to an agreement under Section 17 of the *Range Act*.

Recreation feature - Defined in the *Forest Practices Code of British Columbia Act* as a biological, physical, cultural or historic feature that has recreational significance or value.

Recreation feature significance - The quality, uniqueness, and availability of a recreation feature as classified in the recreation inventory.

Recreation features inventory - One component of the recreation inventory. The identification, classification, and recording of types and locations of biophysical recreation and cultural features, existing and potential recreation activities, recreation feature significance and feature sensitivity.

Recreation inventory - The identification, classification and recording of the types and locations of amenity resources. It is the umbrella inventory that includes the recreation features inventory, visual landscape inventory and recreation opportunity spectrum inventory, and inventories of rivers, sites, trails, caves and other recreation features.

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 five ROS classes, based on criteria of remoteness, area size and evidence of human use, are: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded resource land and rural.

Recreation resource - Defined in the *Forest Practices Code of British Columbia Act* as

a) a recreation feature,

b) a scenic or wilderness feature or setting that has recreational significance or value, or

c) a recreation facility.

Recreation site - A site and its ancillary facilities established under Section 6 of the *Forest Practices Code of British Columbia Act* or designated under the *Forest Act* before the coming into force of the code act and developed by the Ministry of Forests for recreation or to protect a recreation resource.

Recreation trail - A trail and its ancillary facilities established under Section 6 of the *Forest Practices Code of British Columbia Act* or designated under the *Forest Act* before the coming into force of the code act and developed by the Ministry of Forests for recreation or to protect a recreation resource.

Red-listed species - Threatened or endangered species identified by the Ministry of Environment, Lands and Parks. The taxa on the red list are either extirpated, endangered or threatened, or are being considered for such status. Any indigenous taxon (species or sub-species) threatened with imminent extinction or extirpation throughout all or a significant portion of its range in British Columbia is endangered. Threatened taxa are those indigenous species or sub-species that are likely to become endangered in BC if conditions are not altered.

Regional Protected Areas Team (RPAT) - The inter-ministry committee in each region that is responsible for conducting the technical inventories and analyses required to identify gaps in the protected areas system, identify areas of interest, consult with the public and propose study areas.

Resource Management Objective — a concise, measurable statement of a desirable future condition for a resource or resource use that is attainable through management action.

Resource Management Zone — a geographic area within the larger planning area that is distinct from other areas with respect to biophysical characteristics, resource issues or resource management direction.

Resource value - Values on Crown land which include but are not limited to biological diversity, fisheries, wildlife, minerals, oil and gas, energy, water quality and quantity, recreation and tourism, natural and cultural heritage, timber, forage, wilderness and aesthetic values.

Riparian area - Areas of land adjacent to wetlands or bodies of water such as swamps, streams, rivers or lakes including both the area dominated by continuous high moisture content and the adjacent upland vegetation that exerts an influence on it.

Riparian class - Refers to the classification given to streams, wetlands and lakes under Part 10 of the *Forest Practices Code of British Columbia Act* Operational Planning Regulation.

Riparian management area (RMA) - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as an area, of width determined in accordance with Part 10 of the regulation, that is adjacent to a stream, wetland or lake with a riparian class of L2, L3 or L4; and, consists of a riparian management zone and, depending on the riparian class of the stream, wetland or lake, a riparian reserve zone.

Riparian management zone - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as that portion of the riparian management area that is outside of any riparian reserve zone or if there is no riparian reserve zone, that area located adjacent to a stream, wetland or lake of a width determined in accordance with Part 10 of the regulation.

Riparian reserve zone - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as that portion, if any, of the riparian management area or lakeshore management area located adjacent to a stream, wetland or lake of a width determined in accordance with Part 10 of the regulation.

Risk — the potential for loss or damage to an ecological, social or economic value as a result of a human action.

Risk Assessment — a procedure that aims to identify the likelihood and consequence of an undesirable impact due to a management action.

Risk Management — measures that are undertaken to minimize risks.

Scenario — a draft statement of how lands and resources in the planning area will be managed in the future. Scenarios usually include a zoning map and associated statements of resource management objectives and strategies.

Sensitive/vulnerable species - (see blue-listed species)

Sensitivity analysis - Systematic evaluation of the effects of uncertainty or changes in underlying assumptions on overall analysis results.

Seral stages - The stages of ecological succession of a plant community. e.g., from young stage to old stage. The characteristic sequence of biotic communities that successively occupy and replace each other by which some components of the physical environment become altered over time.

Socio-economic analysis (SEA) - An assessment of the impacts of a course of action on the social and economic well-being of a community, region, or the province as a whole. In land and resource management planning (LRMP), when socio-economic analysis is expanded to include environmental impacts it is generally referred to as social, environmental and economic (SEE) impact assessment (see also multiple accounts analysis (MAA)).

Species account - A summary outlining the ecology, distribution and recommended management strategy for a species of identified wildlife (not related to multiple accounts analysis).

Strategic Land Use Planning - A participatory style of planning for relatively extensive areas (regions or sub-regions) that focuses on defining land and resource allocation and management goals and objectives, and corresponding strategies for achieving the goals / objectives. Strategic land use planning is distinguished from operational forms of planning.

Strategy — A means of achieving a resource objective.

Sustainable Forest Management Plan – A tactical level forest plan that outlines the process by which the land base will be managed to achieve a sustainable balance of social, economic and environmental values through time. Sustainable forest management plans are often a component of achieving and maintain certification standards.

Sustainable Resource Management Plan – A comprehensive and integrative approach to planning at the landscape scale. Sustainable resource management plans are based on a technical and design-oriented process rather than a consensus-based process such as LRMPs. The objectives set by SRMPs will be site specific, results based and operationally relevant.

Timber - In terms of harvesting, any trees or stands or trees that are commercially valuable.

Timber licence (TL) - Area-based tenures which revert to the Crown when merchantable timber on the area has been harvested and the land reforested. Many of these licences have been incorporated into tree farm licences.

Timber sale licence (TSL) - An agreement entered into under Part 3, Division 3 of the *Forest Act*, which grants the rights to harvest timber on Crown land. A timber sale licence

usually defines a specific volume of timber to be harvested from a specific area. In special circumstances, an allowable annual cut is specified.

Timber supply area (TSA) - An integrated resource management unit established in accordance with Section 6 of the *Forest Act*. TSAs were originally defined by an established pattern of wood flow from management units to the primary timber-using industries. They are the primary unit for allowable annual cut determination.

Tourism - The aggregate of all business that directly provides goods or services to facilitate business, pleasure or leisure activities greater than 80 kilometres away from the home environment.

Tourism capability - The ability of a set of natural resources (such as forests, rivers, lakes, fish, wildlife, etc.) to support a particular tourism product.

Tourism product - The tourism activity or experience that a tourist participates in.

Tourism resource - A natural or cultural resource that is important for a specific tourism product. For example, wildlife viewing is an important activity in many parts of the province, therefore, wildlife viewing opportunities are a tourism resource.

Traditional use sites - A geographically defined site that has been traditionally used by one or more groups of people for some type of activity. These sites will often lack the physical evidence of human-made artifacts or structures, and maintain cultural significance to a living community of people. Traditional use sites are usually documented with the assistance of oral historical or written archival sources. Examples include: sacred sites, ritual bathing pools, resource gathering sites such as berry-gathering grounds and culturally modified trees, and the site of a legendary or past event of cultural significance (see cultural heritage resource).

Tree farm licence (TFL) - An agreement entered into under Part 3, Division 5 of the *Forest Act*, which grants the rights to harvest timber. A tree farm licence has a term of 25 years and requires a management plan providing for the establishment, management, and harvesting of timber in a described area (Crown and private land) on a sustained or perpetual yield basis (see also allowable annual cut).

Uncertainty — what we don't know about ecological, social and economic systems, and their interactions.

Visual absorption capability - A component of the visual landscape inventory that rates the relative capacity of a landscape to absorb visual alterations while maintaining its visual integrity.

Visual impact assessment - An evaluation of the visual impact of resource development proposals on forest landscape.

Visual landscape analysis - The process of recommending visual quality objectives based on the visual landscape inventory, number of viewers, level of concern and in consideration of other values.

Visual landscape inventory - The identification, classification, and recording of the location and quality of visual resources and values.

Visual landscape management - The identification, assessment, design and manipulation of the visual features or values of a landscape, and the consideration of these values in the integrated management of Provincial forest and range lands.

Visual landscape unit - A landform or portion of a landform visible from one or more viewpoints identifying relatively homogeneous visual landscape features.

Visual quality - The character, condition, and quality of a scenic landscape or other visual resource and how it is perceived, preferred, or otherwise valued by the public.

Visual quality objective (VQO) - A resource management objective established by the district manager or contained in a higher level plan that reflects the desired level of visual quality based on the physical characteristics and social concern for the area. Five categories of VQO are commonly used: preservation; retention; partial retention; modification; and, maximum modification.

Visual sensitivity rating - A component of the visual landscape inventory that estimates the sensitivity of the landscape based on biophysical characteristics and viewing factors.

Vulnerable species - (see sensitive/vulnerable species)

Watershed - An area of land that collects and discharges water into a single main stream through a series of smaller tributaries.

Wildlife habitat - Areas of land and water that support specific wildlife or groups of wildlife.

Wildlife habitat area (WHA) - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as a mapped area of land that the Deputy Minister of Environment, Lands and Parks, or a person authorized by that deputy minister, and the chief forester, have determined is necessary to meet the habitat requirements of one or more species of identified wildlife.

Wildlife habitat feature - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as a significant mineral lick or wallow, an active nest of a bald eagle, osprey or great blue heron, or any other feature agreed to by the district manager and a designated environment official.

Wildlife tree - Defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as a tree or group of trees that are identified in an operational plan to provide present or future wildlife habitat. A wildlife tree is a standing live or dead tree with special characteristics that provide valuable habitat for the conservation or

enhancement of wildlife. Characteristics include large diameter and height for the site, current use by wildlife, declining or dead condition, value as a species, valuable location and relative scarcity.

Woodlot licence - An agreement entered into under Section 41 of the *Forest Act*, which grants the rights to harvest timber on a small parcel of Crown and private land (less than 400 hectares on the Coast or 600 hectares in the Interior). A woodlot licence has a term not exceeding 15 years and requires a management plan (see also allowable annual cut).