

Writing Resource Objectives and Strategies

A Guide to Preparing Effective Resource Management Plans

Second Edition

October 2004



Ministry of Sustainable Resource Management
Forests, Lands and Marine Branch

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Resource Management Division

Information Note:

Relationship Between this Guide and the Forest and Range Practices Act and Regulations

This Guide is a reference for natural resource planners who want to write effective plans. It is one of a series of guideline references that have been developed by the Ministry of Sustainable Resource Management to support the preparation of high quality sustainable resource management plans in British Columbia.

The Guide contains many references to resource “objectives” and “strategies,” as primary tools that planners employ to communicate the desired resource management direction for a plan area.

British Columbia’s Forest and Range Practices Act and associated regulations also use the terms “objectives” and “strategies” and it is important to note that this usage is different from the way that these terms are used in this Guide.

In the Forest and Range Practices Act context, “objectives” and “strategies” have particular legal meaning for purposes of regulating forest practices in the province. The Guide, however, applies conventional planning definitions to these terms and these two usages should not be confused.

Appendix 1 of this Guide provides additional information on forest and range practices regulation in British Columbia, including a summary explanation of how “objectives” and “strategies” are employed for purposes of regulating the province’s forest practices. The province’s Forest and Range Practices Act and regulations may be viewed in their entirety at <http://www.for.gov.bc.ca/mof/acts.htm>.

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Abbreviations Used in This Guide

- ADA** Agricultural Development Area – a potential land use designation where the land management priority is agricultural development and expansion.
- CRMP** Coordinated Range Management Plan – a plan that provides direction for managing range resources. CRMPs are now incorporated under the umbrella of British Columbia’s Sustainable Resource Management Planning Program.
- FSP** Forest Stewardship Plan – an operational forest management plan that is required under the *Forest and Range Practices Act*.
- GIS** Geographic Information System – a computerized tool that is commonly used in resource planning processes to analyze resource information and identify the implications of planning alternatives.
- MWLAP** Ministry of Water, Land and Air Protection – the provincial ministry with primary responsibility for environmental management in British Columbia.
- MSRM** Ministry of Sustainable Resource Management – the provincial ministry with primary responsibility for land use planning in British Columbia.
- OGMA** Old Growth Management Area – a land use designation where the maintenance of old forest structural attributes is the management priority.
- ROS** Recreation Opportunity Spectrum – a system for classifying land into categories of recreation opportunity.
- SFMP** Sustainable Forest Management Plan – a plan for a defined forest area that is developed to implement accepted criteria and indicators for ensuring sustainable forest management practices.
- SRMP** Sustainable Resource Management Plan – a landscape-level plan for Crown land/resources that identifies spatially-specific and measurable resource management direction.
- TDA** Timber Development Area – a potential land use designation where the management priority is commercial timber production.
- VQO** Visual Quality Objective – an objective for managing the visual quality of an area.

About This Guide

Why a Guide?

A resource management plan should, at a minimum, do two things:

1. define a vision for the future use of the land and natural resources in the planning area, and
2. describe how the vision will be achieved.

In meeting these two basic tests, resource planners must decide what specific subjects to address and how much to say about them. It's important to get the content of a plan "right" because the plan will be ineffective if it doesn't deal with the relevant issues and clearly communicate the intended resource management direction. Unclear plans will lead to disputes over interpretation and cause uncertainty about future land and resource use. There is the risk that the plan will not be implemented in the way it was intended, or perhaps not at all.

Aside from concerns about the ineffectiveness of poorly drafted plans, there are financial reasons for preparing good, clear plans. Planning processes are expensive. We cannot afford to make these investments without producing excellent planning products that address the known issues, and can be readily implemented.

These issues have become particularly relevant in British Columbia with the adoption of the *Forest and Range Practices Act*. This Act and its supporting regulations create, among other things, a legal framework for planning forest values, including timber, fish, wildlife, water, recreation and biodiversity. This legislation places considerable emphasis on the availability of "objectives" for forest values, as identified in regulation and through resource management planning processes. Operational forestry plans must be consistent with approved objectives for forest values, as a primary basis for ensuring sustainable forestry.¹

This Guide is a reference for natural resource planners who want to write effective plans. It's aimed at promoting high quality plans that are easy to interpret, implement and monitor.

¹ British Columbia's Crown land planning system is described in greater detail in Appendix 1 of this Guide.

As each resource planning process is unique, it may not be possible or reasonable to apply all of the advice contained in this guide and, for that reason, it is organized in a *guidelines* format — flexibility is key to producing plans that suit particular areas.

This edition of the Guide is an update of the version that was first produced by the British Columbia Ministry of Forests in December 1998, titled, “Guide to Writing Resource Objectives and Strategies.” Since 1998, a number of changes to British Columbia’s Crown land planning system have emerged and this updated Guide reflects those changes.

Scope

Although the Guide has broad application to most spatial land and resource planning processes, the emphasis is advising on the development of Sustainable Resource Management Plans (SRMPs), within a British Columbia Crown land context. SRM Planning is British Columbia’s main vehicle for translating existing, broad strategic land use plans (e.g., regional and sub-regional land use plans) into the more specific and tangible resource management direction that is needed to support operational-level resource planning and day-to-day resource management decision making.²

The Guide focuses on recommended best practices for writing *resource objectives and strategies*. Although resource management plans may contain a variety of other contents (e.g., contextual information, implementation methods, monitoring program) resource objectives and strategies are normally the main elements used in a plan report to communicate intended management direction.

The Guide is compatible with and supports British Columbia’s “results-based” system for regulating forest planning and practices. Its advice, however, goes beyond forest resources to include guidance on effective planning for all types of Crown land and resource values. Hence, terminology used in the Guide for communicating resource management direction, such as resource “objectives” and “strategies” have meaning that is broader and more encompassing than the legal definitions for these terms that are found in the province’s forest practices legislation. Refer to Appendix 1 of the Guide for more specific information on forest resource planning and practices in British Columbia.

The Guide content applies to most spatial planning situations that are likely to arise, including planning for environmental conservation and

² Information on British Columbia’s SRMP program is available at <http://srmwww.gov.bc.ca/rmd/srmp/index.htm>. Figure A in Appendix 1 also provides more information on British Columbia’s hierarchy of Crown land plans and the relationship among planning levels.

economic development of Crown land and resources. Examples of good construction of objectives and strategies are provided throughout to demonstrate the guidelines.

This Guide is one of a series of guidelines that the Ministry of Sustainable Resource Management (MSRM), has developed to describe recommended approaches and methods for SRM planning. It is not, in itself, a comprehensive manual or handbook for the Ministry's SRMP program. See "Additional Reading" on page 50 for a list of related references.

Audience

The Guide is intended primarily for provincial planners and planners in partner organizations who are involved in developing land/resource management plans for public lands. Although the Guide reflects the British Columbia Crown land planning context, most of its advice is transferable to other planning situations and jurisdictions.

Organization

Chapter 1 – Expressing Resource Management Direction – provides an overview of the tools that are available to planners to communicate a plan's intent. The relationship of objectives and strategies — as key instruments for expressing resource management direction — to other communication tools is summarized.

Chapters 2, 3 and 4 are the core of the Guide and describe twelve separate guidelines for writing effective resource objectives and strategies – see Summary in Box 1.

Chapter 2 – Look Up — Look Down — Look Within – describes three guidelines that relate to the need for a plan's objectives and strategies to be informed by and consistent with both 'upper' and 'lower' levels in the planning hierarchy (see Figure A in Appendix 1), and to be internally consistent, so that the plan, when taken as a whole, is achievable.

Box 1. Twelve Guidelines for Writing Effective Resource Objectives and Strategies

LOOK UP – LOOK DOWN – LOOK WITHIN

- Guideline 1 Consider the planning environment
- Guideline 2 Be internally consistent
- Guideline 3 Make sure it's achievable

A PLACE FOR EVERYTHING – EVERYTHING IN ITS PLACE

- Guideline 4 Connect with the issues
- Guideline 5 Distinguish between goals, objectives and strategies
- Guideline 6 Supplement where necessary

CLEAR, TANGIBLE AND SPECIFIC

- Guideline 7 One thing at a time
- Guideline 8 Focus on the physical
- Guideline 9 Identify where, when and who
- Guideline 10 Make it measurable
- Guideline 11 Provide detail – as appropriate
- Guideline 12 Say what you mean

ABOUT THIS GUIDE

Chapter 3 – A Place for Everything — Everything in its Place – describes three guidelines that focus on using the appropriate tools for expressing resource management direction.

Chapter 4 – Make it Clear, Tangible and Specific – describes six guidelines for ensuring that objectives and strategies are communicated effectively.

A *Glossary* of plan-writing terms is then provided, followed by a list of references for *Additional Reading* on SRMP preparation.

An overview of British Columbia’s Crown land planning system is provided as *Appendix 1*, including a description of forest resource planning and practices in British Columbia.

Appendix 2 provides a *checklist* emphasizing key points that are embodied in the guidelines.

Appendix 3 presents a *Trouble-shooting Guide* — a summary of common plan-writing problems and suggested responses based on the 12 guidelines in the Guide.

Appendix 4 provides definitions of verbs that are commonly used to construct resource objectives.

Chapter 1 Expressing Resource Management Direction

What is Resource Management Direction?

Objectives and strategies are normally the most important content of resource management plans because they provide specific and tangible instruction for managing natural resources. However, there are other elements of plan content that are also important for expressing intended management direction. This chapter outlines the various ‘tools’ that can be used for this purpose, and allows users of this Guide to place resource objectives and strategies in appropriate context within the broader plan.

To be complete, a resource management plan should answer five essential questions about land and resource use in the plan area: “what,” “where,” “when,” “how” and “who” — see Box 2.

- **What** goals and objectives (desired future conditions) will apply?
- **How** will the goals and objectives be achieved?
- **Where** in the planning area will the goals and objectives, and actions for achieving them, apply?
- **When** will the goals, objectives and actions have effect?
- **Who** is responsible for carrying out the activities defined in the plan?

Ways to Express Resource Management Direction

There are a number of tools that plan-writers may use to communicate resource management direction. These are each described below briefly, and are summarized in Box 3. Plans may employ all or many of these tools, however, most of a plan’s substantive content will normally be taken up with resource objectives and associated resource strategies.

Box 2. Elements of Resource Management Direction

- What** = types of activities
- How** = methods for undertaking activities
- Where** = spatial application of activities
- When** = temporal application of activities
- Who** = roles and responsibilities for performing actions



Box 3. Tools for Communicating Resource Management Direction

- GOALS**
 - describe a desired end state for a particular resource value
 - worded generally to establish broad aims
 - not usually quantitative
 - no time specified for their achievement
 - normally apply to the whole plan area
- OBJECTIVES**
 - describe end-results that will contribute to broader goals
 - describe desired future conditions for individual resources or uses
 - measurable
 - geographically and time specific
 - can apply to whole plan area or specified parts of plan area
- STRATEGIES**
 - describe how to achieve an objective
 - pertain to activities and how those activities are to be conducted
 - sometimes called “plan policies,” “management actions,” “guidelines”
 - can apply to whole plan area or to specified parts of plan area
 - often stated as conditions that will apply to future resource use activity, but may also direct future administrative processes
- LAND/RESOURCE MANAGEMENT UNITS OR PLANNING UNITS**
 - geographic subdivisions of the plan area that communicate a particular resource management direction for that area
 - land/resource designations can be used to serve a similar purpose
- OTHER TOOLS**
 - Maps**
 - communicate spatial application of objectives and strategies
 - show location of management areas/units; ecological units; capability/suitability classes; resource sites or features; legal and administrative boundaries
 - Indicators**
 - measurement criteria used during plan monitoring to assess the effectiveness of plan strategies in achieving plan goals and objectives
 - Targets**
 - projected levels of resource supply or output as measured, for example, by resource volume, value or area
 - Descriptions of Management Intent**
 - supplemental narrative that more fully describes objectives/strategies or their rationale that helps to envision the desired ‘look’ of a particular area. Sometimes referred to as statements of ‘desired future condition’
 - Activity Matrix**
 - a table indicating the relative compatibility of various land use activities within a plan’s land/resource designation categories
 - External Guidelines**
 - cross-references to desirable existing resource management guidelines or “best management practices”

1. Goals

Goals are generally-worded statements that describe a desired end state with respect to a particular subject. Usually, goals are open ended in the sense that no timeframe is identified for their achievement. They are not normally expressed in quantitative terms. Goals typically reflect broad ideals, aspirations or benefits pertaining to specific environmental, economic or social issues. They often translate provincial level policies or principles into statements of more local relevance. Goals typically apply to the whole plan area, as opposed to a geographic subdivision of the plan area — see Example 1.

Example 1:

Goal Statements

- *Encourage community stability by promoting diverse economic opportunities.*
- *Maintain water quality as a basis for ensuring healthy aquatic ecosystems.*
- *Maintain biological diversity throughout the plan area.*

2. Objectives

Like goals, plan objectives respond to identified issues by describing a desired future state for a particular resource or resource use. They are, however, more specific and concrete than goals. They may be thought of as stepping stones for achieving broader goals. Objectives should be measurable, either directly or indirectly, as a basis for evaluating whether or not they are being achieved over time. In addition, land and resource objectives are spatially specific — they may apply to the whole plan area or to sub-sets of the plan area such as a particular zone or geographic unit. They may also describe a timeframe within which the objective will be achieved.

The ‘SMART’ acronym summarizes what an objective should be: Specific, Measurable, Achievable, Relevant and Time-bound. These criteria are covered more fully in chapters 2, 3 and 4.

See Box 4 for the common structure of resource objectives. See Example 2 for sample objectives for various resource values that might be addressed in a resource management plan.

Box 4. Structure of Resource Objectives

The typical structure of a resource management objective in a SRMP is:

“Active verb” a “resource or resource use” within a “geographic location” for a “specified time.”
(If time is not specified, the objective applies for the duration of the plan.)

Example 2:

Resource Objectives

Conserving Scenic Quality at an Important Viewpoint

Manage Scenic Area A, as viewed from Renton Lake Trail, as shown on map 2, for a visual quality objective of partial retention.

Explanation: Map 2 in the plan document would show the location of the viewscape to which the visual quality objective applies. The visual quality objective of “partial retention” establishes a particular logging regime for the affected area. This objective would affect how operational forestry plans are developed and, hence, direct on-the-ground logging activities.

Promoting Water Resource Development Opportunities

Provide opportunity for economic development uses of water resources in the locations shown on map 3 and as described in Table 5.

Explanation: Map 3 in the plan document would show the location of streams or stream reaches with uncommitted water volumes (i.e., volumes in excess of current licensing commitments or requirements for aquatic conservation) that have been identified during the planning process. Table 5 would identify the scale of the opportunity at each location in terms of available water volume (e.g., cubic feet per second, or percent of mean annual discharge). This objective would signal the availability of the specified water volumes for potential future water licensing.

Conserving Critical Ungulate Winter Habitat

Within the Class 1 Ungulate Winter Range shown on map 6, maintain at all times throughout the rotation of forestry activities, 40% of the winter range area in forest age class of 8 or greater (i.e., >140 years), and a crown closure of >56%.

Explanation. Map 6 in the plan document would show the location of habitat that is critical for winter survival of ungulates. The limitations on forestry activities that are specified in the objective would ensure snow interception cover and foraging opportunities for ungulates. These requirements would come into play during operational forest plan development, approval and monitoring.

Maintaining River-based Recreation/Tourism Opportunities

Provide continued opportunity for high quality whitewater recreation and tourism experiences at the locations shown on map 2.

Explanation: Map 2 in the plan document would show the river locations with high suitability for white water recreation or tourism uses (e.g., canoeing, kayaking, rafting). Strategies for achieving this objective might include direction to regulators to not approve land/resource use activities that would impact negatively on this objective, such as water licensing that might reduce water flows during key periods of recreational/tourism use; or closing roads that are used for recreation/tourism access to the sites.

Note: *In the above examples, no timeframe is specified for when the objectives apply. Therefore, they would have effect until they are cancelled or replaced.*

3. Strategies

Whereas objectives define “what” outcome is intended for particular resource values, strategies describe “how” the desired outcome will be achieved. They are normally drafted to correspond directly to the objective they serve — potentially organized in table format, so that the relationship between objectives and strategies is clearly evident — see Example 3.

In other jurisdictions or planning settings, plan strategies are sometimes called “plan policies,” “management actions” or “guidelines.” They flow out of resource objectives and describe actions that can be controlled by resource managers to achieve particular objectives. They describe the ways that competing objectives are traded-off or integrated with each other. Depending on the circumstances, strategies might describe:

- appropriate types of resource use activities or technologies
- standards of resource use or management activity
- where and when a resource use or management activity is to occur
- procedures or guidelines that should apply in connection with an activity
- conditions that must be satisfied before an activity is appropriate
- roles and responsibilities for performing a resource management activity.

For every resource objective there is usually at least one strategy for achieving it; there should be no strategies that are not attached to an objective.

In the context of British Columbia’s Forest and Range Practices Act and associated regulations, the terms “objective” and “strategy” have special meaning that is more specific than how these terms are used in this Guide. Readers interested in how resource objectives and strategies are described in the province’s forest practices legislation should refer to <http://www.for.gov.bc.ca/mof/acts.htm>.

Example 3:
Strategies Support Objectives

Objective	Strategies
Maintain a full range of ecosystems, old seral stage classes (i.e., age classes 8 and 9) and forest interior conditions throughout each rotation within the Old Growth Management Areas (OGMAs) shown on map 6.	<p>Forest management/harvesting activities in the OGMAs shown on map 6 are limited to the following:</p> <ul style="list-style-type: none"> • insect or disease control that is necessary to mitigate severe damage to the habitat attributes in the OGMAs, or to other forest values in the landscape; • control of wildfire; • seed cone collection, provided trees are not felled; • road construction where there are no other practicable route alternatives; • First Nation cultural purposes, provided trees are not felled; and • thinning to enhance old forest attributes within Mule Deer Winter Range, provided the thinning is consistent with direction contained in the regional ‘Management Strategy for Caribou Winter Ranges.’



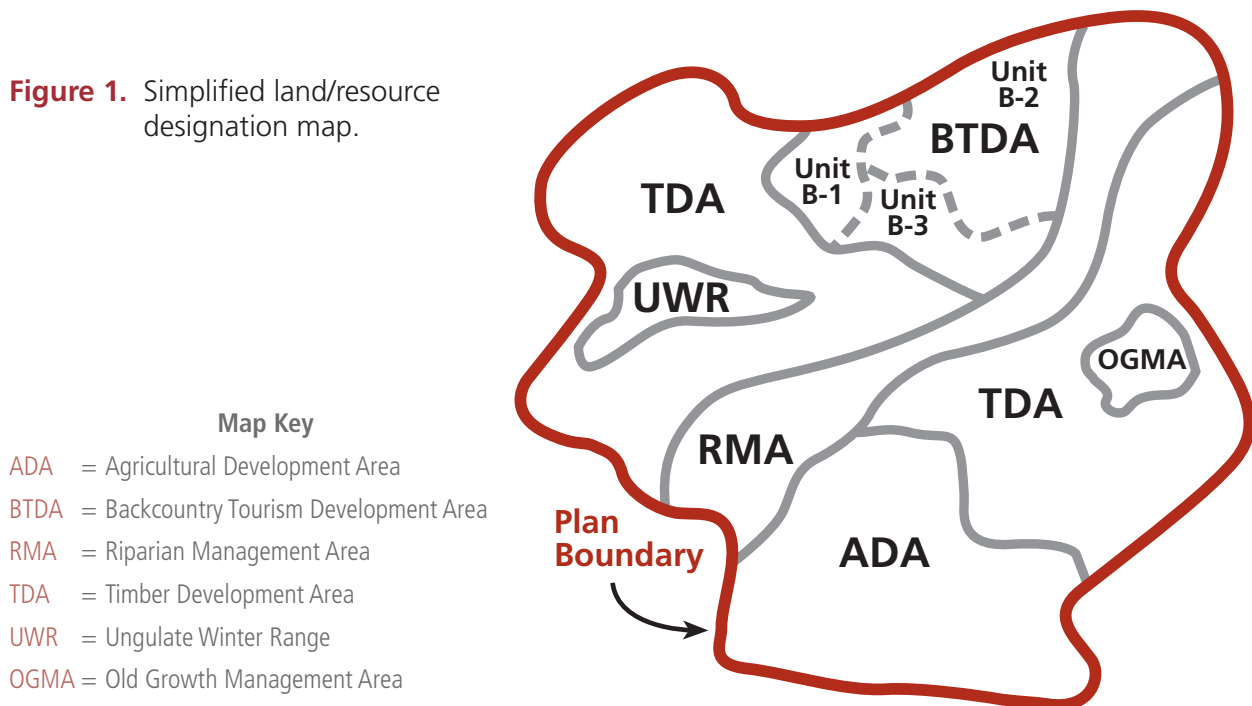
4. Land/Resource Management Units

Many resource management plans break the planning area into Management Units or Planning Units, and assign these areas an identifying label (e.g., Management Unit 6 – Georgie Creek). Objectives and strategies that are unique to that unit may be expressed by referencing a map showing the unit's location.

An alternative to management units is to employ spatial designations to communicate where on the land particular management objectives are to be given emphasis or priority. The designations visually portray resource management intent. Where they are included in a plan, subdivisions of the land base are assigned a particular designation from a list of designation categories. Objectives and strategies in the plan document are defined for the various categories. Example 4 shows land/resource designation categories that might conceivably appear in a resource management plan. An example of a simplified designation map is shown as Figure 1.

Combining designations and management units is another option that enables planners to provide more spatially-specific resource management direction within designation categories.

Figure 1. Simplified land/resource designation map.



Note: For each designation, the plan document would identify resource objectives and strategies, and potentially also provide resource management direction using other tools — see Box 3. It's probable that some designated areas would be broken into smaller units, as shown for the BTDA designation, to enable the communication of more geographically specific objectives and strategies.

Example 4:

Possible Resource Management Plan Designations

<i>Designation Category</i>	<i>Would Apply To</i>	<i>Land or Resource Management Intent or Priority</i>
<i>Agricultural Development Areas</i>	<i>Arable areas with high suitability for permanent agricultural development/ expansion</i>	<i>Potential future allocation for agricultural development in response to proposals from the private sector</i>
<i>Timber Development Areas</i>	<i>Productive forest lands with high capability & suitability for long-term timber production</i>	<i>Intensive timber management and silviculture activities</i>
<i>Backcountry Tourism Development Areas</i>	<i>Areas with high suitability for supporting backcountry tourism activities</i>	<i>Potential future allocation for backcountry tourism activities in response to proposals from the private sector</i>
<i>Ungulate Winter Range Areas</i>	<i>Habitat areas with high suitability for supporting ungulate populations in winter months</i>	<i>Provide winter foraging opportunity for ungulates by maintaining sufficient snow interception cover and appropriate amounts of vegetation age/type within the designated areas</i>
<i>Riparian Management Areas</i>	<i>Areas adjacent to streams, lakes and wetlands that are important determinants of stream channel morphology and aquatic habitat quality</i>	<i>Conserve riparian area integrity and function by preventing or minimizing potential adverse impacts of resource development activities</i>
<i>Scenic Areas</i>	<i>Areas with high visual/aesthetic significance</i>	<i>Maintain scenic quality through the identification and implementation of appropriate visual quality objectives and/or the application of development design criteria</i>
<i>Cultural Heritage Areas</i>	<i>Areas with important historical, archaeological or First Nation's traditional use values</i>	<i>Conserve the cultural heritage values in these areas by preventing or minimizing potential adverse impacts of resource development activities</i>
<i>Old Growth Management Areas</i>	<i>Areas containing stands of old/ mature trees</i>	<i>Conserve old forest structure and function</i>

5. Other Tools

Resource management direction can be communicated through other means which supplement or enhance the primary tools discussed above.

Maps: are obviously an important way to link individual resource management objectives and strategies to particular:

- biophysical or ecological sub-units (e.g., biogeoclimatic zones/sub-zones, natural disturbance types, sub-drainages, landscape units, management units)
- land or resource capability or suitability classes (e.g., “high” potential for tourism resources, class 1 fisheries habitat, critical deer/elk winter range)
- resource sites or features (e.g., historic trail)
- legal boundaries (e.g., Tree Farm Licence boundary, municipal boundary)
- administrative boundaries (e.g., Timber Supply Area boundary, regional district boundary).

Example 2, page 4, demonstrates how maps are essential for communicating the spatial extent of resource objectives.



See Guideline 9, page 31, “Identify Where, When and Who” for further explanation.

Indicators: Plans may identify indicators for monitoring the extent to which plan goals and objectives are being achieved. Identifying relevant indicators during the development of objectives and strategies can help planners prepare more effectively worded objectives and strategies.

See Guideline 10, page 35, “Make it Measurable,” and Example 31, page 36.

Indicators are also commonly developed for Sustainable Forest Management Plans that often follow a “criteria and indicators” approach for expressing forest management direction. In this context, indicators have a special meaning and application — see Box 5 for details.

Box 5. Tools Used in Sustainable Forest Management Plans for Expressing Resource Management Direction

Many forest licensees voluntarily develop Sustainable Forest Management Plans (SFMPs) to meet the requirement for independent certification that the forest area is being managed in a sustainable fashion. Certification may assist with marketing a company’s forest products. In some cases, the Province may elect to adopt elements of SFMPs as government-endorsed resource management direction.

SFM Planning has developed its own tools and terminology for expressing forest management direction. There are, however, close parallels with more conventional planning terminology, as shown below.

SFM Planning Terminology	Meaning in a SFMP	Conventional Planning Terminology
Criteria	Broad categories of forest value or benefit that, together with other elements, define “sustainable” forest management. The Canadian Council of Forest Ministers, in developing Canada’s framework for sustainable forestry, has adopted six criteria: <ol style="list-style-type: none"> 1. Conserve biological diversity 2. Maintain/enhance ecosystem condition & productivity 3. Conserve soil and water resources 4. Recognize the role of forests in global ecological cycles 5. Achieve economic and social benefits from forest management 6. Manage forests in a way that reflects and responds to society’s preferences for fair and informed decision making 	Goals
Goal	Broad statement describing a desired future state or condition of a particular forest value. There may be several goals for each criterion.	Goal
Indicator	A variable that is used for measuring the condition of a goal for a defined forest area.	Taken together, a SFMP “indicator” and “target” parallel a typical plan “objective”
Target	Targets are identified for each indicator to specify the quantifiable level that is desirable.	

SFM Planning Examples

Criterion →	Goal →	Indicator →	Target
Conserve biological diversity	Maintain representative seral stages across the landscape	% of forest in 0–20 year age class by landscape unit	Less than 30% of a landscape unit
Maintain/enhance ecosystem condition and productivity	Ensure that stands in harvested areas are re-established in a timely manner	% of cut blocks achieving free growing within 12 years of harvest date	100%
Manage forests in a way that reflects and responds to society’s preferences for fair and informed decision making	Provide opportunity for meaningful public consultation in forest management decision making	Level of public satisfaction with decision-making process (measured by survey)	High satisfaction level

For additional information on the Sustainable Forest Management Criteria and Indicators Framework developed by the Canadian Council of Forest Ministers see <http://www.ccfm.org/>

For advice on developing a Sustainable Forest Management Plan see <http://www.for.gov.bc.ca/hfp/pubssfmp.htm>

Targets: represent a projected level of resource output or supply as measured, for example, by resource volume, value or area. These can help to clarify goals, objectives and strategies as expressions of the tangible results that objectives and strategies are expected to achieve. Measurable targets may be incorporated into a resource objective, an associated strategy, or included as a separate piece of information that corresponds to a resource objective or strategy.

See Guideline 10, page 35, “Make it Measurable” for further explanation.



Descriptions of Management Intent: supplemental descriptive narrative that is provided to help resource managers more accurately envision resource management objectives in terms of effects on-the-ground. These are sometimes referred to as statements of ‘desired future condition.’

See Guideline 6, page 26, “Supplement Where Necessary” for further explanation.

Activity Matrix: a table that indicates the relative emphasis that will be given to various land use activities within a plan’s land/resource designations. The designation categories are listed along the top of the table, and the alternative land use activities are listed down the left-hand side of the table. In each of the resulting cells, a code letter is inserted, for example, to indicate if the alternative land use is a priority use, a compatible but conditional use, or an incompatible use that would not usually be permitted to occur — see Example 5. Example 24 on page 32 shows a similar approach for communicating appropriate land use direction in geographic ‘management units.’

Reference to External Guidelines and Existing Plans: cross-references to existing resource management guidelines or best management practices and existing resource management plans that replace the need to re-invent detailed management direction in a plan report.

See Guideline 11, page 38, “Provide Detail — As Appropriate” for further explanation.

Example 5:
Activity Matrix

Land Use Activities	Land/Resource Designation Categories						
	Forest Recreation	Aggregate Management	Agricultural Development	Industrial Reserve	Natural Hazard	Wildlife Habitat	Settlement Reserve
<i>Agriculture</i>							
Cultivation	I	C	P	C	I	I	C
Grazing	C	C	P	C	C	C	C
<i>Commercial</i>							
General	C	C	I	C	I	I	P
<i>Fish & Wildlife</i>							
Management & Enhancement	C	C	C	C	I	P	C
<i>Industrial</i>							
General	I	P	C	P	I	I	C
<i>Recreation</i>							
Community/Public	P	I	I	I	C	C	C
Commercial Backcountry Cottage Use	P	I	I	I	C	C	C
Cottage Use	C	I	I	I	I	I	P
<i>Timber</i>							
Harvesting	C	C	C	P	I	C	C
...etc.							

Legend:

P = Priority land use activity. Land use activity is fully compatible with designation's management emphasis.

C = Land use activity is potentially compatible with designation's management emphasis. Land use activities may be subject to conditions aimed at promoting resource integration/conflict resolution.

I = Land use activity is incompatible with designation's management emphasis. This use is not normally permitted to occur in this designation.

Chapter 2 Look Up — Look Down — Look Within



This chapter title refers to the fact that successful land/resource management plans will:

- reflect the legal, policy and land use direction that comes from ‘above’ in the planning hierarchy (*Look Up*) – see BC’s Planning Hierarchy in Figure A on page 52 in Appendix 1
- be informed by existing local plans, and sometimes even operational plans (*Look Down*)
- be internally consistent within the plan itself (*Look Within*)
- be achievable — technically, financially and administratively.

Being conscious of the wider environment within which a plan is developed will help greatly in drafting appropriate resource objectives and strategies. Ensuring that plan content is consistent within itself, and that the component parts are balanced and integrated, will result in plans that are capable of being implemented. The three guidelines in this chapter should help planners achieve these aims.

Guideline 1 Consider the Planning Environment

1. Legislative and Policy Direction

Planning processes are required to work within governments’ established legal and policy bounds. The following are sources of legislative and policy direction that may influence the development and content of a plan’s objectives and strategies.

Statutes and Regulations

Many provincial and federal laws will have a bearing on resource plans in the sense that planners must not create inconsistencies with the law. Examples of legislation that may direct resource plan content are the federal *Fisheries Act*, provincial *Agricultural Land Reserve Act*, provincial *Heritage Conservation Act*, and their associated regulations. Where resource objectives and strategies do not conform to the law, the law will prevail. This includes resource objectives that, even though they may be established as legally enforceable objectives,³ are lower in the legal hierarchy than statutes and regulations.

3 For an explanation of how resource objectives may be given legal weight in British Columbia, see “Ways that Plans are Implemented” on page 54 of Appendix 1.

Corporate Policies and Sector Strategies

Beyond statutes and regulations, certain provincial policies can significantly affect the nature of objectives and strategies in resource management plans. Those with the greatest effect are “corporate” policies and provincial-level strategies for particular resource sectors, which reflect Cabinet-level direction. Examples of British Columbia corporate policies or sector strategies that might influence the direction that a resource management plan takes include the Provincial Tourism Strategy and the province’s Energy Plan and the Two-Zone System for Mineral Exploration and Mining.



Provincial Principles

Another type of provincial policy that can influence plan content includes provincial principles. A British Columbia example is the Ministry of Sustainable Resource Management’s ‘Governance Principles for Sustainability’ that provide high-level policy guidance for managing the province’s land and resources. See Box 6 for a summary of these principles. More information on the principles is available at <http://srmwww.gov.bc.ca/clrg/psirb/sustainability/sustainability/index.html>.

Agency Programs and Policies

Agency-level programs and policies can also significantly influence the way that objectives and strategies are drafted. For example, the Crown land disposition programs and policies of Land and Water British Columbia Inc.⁴ may result in plan objectives and strategies that identify areas of land with a priority for future allocation for commercial recreation use, agricultural use, or settlement expansion. Similarly, the Ministry of Water, Land and Air Protection’s program and policy to offer guide-outfitting and trapping opportunities may influence the development of plan objectives and strategies for wildlife and furbearers. As another example, the Ministry of

Box 6. MSRM’s ‘Governance Principles for Sustainability’

1. Accountability – Enhancing performance management through effective compliance, enforcement, auditing and public reporting activities.
2. Certainty – Making timely and clear decisions within a predictable and understandable framework.
3. Competitiveness – Ensuring that British Columbia remains internationally competitive by removing barriers to investment and promoting open trade.
4. Continual improvement and innovation – Learning from the past, adapting to changing circumstances, encouraging innovation and being entrepreneurial.
5. Efficiency – Focused and efficient delivery of government services and maximizing the net benefits arising from the allocation, development and use of natural resources.
6. Inclusion – Including the interests of First Nations, and their desire to participate more fully in the economy of the Province.
7. Integration – Ensuring that decisions integrate economic, environmental and social elements, while considering the limits of each, for the benefit of present and future generations.
8. Science-based decision making – Making justifiable decisions informed by science-based information and risk management.
9. Shared responsibility – Encouraging co-operation among First Nations; federal, provincial and local governments; academics; industry and non-governmental organizations in developing and implementing policies.
10. Transparency – Establishing open and transparent decision-making processes that consider First Nations, the public and other key interests.

⁴ This is the organization with primary responsibility in British Columbia for allocating surface rights tenures for Crown land, and managing water rights.

Box 7. Summary of Sustainable Resource Management Planning Standards

SRMP Process Standards

SRM Planning Processes must:

- Be approached in a flexible manner
- Integrate social, economic and environmental values
- Concentrate on addressing known issues
- Be technically and scientifically defensible
- Provide appropriate opportunities for consultation
- Be undertaken in an accountable manner

SRMP Product Standards

SRM Plans must:

- Identify resource goals
- Identify resource objectives and strategies
- Indicate how the plan will be implemented and monitored
- Be written in a plain and neutral style

SRMP Implementation and Administration Standards

SRM Plans that are approved must be:

- Implemented in a timely way
- Widely communicated / disseminated to affected interests
- Monitored as a basis for implementing adaptive management

Sustainable Resource Management's Standards for SRMPs define the Ministry's expectations for how these planning processes must be undertaken, the type of products that the planning processes should generate, and direction on how plans will be administered over time. These Standards, some of which parallel the material in this Guide, are available at <http://srmwww.gov.bc.ca/rpb/>. A summary of the SRMP Standards is provided in Box 7.

Regional Strategies

Regional strategies that have inter-agency endorsement may also steer plan content. For example, the Kootenay regional biodiversity strategy provides important guidance for preparing resource objectives and strategies at the landscape level.

2. Conformance With "Plans Above"

A common purpose of resource management plans is to translate the general resource management direction in a broader, existing land use plan (e.g., a regional or sub-regional land use plan) into more specific and tangible resource objectives and strategies for guiding operational decision making. There is an expectation that a plan's objectives and strategies will be consistent with plans 'above it' in the planning hierarchy. If objectives are developed that do not conform to the guidance provided in a 'higher' plan, a clear explanation should be offered along with a strategy to eventually bring the two plans into line.

In British Columbia, where resource objectives have been legally established, however, there is a strict requirement for consistency between those objectives and new objectives that are being developed for legal adoption. See Example 6 for an example of inconsistency between resource objectives.

Example 6:

Inconsistency Between Legally Established Resource Objectives

The following two objectives would materially conflict and, therefore, should be reconciled:

1. Strategic Land Use Plan Objective: "Maintain opportunities for backcountry recreation in an undeveloped wilderness setting in the areas shown in map 3."

2. SRMP Objective: "Apply a visual quality objective of modification to the areas shown in map 4"

(In this example map 3 and map 4 cover all or some of the same territory).

3. Consider “Plans Below”

In some locations where resource management plans are being formulated, existing local resource plans may cover portions of the planning area. For example, within a given planning area, there may already exist a local resource use plan, a coordinated range management plan, an integrated watershed management plan,⁵ or a rural land use bylaw prepared by a regional district. These plans provide basic information that is likely to be very helpful in developing new objectives and strategies. Moreover, there exists a certain accountability to these pre-existing plans — particularly if they reflect the agreement of agencies and local stakeholders.



It may be possible to incorporate the general direction contained in pre-existing resource plans directly into the relevant objectives and strategies of the broader plan (see Example 7).

Where a resource management plan encompasses an existing local plan but departs from, or conflicts with, the management direction contained in the local plan, then a rationale or explanation should be offered.

It is also appropriate to consider existing operational plans in good standing when developing SRMP objectives and strategies. Approved operational plans, such as a Forest Stewardship Plan or a commercial recreation management plan, are legal commitments to access and use Crown resources. These legal commitments may affect how the objectives and strategies in a new land use plan should be written.

Example 7:

Incorporating Resource Management Direction from Existing Local Plans

An existing Coordinated Range Management Plan (CRMP) contains objectives and strategies respecting:

- *the relationship between forage use by livestock and wildlife,*
- *water quality protection measures (controls on cattle access to surface water)*
- *measures to restore the historical composition of range plant species (e.g., through the grazing regime, seasonal duration).*

A new, broader objective over the same area could reflect/restate desirable CRMP provisions in its objectives.

⁵ These former types of resource plans are now integrated under the province's SRMP program 'umbrella.' See "Sustainable Resource Management Planning: A Landscape-level Strategy for Resource Development" (<http://srmwww.gov.bc.ca/rmd/srmp/index.htm>) for further explanation of the consolidation of British Columbia's resource planning programs.

Guideline 2 Be Internally Consistent

A plan’s objectives and strategies must complement each other. If objectives and strategies are in conflict, plan implementation will be difficult or impossible. The plan will not provide a clear guide to future planning or resource development/conservation.

There are several ways to write resource objectives and strategies so that plan content is internally consistent:

Separate Resource Conflicts in Space or Time — by preventing conflicting activities from occurring at the same place, or at the same time. This will often require a trade-off decision, where one resource use is given priority over another — see Examples 8 and 9.

Example 8:

Preventing Conflict Through Spatial Separation

Visual Quality – Forest Development Example:

Writing an objective that assigns a “retention” visual quality objective to a timbered location that also has high scenic values would reconcile a visual landscape management / timber harvesting conflict in favour of maintaining the visual resource (see Objective 1 below). Similarly, identifying a “modification” visual quality objective to a different location that also has high scenic values would assign a timber harvesting priority to that portion of the land base — the two competing uses are spatially separated (see Objective 2 below).

Objective 1 Manage scenic area B for a visual quality objective of “retention,” as viewed from the Grill Pass trail and Highway 3 between Black Creek and Mosely Creek, as shown on map 3.

Objective 2 Manage the south facing slopes of Greerson Ridge for a visual quality objective of “modification” as viewed from the Merryweather forest service road (km 16 to km 24), as shown in map 4.

Example 9:

Preventing Conflict Through Temporal Separation

Risks of sedimentation and associated fish habitat damage from road building in a steep and wet location may be reduced by drafting objectives and strategies that limit road building to dry periods of the year.

<i>Objective</i>	<i>Strategy</i>
<i>Minimize seasonal reductions in water quality in critical fish bearing streams, as shown in map 7.</i>	<i>Road construction in areas adjacent to fish bearing streams, as shown in map 7, is restricted from November 1 to April 30 each year.</i>

Minimize Resource Conflicts — by limiting or constraining an activity that may lead to a resource conflict if constraints on that activity are not specified — see Example 10.

Example 10:

Mitigating Conflict by Constraining Resource Uses

- *In the case of a community watershed-logging conflict, objectives and strategies could be written to limit logging activity to partial retention systems for the purpose of maintaining hydrological integrity.*
- *In the case of a wildlife/mineral road access conflict, the resource management plan could specify that road access into a particular area will be subject to controlled access by gated supervision.*

Rectify Resource Conflicts — by allowing a conflict or resource impact to occur, subject to measures to redress the problem through some means — see Example 11.

Example 11:

Redressing Conflict through Rehabilitation or Restoration

- *A temporary resource access road through a sensitive area could be permitted in a plan, subject to its rehabilitation by a certain time, or after resource development was completed.*
- *Logging insect-damaged old-growth stands might be permitted, provided that less mature stands of the same type are identified for recruitment into old-growth condition.*
- *To compensate for fish habitat loss from aquaculture site development, it might be possible to draft objectives and strategies that would lead to replacement of the habitat in an alternative location (i.e., no net loss).*

Objectives must be developed and written to work together to achieve an overall aim, or at least so that they do not work against each other — see Example 12.

Example 12:

Drafting Objectives that are Consistent With Each Other

Objectives

1. *“Reduce fire hazard and optimize timber productivity by salvaging trees within areas identified as moderate to severe hemlock looper kill, as shown in map 4.”*
2. *“Manage scenic area C, as shown in map 3, to meet the visual quality objective of “retention” when viewed from the Murtle Lake Road and the Yellowhead Highway between Miledge and Chappell Creeks.”*

These objectives would be inconsistent with each other if the retention VQO overlaps the area of hemlock looper treatment and if these areas are visible from the viewpoints described in Objective 2. The two objectives could be made consistent by adding to the visual quality objective that, “Visual impacts may exceed visual quality objectives within the areas identified in map 4 as having moderate to high hemlock looper damage until such time as the replacement forest has reached visual green-up.” Or, VQO consistency could be achieved by prescribing the use of a silviculture system other than clearcutting, if feasible for removing the looper infestation.

Estimating the magnitude and distribution of the consequences of draft plan objectives and strategies (e.g., through modelling and other analytical techniques) can provide an indication of the effect that resource objectives and strategies will have on each other. Where evaluation results show incompatibility between objectives, or that a particular objective will cause unacceptable impacts on another resource, then those objectives need to be revised so that the plan is integrated and consistent.

Another way to achieve internal consistency is to ensure that resource objectives and strategies match the intent of spatial designations that the plan may have developed for communicating resource management direction (See Example 4, page 7, and Figure 1, page 6 for an explanation of land/resource designations.) Occasionally, however, it may be appropriate to identify objectives and strategies for smaller, distinct areas within a designation that differ from the designation's broader purpose. This flexibility allows for smaller areas of important values to be accommodated within the larger designation — see Example 13.

Example 13:
Recognizing Variability Within a Land Use Designation

The resource management priority within a plan's Timber Development Area (TDA) designation is intensive timber management, as characterized by:

- *even age stand management*
- *predominance of clear cut harvesting systems*
- *development of permanent road infrastructure*
- *application of close utilization standards*
- *minimum green-up periods*
- *regular application of various stand treatments to enhance timber value and rate of timber production (e.g., pruning, spacing, fertilization, commercial thinning, use of genetically improved stock)*

Plan objectives and strategies that reflect the management intent of the TDA designation would be appropriate. For example:

- *An objective might be to “Promote short- and mid-term opportunities for timber harvesting in the TDA designation, as shown on map 5.”*
- *Corresponding strategies that give some general direction on the above-listed characteristics of this plan designation would be appropriate.*

Despite the presence of the TDA designation, it would be acceptable to draft a conservation-oriented objective and strategy(ies), that diverge from the zone's general intent, provided that it was for a particular resource in a restricted location. For example:

“Protect the class A wetland habitat including a no development buffer around the wetland as shown in map 2.”

- *It would not be appropriate, however, to draft “conservation-maximizing” objectives with general or widespread application to the TDA designation. It may instead be necessary to revise the designation boundary to exclude substantial areas requiring conservation measures.*

Guideline 3 Make Sure It's Achievable

1. Technically Achievable

Resource objectives and strategies must be technically possible in terms of the direction provided and the physical reality of the targeted resources — see Example 14.

Another aspect of technical achievability is to ensure that lands and resources that are assigned a particular land or resource use have the intrinsic biophysical capability and the socio-economic suitability to sustain that use. Where land use allocations or resource use thresholds exceed inherent capability or suitability of the lands in question, then it will not be technically possible to achieve the prescribed use or level of use over the long term. Properly matching resource use demand with resource supply is fundamental to resource planning.

Also, in the case of forest resources, insects and fire can, in short order, significantly impact the ability to achieve resource objectives. Where a catastrophic event makes an existing resource plan out-of-date, there will be a need to amend the plan's objectives and strategies, unless they have been written in a manner that permits some flexibility and discretion in how they are implemented.

2. Financially Achievable

Make sure that objectives and strategies are financially realistic in terms of the staff resources and budgets that are estimated to be available to deliver the objectives and strategies. This consideration will apply primarily to process-oriented objectives and strategies that are subject to normal budget allocation decisions. Although plans can have a strong bearing on future administrative and spending priorities, they do not in themselves represent budget commitments.

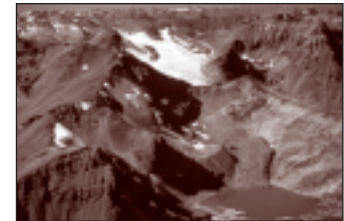
Another key aspect of financial achievability is to ensure that plan objectives and strategies are financially reasonable in terms of the costs that they may impose at the operational level — see Example 15.

Example 14:

Drafting Technically Sound Objectives and Strategies

Avoid drafting technically unrealistic resource management direction, such as objectives or strategies that:

- *identify areas too small to be economically viable*
- *propose to retain a high percentage of small patch sizes in a landscape that's natural disturbance pattern is for few small patches*
- *that promote salmon aquaculture activities in sites of high wind or wave exposure that exceed the technological capacity of the industry.*



Example 15:

Drafting Financially Sound Objectives and Strategies

- *Avoid objectives and strategies that commit to extensive resource inventories or ecological research programs that are known to be unrealistic in their scope or cost.*
- *In a situation where standard criteria for locating a road would adequately conserve forest resources, do not specify a road location that would make the construction unaffordable.*

3. Administratively Achievable

Planners never start with a blank slate when they begin to draft objectives and strategies in resource management plans. They must work within the reality of numerous former land and resource use decisions that will invariably influence the plan's direction. The land base may be subject to existing statutory designations; or, various resource tenures may have been issued over the land — see Example 16.

While a plan may influence the future management on lands that are covered by existing designations or tenures, the reality is that existing commitments strongly influence the content of plans. In many cases, it would be inappropriate to draft objectives and strategies that directly oppose the intent of past major land or resource use decisions. There are, of course, exceptions to this, such as where protected area decisions resulting from a strategic land use planning process revise past land allocation decisions. Where changes to existing allocation patterns are being proposed, their reasons should be clearly explained.

Example 16:

Considering Existing Major Land Use Commitments

Objectives and strategies that promote intensive timber management in a Wildlife Management Area are not likely to be achievable given the conflicting legal priority that has been previously established over the land, and also due to the administrative reality that the Ministry of Water, Land and Air Protection is responsible for approving resource activities in Wildlife Management Areas.

Chapter 3 A Place for Everything — Everything in Its Place

The three guidelines described in this Chapter advise planners on the appropriate use of the tools, including objectives and strategies, that are available for expressing resource management direction in plans (see Chapter 1 — Box 3, page 2). Each of the tools plays an important role in communicating resource management intent. Mixing the tools together, or skipping some, can lead to confusing plan content. A hierarchy of direction should be recognizable within any resource management plan, moving from general (e.g., goals and/or objectives) to specific (e.g., strategies and indicators).

This Chapter's guidelines stress the importance of:

- defining and analyzing issues that the plan must address
- ensuring that the plan distinguishes between goals, objectives and strategies when developing resource management direction
- including supplemental narrative information to describe the future desired condition for resource values where this type of description would help to convey a clear sense of what the plan is striving to achieve.

Example 17 shows the logical flow of management direction that should be generally evident within a resource plan, or that should at least have been considered in the development of the plan. The flow begins with a description of a particular resource issue→and then to declaration of a plan goal for responding to the issue→to identification of objectives that are stepping stones to achieving the goal→to development of strategies for achieving the objective→to identification of indicators that are used to measure progress towards the objectives.



Example 17:
Flow of Resource Management Direction Within a Plan

<i>Issue→</i>	<i>Goal→</i>	<i>Objective→</i>	<i>Strategy→</i>	<i>Indicator</i>
Air Quality				
<i>Periodic/seasonal deterioration of air quality (smoke particulate matter) in the Andrews Valley, with consequent effects on human health</i>	<i>Maintain air quality and human health</i>	<i>Meet or exceed provincial ambient air quality standards in the Andrews Valley at all times</i>	<ul style="list-style-type: none"> • phase out wood waste burning in the Andrews valley in favour of wood waste recycling • limit prescribed burning in the Andrews Valley to spring and early summer only 	<ul style="list-style-type: none"> • airborne particulates • incidence of health-related impacts
Wildlife — Moose				
<i>Declining moose population density due to habitat reductions</i>	<i>Maintain a viable moose population throughout the plan area</i>	<i>Maintain the functional integrity of critical moose winter habitat shown in map 5</i>	<ul style="list-style-type: none"> • retain at least 25% of the forested area as thermal cover within critical moose winter range • screen swamps and openings along highways, secondary roads and main forestry roads using visual buffers • maintain adequate browse species such as red osier dogwood and willow during silviculture activities (brushing and weeding, stand tending) • lower stocking standards from between 600 to 800 stems per hectare to allow for deciduous forage within conifer leading stands • retain more than 20% of deciduous trees and shrubs more than one metre in height in conifer leading stands throughout the rotation 	<ul style="list-style-type: none"> • % of mapped winter range retained in thermal cover • density of browse species • stocking ratios • moose populations

Note Respecting Targets: Measurable resource targets can also be provided to clarify resource management direction. For instance, in the above air quality example, the objective identifies provincial ambient air quality standards as the measurable target. Specific air quality parameters and associated target levels are not actually stated in the objective, but measurable targets are nonetheless provided by cross-reference to the provincial air quality standards. In the wildlife-moose example, several of the strategy statements include measurable targets. Another alternative would be to place quantifiable targets in a separate targets column.

Guideline 4 Connect with the Issues

Resource management planning is most frequently undertaken to deal with particular resource issues — be they problems or unrealized opportunities. Box 8 identifies characteristics of issues.

Generally speaking, if there are no large issues, there is no need for a plan — standard laws, policies and guidelines will normally provide an adequate basis for resource management. However, where there are issues that need addressing, clearly articulating them at an early stage in the planning process can help immensely with developing appropriate resource management direction. This is demonstrated in Example 18 where plan goals, objectives, strategies and indicators all flow directly from the issue statements.

Inaccurately identifying the issues will make it harder to arrive at the most appropriate management objectives and strategies. Getting the problem identified correctly is always the first step in resolving it. This is not always as simple as it sounds. For example, if a planning area has experienced a substantial decline in anadromous fish runs, it would be tempting to identify this alone as the issue. Looking closer, however, will reveal that declining fish runs is the symptom and that habitat and water quality decline (and also potentially over-fishing) are the causes. Together these comprise the issue. Realizing this can help with the construction of objectives and strategies.

Good “issues analysis” at the outset of the planning process allows planners to distinguish between symptoms, causes and appropriate resource management responses. Each of these can be readily translated into goals, objectives and strategies — see Example 18.

The issues that a resource plan should address may be identified through consultation initiatives (e.g., opinion surveys, workshops), previous reports or studies on the planning area, and local knowledge of planning staff, the public and First Nations.

Box 8. Characteristics of Issue Statements

Issues should:

- pertain to existing or potential resource problem, concern, or unrealized opportunity
- relate to the planning area or a portion of it
- specify both the problem (i.e., symptom) and the underlying cause
- pertain to a matter that is within the scope of the planning terms-of-reference
- pertain to a matter that can actually be addressed via a plan
- be stated in neutral terms

Issues should not:

- normally describe a problem that is not resource based (e.g., administrative problem)
- relate to a provincial, national or international problem that is better dealt with at those levels
- fail to identify the underlying cause of the problem
- describe a solution, rather than the problem
- be vague or loosely stated



Example 18:

Issue Analysis and Relationship to Goals, Objectives and Strategies

<i>Issue</i>		
<i>Symptom</i>	<i>Cause</i>	<i>Management Response</i>
<p>1. Diminished water quality in ... (locations)</p> <p style="text-align: center;">↓</p> <p>Goal: Protect water quality... (location)</p>	<ul style="list-style-type: none"> • erosion and sedimentation <p style="text-align: center;">↓</p> <p>Objective: Maintain water quality in ... (location) at ... standards.</p>	<ul style="list-style-type: none"> • limitation on logging and road building • watershed restoration <p style="text-align: center;">↓</p> <p>Strategy: Logging practices in steep and unstable locations will...; and restoration will occur in... (location)</p>
<p>2. Conflict between mechanized and non-mechanized recreation use in ... (locations)</p> <p style="text-align: center;">↓</p> <p>Goal: Maintain diverse opportunities for outdoor recreation in... (location).</p>	<ul style="list-style-type: none"> • noise impacts from mechanized recreation activities <p style="text-align: center;">↓</p> <p>Objective: Maintain non-motorized recreation access in the areas designated as... (location A). Enable motorized recreation access in the areas designated as... (location B).</p>	<ul style="list-style-type: none"> • spatial separation of mechanized and non-motorized recreation activities <p style="text-align: center;">↓</p> <p>Strategies: Establish the recreation opportunity settings for the subject lands in the province's recreation inventory. Establish an order under s. 58 of the Forest and Range Practices Act to restrict specified mechanized recreation activities in location A. LWBC will accept applications for commercial recreation consistent with the objective.</p>
<p>3. Declining forage capacity on forested permanent range, and increasing grazing pressure on grasslands</p> <p style="text-align: center;">↓</p> <p>Goal: Maintain forage capacity on forested permanent range; prevent overuse of grasslands</p>	<ul style="list-style-type: none"> • forest ingrowth due to fire suppression and disruption of natural fire regime <p style="text-align: center;">↓</p> <p>Objective: Restore natural stand structure on forested permanent range ... (location); prevent dense stocking ... (locations)</p>	<ul style="list-style-type: none"> • rejuvenate forage on forested range <p style="text-align: center;">↓</p> <p>Strategy: thin stands to keep tree density between 100 and 300 stems/ha; underburn stands at approximately 10 year intervals to maintain open structure and productive forage.</p>
<p>4. Community impacts due to declining timber supplies</p> <p style="text-align: center;">↓</p> <p>Goal: Maximize short-term timber harvesting opportunities.</p>	<ul style="list-style-type: none"> • enhanced measures to conserve other forest resources • poor utilization • low growth and yield <p style="text-align: center;">↓</p> <p>Objective: Apply intensive forestry practices in ... (location); undertake commercial thinning opportunities in ... (locations)</p>	<ul style="list-style-type: none"> • gradual lowering of harvesting rates • gradual phase-in of modern constraints • amended utilization standards in selected locations • commercial thinning • enhanced forestry initiatives <p style="text-align: center;">↓</p> <p>Strategies: Implement intensive silviculture practices including ... in ... (locations); stands in 40–60 year age class will be evaluated for commercial thinning opportunities ...</p>

As shown in Example 18, if issues are properly framed, goals and objectives will virtually write themselves, and appropriate strategies will be almost self-evident.

Guideline 5 Distinguish Between Goals, Objectives and Strategies

Preparing generally worded resource management goals, or at least being aware of them, can encourage planners to write specific and measurable resource objectives. A common weakness is to write objectives that read more like goals, and strategies that are more like objectives, and then fail to provide sufficiently prescriptive strategies. This can significantly detract from the effectiveness of a plan.



Importantly, goals can help bridge between particular resource management issues that have been identified for the planning area and the objectives and strategies that are appropriate for addressing those issues — as demonstrated in Example 18.

As described in Chapter 1, resource objectives define the “what” and strategies the “how” when it comes to expressing resource management direction. To keep the distinction clear, resource management plans should maintain a logical separation between objectives and strategies. Objectives should be drafted according to the criteria specified in this Guide, and strategies for achieving those objectives should be drafted and presented independently. However, where plan objectives will be established as legal objectives, decision makers may wish sometimes to establish direction that is more prescriptive than that normally expressed in an objective alone. To do this, the decision maker may choose to incorporate selected strategies into objectives — see Example 19.

As a general rule, mixing objectives and strategies in a statement that will become legally enforceable land use objective should be limited to situations where the strategy is:

- technically sound
- achievable
- the best way to achieve the objective
- not likely to be amended in the foreseeable future
- certainty of outcome is important.

Example 19:

Incorporating Strategy into a Resource Objective

Objective:

“Maintain representative examples of ecosystems in old-growth condition throughout each rotation.”

Strategy:

“Commercial harvesting is not permitted within the old growth management areas shown on map 3.”

More prescriptive objective that combines both the objective and the strategy:

“Maintain representative examples of ecosystems in old-growth condition throughout each rotation by prohibiting commercial harvesting within the old growth management areas identified on map 3.”

Guideline 6 Supplement Where Necessary

The convention for writing resource management plans that has emerged in British Columbia is to structure objectives and strategies in a format where resource objectives and supporting strategies are linked, side by side, in two columns in a table. This structure helps provide a clear indication of how objectives will be met, and disciplines plan writers to always include a strategy for each objective. This format, however, can limit the amount of contextual resource management information that is provided in a plan.

There may be situations where additional descriptions of desired future condition would help interpret the plan's intended meaning. Although this type of information will normally be quite general and informational, and would not be appropriate for adoption as a legal land use objective, it may help resource managers, when they are developing or approving more detailed plans, to better envision the desired outcome. Three examples of supplemental descriptions of resource management intent are shown in Example 20. These types of statements may be generated for an entire planning area, a particular class of lands or resources within a plan area, or for individual areas within an overall planning area.

It is also possible to express general management intent in time increments, for example, by decade for five decades, where the expected future conditions are described for a period beyond the life of the plan itself. These can be supplemented with graphics, illustrations or GIS-modelled renderings that show how resource conditions would be expected to look over time.



Example 20:

Supplemental Descriptions of Resource Management Intent

Recreation — Tourism Priority Area

The management intent for the Brewster Lake management unit (see map 2) is to give priority to the regionally important recreational/tourism and cultural heritage resources in the area. Scenic qualities that are visible from the lake and from Hwy. 36 corridor are to be retained. The excellent fisheries values and associated angling opportunities in Brewster Lake and nearby chain of alpine lakes are to be protected. Historical resource values at the mouth of Brewster Creek are to be protected through statutory designation under the Heritage Conservation Act. Limited opportunities for expansion of commercial recreation and tourism are appropriate. There are opportunities for a modest increase in grazing activity in the Wildhorse Lakes portion of the management area, subject to annual monitoring. There are limited opportunities for timber resource development, using alternative, low-impact silviculture systems, in locations outside of sensitive viewscales.

Timber Development Priority Areas

Areas identified for timber management emphasis (see map 7) will, in operable areas, take on the predominant appearance of intensively managed timber lands, typified by even ages of stands, relatively even spacing of trees, well developed crown ratios, and low levels of mortality. Clearcuts are common; they may borrow form, line and texture from the characteristics of the surrounding landscape, but timber management activities will generally be dominant. Intensive silviculture activities, such as brushing, spacing, fertilizing and commercial thinning will be common. Access will generally be by permanent road. Basic forest management standards specified in the Forest and Range Practices Act and other laws of common application will have effect.

Integrated Resource Management Area

The Blueberry Ridge management unit, comprising 67 000 ha, is assigned a “low” biodiversity emphasis rating. Biodiversity will be maintained primarily through the careful placement of old growth management areas (OGMAs). Wherever possible, representative areas of blue-listed plant communities will be incorporated into OGMAs. Outside of OGMAs, biodiversity connectivity will be maintained on a normal rotation through the strategic location of cut and leave areas over time.

The unit will be dominated by plant communities comprising native species in a climax condition, distributed throughout the unit. Within managed stands, wildlife tree patches will be retained and efforts will be made to mimic the structural attributes of old forests (e.g., coarse woody debris, standing dead trees, variable canopy and plant densities, and variety of size classes in all blocks).

General wildlife habitat needs will be met through the above biodiversity maintenance provisions, as well as through establishment of riparian areas. However, more particular, site-specific measures will be defined for protecting a number of species of concern in the unit (e.g., great blue heron, bald eagle, long-eared myotis, grizzly bear, mountain goat and moose). These measures will focus mainly on area-specific mitigation and integration strategies.

Visual quality will be maintained along major highway corridors by assigning these areas a visual quality rating of retention or partial retention. However, overall forest health (e.g., threat from insect infestation) will be maintained by allowing harvesting in insect damaged stands to proceed ahead of visual quality objectives. Where possible, only the affected portions of the stands will be harvested.

First Nations traditional use areas for hunting, fishing, berry picking and camping will generally be protected through the above biodiversity and wildlife habitat provisions. In addition, generous visual buffers around traditional camping sites will be established.

Chapter 4 Make it Clear, Tangible and Specific

The six guidelines in this Chapter focus on drafting objectives and strategies that are specific and worded clearly, as a basis for narrowing the possibility of conflicting interpretation of meaning. The guidelines provide advice on:

- developing resource management direction for manageable categories of resource values
- giving priority in the plan to defining physical resource management direction, as opposed to process-oriented direction
- clarifying the spatial and temporal application of objectives and strategies, and ensuring clarity about who is responsible for implementing particular objectives and strategies
- ensuring that intended resource results are measurable
- providing the amount of prescriptive resource management detail that is appropriate for the situation
- using good clear language to communicate the intended resource management direction.

Guideline 7 One Thing at a Time

Example 21:

Separate Broad Concepts into Individual Resources

Overarching concepts like “biodiversity” or “terrestrial ecosystems” or “aquatic ecosystems” should be broken down into their constituent parts. In the case of biodiversity, objectives and strategies could, at the landscape level, be organized under a “timber” or “forest” heading with separate sub-headings for:

- *old-growth retention*
- *seral stage distribution*
- *landscape connectivity*
- *stand structure*
- *species composition*
- *temporal and spatial distribution of cutblocks.*

A resource objective and its corresponding strategies should normally provide management direction for a particular resource or resource use. That direction may apply to the whole plan area, or some subset of it such as a land use category, an individual management unit or some other selected location(s) within the plan area.

Grouping management direction under very general or all-encompassing resource headings should be avoided to prevent a loss of focus. From a plan organization perspective, it is normally better to break up broad concepts into their component parts, while still appreciating that the parts are inter-related — see Example 21.

Preparing a list of well-defined issues at an early stage in the planning process (see Guideline 4, page 23, “Connect with the Issues”) can help define the particular resources or resource uses for which management objectives and strategies are needed.



Guideline 8 Focus Mainly on the Physical

From an operational perspective, the most valuable resource plans are those that define future on-the-ground resource management expectations. Some plans, however, tend to be dominated by objectives and strategies that direct future process, such as what and how administrative or decision-making activities will be carried out — see Example 22(a) below. While objectives and strategies like this are generally easier to write — because they defer difficult resource trade-off and integration decisions to a later time or process — it is important to try to extract from every planning initiative as much direction on physical resource management as is possible and reasonable. Compare Example 22(a) with 22(b) that provides increased detail in the strategies, in an

Example 22:

Procedural Versus Substantive Resource Management Direction

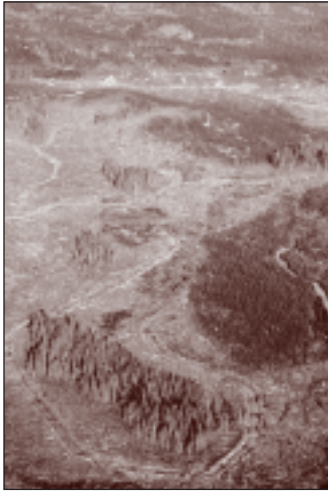
Objectives	Strategies
<i>(a) Example of Heavily Process-oriented Direction</i>	
Maintain high capability ungulate winter habitat.	<ul style="list-style-type: none"> • inventory and map high capability ungulate winter range areas. • incorporate methods for maintaining high capability ungulate winter range (e.g., thermal and escape cover, sustainability of forage and browse) into operational plans. • plan and develop new access routes to avoid direct disturbance within, or in close proximity to, high capability ungulate winter range.
<i>(b) Example of More Substantive Resource Management Direction</i>	
Protect the existing quality of the high capability ungulate winter range shown in map 5.	<ul style="list-style-type: none"> • retain mature forest cover over the managed forest land base at the percentage levels and distributions shown in Table 1. • where reasonable alternatives are available, avoid the placement of new access routes in locations adjacent to key ungulate habitat attributes within ungulate winter range areas, as shown on map 5. • apply ungulate forage and habitat enhancement measures (e.g., prescribed burns) according to the priorities established in annual MWLAP ungulate habitat management plans. • enhance the quality of ungulate winter habitat inventories in those areas recognized to have inventory deficiencies, as shown in map 6.

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effort to influence physical resource management without defining a lot of future process.

If objectives such as the one shown in Example 22(a) were to be established as legal objectives, operational planners would be legally obligated when preparing operational plans to develop prescriptions that conserve ungulate winter habitat. The broad intent is clear, but no direction is supplied on the whereabouts of the subject habitat; and the strategies do not clarify what types of management practices should be followed to conserve the habitat. The statements generally assume that future processes will provide the substantive resource management direction. This could place both the operational planner and the approving official in a situation where they would be required to observe the stated legal objective, but would have very little guidance on how to implement it.

Certainly, scale limitations can sometimes constrain the amount of detailed resource management direction that can be provided in plans (as well as other factors — see Guideline 11, page 38, “Provide Detail — As Appropriate”). But, even using reconnaissance-level inventory information, more substantive direction such as that shown in Example 22(b) would be beneficial.



This is not to say that resource management plans should completely avoid writing objectives and strategies that define future process. Plans may, as appropriate, need to give direction on aspects such as filling information gaps, institutional arrangements for future decision making, and future planning priorities. See Example 30, page 35, as an indication of where process-oriented direction might be relevant. Where possible, however, process-related direction should be contained in a section of the plan report that deals with plan implementation (i.e., where direction is appropriately provided on future planning needs, public involvement mechanisms, research and inventory initiatives, or the creation of oversight committees to advise on and coordinate plan implementation). Resource objectives and strategies should focus on defining the spatial application of physical resource management actions, not administrative processes.

Finally, it is not necessary to provide direction on what would be considered routine operating procedures that are already established through approved policy and procedures or are matters of operating convention (e.g., referral process), or direction on what would be expected as standard professional conduct of resource managers (e.g., exercising due diligence in approving an engineering project).

Guideline 9 Identify Where, When and Who

1. Location of Objectives and Strategies

By definition, resource management planning is spatial; therefore, it is essential to identify “where” resource management prescriptions are intended to apply. The “where” could be an extensive geographic area or a particular site — see Box 9.

Maps are the preferred method of communicating the spatial application of objectives and strategies, but narrative description of geographic location can potentially also be used — see Example 23.

Ideally, the spatial application of objectives and strategies should correspond to boundaries that are visible on the ground or are generally accepted (e.g., roads, rivers, heights of land, forest district, wildlife management unit).

Subdividing the plan area into ‘management units’ and identifying objectives and strategies that apply within the units can also be an effective way to communicate resource management direction. Depending on the nature of the objectives and strategies in the various management units, the units can be assigned a ‘management emphasis’ label to communicate the ‘flavour’ of existing values, the level of intended development, and the nature and extent of land use opportunities in the units — see Example 24.

Box 9. Spatial Application of Resource Objectives and Strategies

Depending on the scope and scale of the planning process, objectives and strategies may apply to:

- an entire plan area — for example, a watershed or landscape unit
- a zoning designation within the planning area
- an administrative unit
- an individual management area or unit
- a particular location or class of locations, such as a habitat type
- a site or resource feature

Example 23:

Options for Expressing the Spatial Applications of Objectives

- *An objective might say, “Protect deer and elk winter range on the south-facing slopes of Steward Ridge.” This may be acceptable if it is clear where the south-facing slopes of Steward Ridge start and end. Obviously, cross-referencing a map that shows the boundaries of that area will provide a much clearer indication of where deer and elk winter range is to be protected.*
- *The least desirable option for communicating the spatial application of resource management objectives is to say, for example, that an objective applies to “key” fish habitat, “productive” agricultural land, or “critical” grizzly habitat. Unless these terms are defined in some way that allows resource managers to spatially locate the resources, the intent will be unclear.*

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Example 24:

Using Management Units to Express Spatial Application

Management Unit 3 – Gracie Harbour

Tenured Use Recommendations

O	shellfish beach aquaculture	O	log booming ground
O	shellfish deepwater aquaculture	O	log handling facilities
O	finfish aquaculture	X	helicopter log drops
O	marine plant aquaculture	√	private residential moorage
X	marine residential	√	light docks, wharves and facilities
X	floating lodges and base camps	√	heavy docks, wharves and facilities
√	boat launch	√	marine telecommunications and utilities
√	commercial recreation guideing	√	conservation

Legend

√ Acceptable – The use is appropriate. Tenure applications for foreshore or water lots should be accepted for processing and evaluation. Acceptance of an application does not guarantee that a tenure will be approved.

O Conditionally Acceptable – The use may be appropriate. New land tenure applications are accepted for evaluation only if they meet the relevant management provisions in the Plan.

X Not Acceptable – The use is inappropriate. Applications for land tenure are not accepted.

In this example, the location of the management unit would be mapped. For each management unit, the Tenured Use Recommendations (see above) would be based on an analysis to identify areas of ecological significance, First Nations use, current uses and activities, and issues. The Tenured Use Recommendations would effectively constitute land use objectives for the management unit. Strategies for processing tenures for the ‘acceptable’ and ‘conditionally acceptable’ uses would also be defined for the unit. The unit could be assigned a management emphasis of “Community” to indicate that the unit comprises a concentration of existing and permitted multiple uses/activities that are associated with adjacent floating or upland settlement.

Where map references are contained in plan objectives that will be implemented by being adopted as legal objectives, it is particularly important to ensure that the boundaries shown on the map are portrayed accurately. If they are not, and there is a need to subsequently alter the boundaries, then the full legal procedure for amending legal objectives must be followed.

The scale of maps that are cross-referenced is another consideration. Scale should generally correspond to the level of prescriptive detail that is expressed in the objective and strategy. Or, if serious legal or financial implications would result from misinterpretation of the intended spatial extent of an objective or strategy, then the map scale must allow for a clear representation of the boundaries — see Example 25.

Example 25:

Using Appropriate Map Scale

- If direction is being provided on a complex of resources in a relatively small area, then the scale of the maps that are cross-referenced in objectives or strategies should be large enough to clearly communicate the intended resource relationships.
- If areas are being defined in a plan that will prevent or substantially constrain future commercial activities in those areas (e.g., marine conservation areas, old growth management areas), then the maps showing those locations should not be drawn at, for example, 1:1 000 000 scale — boundaries should probably be portrayed at 1:20 000 scale or larger.

2. Timing of Objectives and Strategies

Most objectives and strategies in resource plans are silent on when the management direction is expected to occur. This is because it is normally expected that the management direction will apply throughout the life of the plan. There may be situations, however, when it is appropriate for an objective or strategy to apply only during certain timeframes — see Example 26.

Example 26:

Time-specific Resource Management Direction

<i>Objective</i>	<i>Strategies</i>
<i>Mountain Caribou</i> Minimize disruption of Mountain Caribou in and adjacent to important caribou habitat features, as shown in map 5.	<p><i>In the Caribou Calving Areas shown on map 5, the following activities are prohibited between May 15 to July 1 each year unless MWLAP verifies an absence of caribou use in these areas:</i></p> <ul style="list-style-type: none"> • snowmobiling • heli-skiing • non-emergency use of emergency shelters, and • flying aircraft (including helicopters) less than 2000 metres above the ground. <p><i>In the early Winter Caribou Habitat Areas shown on map 5, the following activities are prohibited between November 1 to January 15 each year unless MWLAP verifies an absence of caribou use in these areas:</i></p> <ul style="list-style-type: none"> • snowmobiling • heli-skiing, and • non-emergency use of emergency shelters.

It may also be appropriate to draft an objective to take effect following a specified event or activity, potentially related to the imminent collection of additional inventory. However, this should not be a common occurrence, given that planning should be supported by the advance collection of appropriate inventories — see Example 27.

Example 27:

Resource Objective that Takes Effect Following a Specified Event

<i>Objective</i>	<i>Strategies</i>
<i>Maintain important grizzly habitat features in areas of known high density of grizzly bears, as shown in map 6. This objective will come into effect following completion of an inventory of grizzly bear habitat attributes for the area of high known grizzly density, as shown in map 6.</i>	<p><i>Retain a 100 metre no development buffer around the following key grizzly bear habitat attributes (as determined through future inventory):</i></p> <ul style="list-style-type: none"> • denning sites • concentrated feeding/foraging sites • primary travel corridors (e.g., avalanche chutes) • breeding areas

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A plan might also stipulate that an objective is to cease to have effect following a specified event — see Example 28.

Example 28:

Resource Objective that Expires Following a Specified Event

In a range management situation where cattle grazing is occurring in an area in need of rehabilitation, it might be appropriate to allow grazing to continue on a temporary basis, pending the anticipated opening up of new, nearby range areas, following scheduled harvesting.

Objective	Strategies
<i>Rehabilitate forage resources in the North Pipers Ridge area, as shown on map 2.</i>	<ul style="list-style-type: none">• <i>Allow cattle grazing in the North Pipers Ridge area until range opportunities in the South Pipers Ridge area (see map 2) are approved by the MOF district manager.</i>• <i>Develop a rotational grazing system that encourages restoration of the desired plant community.</i>

3. Roles and Responsibilities

Plan writers should clarify roles and responsibilities for carrying out particular objectives and strategies where it would not otherwise be clear who has “ownership.” In most cases, this will relate to objectives and strategies that involve agencies’ decision-making or program management responsibilities. In some situations it may be desirable to identify certain qualifications required of individuals that have a role in delivering objectives and strategies — see Example 29.

Example 29:

Specifying a Professional Qualification Requirement

Objective	Strategies
<i>In the Agricultural Development Areas (ADAs) shown on map 3, conduct timber harvesting in a manner that facilitates subsequent agricultural development.</i>	<ul style="list-style-type: none">• <i>Prior to issuing timber harvesting opportunities in the ADAs shown on map 3, BC Timber Sales will develop a timber harvesting plan.</i>• <i>The plan will identify operational strategies for balancing cost-effective timber harvesting with the needs of subsequent agricultural development (e.g., wind break locations, access considerations, adequate stump height to facilitate land clearing)</i>• <i>Timber harvesting plans within ADAs must be vetted by a registered professional agrologist.</i>

The need to “name names” may be most relevant in strategic land use planning exercises where, given the relatively broad scope and scale of planning, there is a greater tendency to identify administratively oriented objectives and strategies. The need to clarify responsibilities is also likely to occur where jurisdictional arrangements are complex or potentially overlapping — see Example 30. Or, it may be important to identify groups or organizations that are created to fulfill a particular resource management role. In most cases, however, particulars about agency responsibilities for plan implementation (e.g., future planning, monitoring, research, inventory) will be contained in a separate section of the plan that deals with implementation details.

Example 30:

Identifying Roles and Responsibilities

In the case of coastal zone management, where institutional arrangements are typically complex, the following objective and strategy respecting a First Nations role in resource management decisions is conceivable.

Objective	Strategies
Salmon Aquaculture <i>Provide opportunities for salmon aquaculture in the coastal areas shown in map 1, subject to consultation with local First Nations and local government.</i>	<ul style="list-style-type: none">• <i>Salmon aquaculture tenure applications are accepted only in the areas shown on map 1.</i>• <i>Land and Water BC Inc. will refer all applications for salmon aquaculture tenures to the Regional Land Use Advisory Committee that has been established as an Interim Measure initiative.</i>• <i>Land and Water BC Inc. will base its aquaculture tenuring decisions on the recommendations of the Advisory Committee.</i>

Guideline 10 Make It Measurable

“If you can’t measure it you can’t manage it.” This adage refers to the need to develop plans that can be readily understood and implemented because the intended results are clearly evident. There are several ways that measurable resource management direction can be provided:

- 1.** Write resource objectives to include a threshold or target (i.e., a ‘metric’) within the objective itself,
- 2.** Leave the metric out of the objective, but include it in the companion resource strategy, or
- 3.** Leave the metric out of both the objective and strategy, but identify an indicator and a quantifiable threshold (or target) that will be used for plan monitoring purposes.

Examples of these options are shown in Example 31.

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Example 31:

Options for Expressing Measurable Resource Management Direction

Option 1. Include a Resource Target in the Objective

- Maintain livestock grazing levels at no more than 500 animal unit months per annum for guide-outfitter and backcountry tourism operators in the Jeffrey and Greystone watersheds – see map 8.
- Retain a 50 metre minimum width of forest cover adjacent to the perimeter of avalanche track complexes in the grizzly bear habitat areas shown in map D-2.
- Maintain a viable trapping industry in the plan area by licensing up to 24 registered traplines.

Option 2. Include a Resource Target in the Associated Strategy

Objective	Strategy
In the Timber Management Areas shown on map 2, maintain, at all times, a seral stage distribution that is representative of the natural range of variability for the ecosystem types within those areas.	Meet or exceed the levels of old and mature forests, by biogeoclimatic sub-unit within each landscape unit, specified in Table 6. (NB. Table 6 would identify percentage targets for different seral stages in each biogeoclimatic sub-unit within each landscape unit.)

Option 3. Express a Resource Target as Indicators and Thresholds that will be Monitored

Objective	Strategy	Indicators and Thresholds
In the Roberts Ridge Management Unit (see map C-4), maintain backcountry tourism and recreation attributes and the existing quality of the outdoor experience by implementing a “limits of acceptable change” monitoring process that measures and responds to trends in amenity indicators.	Bi-annually monitor indicators of tourism/recreation quality under a partnership arrangement between the local outdoor club, the local backcountry tourism operators committee, and the MSRM region. If indicator trends experience a decline below the defined thresholds, the partners will convene a process to identify corrective measures.	Encounters with other parties: 80% probability of no encounters per day with other parties. Noise disturbance: 70% probability of not hearing motor noise per day. Angling success: 50% probability of achieving at least some level of angling success (per outing) in alpine lakes. Visitor satisfaction: 80% of visitors/clients report (seasonal average) the quality of their outdoor experience to be ‘good’ to ‘excellent.’

Some objectives and strategies will not lend themselves to incorporating a resource threshold or target, but are nonetheless measurable, simply by assessing whether or not an activity or event has occurred — see Example 32.

Example 32:

Measurability without Identifying a Target or Threshold

Objective

“Minimize erosion and sedimentation impacts on aquatic habitats by prohibiting road construction in areas classed as having Extreme Terrain Hazard Risk (see map 5).”

In this example, no metric is included, but the objective is readily measurable – roads have either been built in the prohibited areas as mapped, or they have not.

When plan objectives are being developed that are expected to be adopted as legally enforceable objectives, it is especially important to ensure that the thresholds or targets expressed in the objective are achievable. Example 33 shows a situation where including a target in an objective would be problematic.

Example 33:

Problems Encountered by Including Resource Targets...in Objectives

The following objectives would be inappropriate, particularly if they were established as legal objectives which creates a requirement for the objective to be met in subsequent operational plans.

Objective: *“Maintain a minimum elk population of 75 mature animals in the landscape unit.”*

- *There are many factors outside of the plan’s control (e.g., disease, poaching, climate) that could make the objective unattainable. An objective pertaining to the conservation of elk habitat would be more appropriate.*

Objective: *“Harvest an average of 10 000 cubic metres of timber annually from the south-east portion of the landscape unit, as shown in map 4.”*

- *Market conditions or other business reasons may prevent achievement of the objective. Identifying absolute timber harvesting levels should be avoided. Rate of harvest determinations for management units are developed on the basis of a wide range of factors, one of which is the direction in resource management plans that affects the availability of timber for harvesting.*

Where it is considered appropriate to include a specific resource output value in an objective, but there is some uncertainty about the appropriate figure to include, it may be a good idea to provide a range of values — see Example 34.

Example 34:

Providing a Range of Values

“Provide adequate forage for 75–100 animal unit months per annum of grazing for domestic livestock evenly distributed over the Upper Ashburton Management Unit.”

Guideline 11 Provide Detail — As Appropriate



One of the biggest challenges in drafting resource management plans is knowing how much directive detail to include — how much of the “what,” “how,” “where,” “when” and “who” to specify. On one hand, certainty of outcome is important, suggesting that plans should be as detailed and prescriptive as possible. On the other, there are practical limitations (e.g., map scale, time, cost constraints) that affect how much detail can realistically be provided.

And, importantly, there can be downsides to creating detailed plan prescriptions that may unreasonably limit future management flexibility. This can be an important consideration when writing legal objectives for British Columbia forest resources, given the Province’s move to a “results-based” framework for regulating forest practices — where government is responsible for identifying forest resource objectives and forest licensees are required to identify intended results and strategies — for further explanation see ‘Forest Resource Planning and Practices in British Columbia,’ in Appendix 1.

Box 10. Factors that Influence a Plan’s Level of Detail

- Planning level and scale
- Imminence of a future resource planning process
- Information availability and quality
- Inherent nature of a resource or resource use
- Degree and complexity of resource conflicts
- Relative importance of a predictable outcome
- Availability of other resource plans and guidelines

There is no magic formula for determining how much detail a resource plan should contain — each situation will be different, depending on the unique circumstances of the planning area. Planners should consider the factors shown in Box 10 when exercising judgement on the level of detail that will be incorporated into resource objectives and strategies.

Each of the factors in Box 10 is considered below briefly.

1. Planning Level and Scale

Generally speaking, the degree of specificity in objectives and strategies should be commensurate with the level in the planning hierarchy. Large areas (i.e., regions, sub-regions) are normally planned using small-scale map information (e.g., 1:250 000 working scale; 1:500 000 presentation scale). Such maps are typically based on “extensive” resource inventories, derived from reconnaissance-level satellite or aerial photography, compared to “intensive” resource inventories that originate from more detailed field surveys — see Box 11. These considerations are important determinants in how much detail is appropriate. Invariably, strategic land use plan objectives and strategies for large regions or sub-regions will be

less detailed than those in watershed-level plans, where the land area is smaller and the planning scale larger, and technical information is based on intensive resource inventories.

Box 11. Level of Detail in Relation to Plan Area Size and Map Scale

small scale = large area = extensive inventories = less plan detail
large scale = small area = intensive inventories = more plan detail

2. Imminence of a Future Resource Planning Process

The result of any planning process should be capable of standing on its own, without an expectation that there will be a subsequent plan to clarify and refine resource management direction. Therefore, when drafting objectives and strategies, the goal should be to develop as much substantive resource management detail as is possible, but commensurate with the planning level and scale, and subject to the other considerations identified in this guideline. If, however, it is known for sure that another planning process will soon follow to deal with issues at a finer level of resolution, then it may be appropriate to defer certain issues to the coming process.

3. Information Availability and Quality

Aside from limitations on plan specificity that may be dictated by planning level and associated map scale, it is not appropriate to draft overly detailed objectives and strategies where there are significant information gaps. This might mean:

- “holes” in inventory data (e.g., geographic areas where inventories have not been collected or have been collected at only a broad, reconnaissance level that limits their utility for detailed planning)
- dated inventory data (e.g., where data doesn’t comply with modern inventory standards and is thus considered unreliable)
- major uncertainties with respect to a particular resource (e.g., insufficient research to confidently know how a resource will respond to a particular management action), or
- gaps that are a reflection of having only a limited amount of time or budget to perform resource analysis (e.g., raw, descriptive data may not have been interpreted into forms that are more “user-friendly” such as mapped capability or suitability information for particular resources or resource uses).



Where there are major information gaps, planners often write strategies to fill the gaps (e.g., through future inventory or research initiatives). Or, it might be appropriate to write an objective and strategy that is conditional upon the gap being filled. Nonetheless, objectives and strategies should normally be developed on the basis of “best available” information.

4. Inherent Nature of a Resource or Resource Use

Related to information availability and quality (see above), there may be situations where the very nature of a resource or resource use will limit the amount of prescriptive direction that can be reasonably provided. For example, under-surface resources such as minerals and petroleum and natural gas are not exposed where they are easily measured and mapped — inventory information on under-surface resource quality and quantity is often limited to broad mineral resource potential maps, modelled on

MAKE IT CLEAR, TANGIBLE AND SPECIFIC

the known distribution of geological formations and deposits, and past exploration and development activity — see Example 35.

The same situation can also apply to resource uses that are more location-specific in nature. For example, attempting to identify site-specific opportunities for commercial backcountry recreation in a land use planning process could be difficult because assessing the business feasibility of particular operations is not normally part of a land use planning exercise. The information base for this resource is normally limited to general tourism or recreation potential or opportunity maps that lend themselves to land use capability and suitability assessment, but not business feasibility assessment. The nature of this resource use, therefore, can affect the level of detail that can be reasonably provided in a plan's objectives and strategies.

Example 35:

Amount of Detail May Be Limited by the Nature of a Resource or Resource Use (Mineral Example)

- *Providing access to the largest possible land base for ongoing mineral exploration and development is important to the mining sector. This is because complete information on mineral quality and quantity is unavailable — mineral resource inventories rely on information about known deposits, geology and past exploration. Future discovery areas may be expressed as mineral potential, based on modelling assumptions that can never be fully verified.*
- *This reality often limits the level of prescriptive, spatial specificity that can be provided for these resources. Objectives and strategies for mineral resources are commonly limited to more general management direction that applies to the whole planning area, and they often take on a “guidelines-like” appearance to enable future flexibility.*

Objective: *“Provide opportunities for mineral resource exploration and development in all non-protected areas in the planning area, subject to the ‘mineral exploration and development access guidelines’ described in part 3.7.1 of this plan.”*

To illustrate how the “mineral exploration and development access guidelines” in part 3.7.1 relate to the objective, refer to the following excerpts:

- *air access is encouraged during the preliminary stages of remote mineral exploration*
- *consider alternatives to roaded access during both preliminary and advanced exploration in particular areas, such as certain classes or locations of critical wildlife habitat areas for red- or blue-listed species*
- *apply best management practices for maintaining the visual quality of amenity resources, and screening sensitive habitat resources*
- *limitations on the seasonal use of mining access roads where technically appropriate to avoid impacts on environmental resources, such as areas important during caribou calving*
- *deactivate or close and stabilize mining resource access roads after completing resource development.*

5. Degree and Complexity of Resource Conflicts

Guideline 4, page 23, “Connect with the Issues” reminds us that the job of resource management plans is to address issues. These are often a result of conflicting resource uses. The main tool available to planners to address conflict is to write objectives and strategies that separate incompatible uses by designating one use a priority over others

(i.e., to prevent conflict) or identify ways to integrate uses with each other (i.e., mitigate conflict). See Guideline 2, page 16, “Be Internally Consistent.”

Therefore, where there are significant conflicts between competing resources and resource uses, objectives and strategies need to provide clear direction on what resource(s) will receive priority, or how resource uses will be integrated with each other to mitigate conflicts. If resource trade-off and integration direction is not clearly described in objectives and strategies, the plan will not have done its job. The likely result will be that the resources in question will be degraded over time; or, resource managers will be faced later with a difficult trade-off/integration decision without having the advantage of a wider planning context to work within.

The wording employed in objectives and strategies will communicate trade-off and integration direction — see Example 36.

6. Relative Importance of a Predictable Outcome

More specific and detailed resource management direction should be incorporated into objectives and strategies where certainty of outcome is important to address a critical resource management issue, or where only one approach will produce the desired results — see Example 37.

Similarly, a relatively high level of management detail is needed to address issues of significant public concern. This may occur where public opinion has coalesced around a particular issue or location and it is important to the participants that their agreement on the solution is reflected in objectives and strategies that minimize the potential for future misinterpretations.

Example 36:

Detail is Needed to Clarify Resource Trade-offs and Management Priorities

- *The objective, “Protect the scenic quality of Juniper Ridge by managing areas visible from Seton Lake and the Seton Lake access road, as shown in map 4, for a visual quality objective of retention,” clearly indicates that recreation — tourism has been assigned a priority in this area over timber harvesting. If increased integration between visual management and timber harvesting was intended, the plan could identify a ‘partial retention’ visual quality objective, or it could provide more spatial specificity respecting where retention and modification visual quality objectives would occur in the area.*
- *To choose another example, plan prescriptions on the percentage of old growth management areas, patch size requirements; or the attributes of stand structure that are stated in objectives and strategies will all communicate the extent to which the goal of biodiversity maintenance is to occur in a given landscape unit, relative to timber harvesting.*

Example 37:

Detail Is Needed Where Certainty of Outcome is Important

Objectives and strategies should be more prescriptive and detailed where they concern a vitally important resource value such as a red- or blue-listed species, or a nationally designated heritage trail, or where there will be significant socio-economic consequences, such as a business closure, if particular management actions are not followed, or certain impacts are exceeded.

7. Availability of Other Resource Plans and Guidelines

There may be situations where an existing plan (e.g., a prior government-approved plan or a licensee-led Sustainable Forest Management Plan), or a set of resource management guidelines already supplies appropriate detailed management direction for all or part of a plan area. Where this occurs, it would not normally be necessary or desirable to repeat that detail in the plan. Instead, the appropriate provisions of the existing local plan or guidelines could be cross-referenced in the objectives and strategies of the plan being developed — see Example 38.

Example 38:

Providing a Cross-reference to Existing Resource Management Direction

In this example, the Province’s approved guidelines for addressing impacts are referenced in the strategy. This makes more sense that repeating the guidelines in the land use plan.

Objective: “Prevent adverse impacts from commercial backcountry recreation use on the areas frequented by mountain goats, as shown in map 4.”

Strategy: “Apply the Province’s impact mitigation guidelines for mountain goats when processing and adjudicating Crown land tenures for commercial backcountry recreation. (See “Interim Wildlife Guidelines for Commercial Backcountry Recreation in British Columbia,” Chapter 4, Mammals — available at ...).”



Guideline 12 Say What You Mean

1. Action Verbs

All resource objectives and most strategies contain a verb indicating what is to happen to the resource in question (e.g., To “protect,” “increase,” “retain,” “conserve”).

Clear meaning of the verbs used in the objectives is always important. Concerns may arise where a verb implies a particular management direction, but the expected outcome is ambiguous.

The planner’s challenge is to try narrow or eliminate subjectivity and the associated potential for disagreements about meaning. There are several ways to increase the precision of the meaning of verbs. One is to define terms in a plan glossary, using either dictionary definitions or definitions that are agreed upon by the planning participants. It is not a good idea, however, to invent new definitions for common words that have an accepted meaning. Appendix 4 provides common definitions of verbs that are frequently used in resource management objectives and strategies.

Another way to clarify intent of verbs in resource objectives is to incorporate some wording in the objective that modifies or enhances the meaning of the verb — see Example 39.

Example 39:

Clarifying Verb Meaning with Modifying Language

Objective: “Maintain water quality in the Leah Creek watershed within the watershed’s natural range of variability, as indicated in Table 2.”

- *Providing information in a table on the acceptable range of water quality conditions clarifies both the verb “maintain” and the term “natural variability.” This is much better wording than an objective that simply says, “Maintain water quality in the Leah Creek Watershed.”*

Objective: “Maintain air quality in the planning area that meets or exceeds provincial ambient air quality criteria.”

- *This objective is much more meaningful than a general objective that said, “Maintain high air quality in the region.” This objective would assume, however, that relevant ambient air quality criteria are in place, and that it is possible to achieve those criteria in the planning area.*

Certain verbs, such as “recognize,” “acknowledge,” “address,” “consider,” “manage,” do little to communicate a clear management direction or establish a management obligation. Verbs like this should be avoided unless accompanied by words that help clarify the intended meaning. For example, the objective to, “Manage the Hope Creek recreation site for a semi-primitive recreation experience” is an effective objective because it communicates the measurable standard at which management is to occur. Another way of saying this would be, “Provide a semi-primitive recreation experience at the Hope Creek recreation site.”

2. Mandatory versus Discretionary Wording

The choice of words in resource objectives and strategies can help communicate the strength of management commitment — see Example 40.

If the terms shown in Example 40 are used in drafting objectives or strategies, it’s a good idea to clarify them in a definitions or interpretation section in the planning report. If they are not defined, avoid using terms like “should,” “may” and “whenever possible” — they leave too much room for conflicting interpretation.

Example 40:

Words that Communicate Degree of Commitment

- *Using the word “will” or “shall” normally indicates that the action is required as a standard practice, whereas the word “should” indicates that the action is required unless justifiable reason exists for not taking the action. Exceptions to “should” would be expected to be infrequent.*
- *Using the term “wherever possible” or “wherever practicable” would indicate that the approach is not always feasible or practical in every situation — the approach is encouraged, but not absolutely required.*
- *Use of the word “may” allows for activities that may or may not be appropriate, depending on circumstances, thus providing a relatively high degree of discretion to resource managers.*

3. Good Drafting Habits

The way that objectives and strategies are constructed and appropriate word selection can significantly enhance plan clarity.

Jargon words or technical terms should be avoided or defined in a glossary. Descriptors that are inherently subjective (e.g., “significant,” “numerous,” “frequently”) should be avoided or enhanced with qualifying wording or definitions. If quantities or distances are included, identify specific values instead of using vague terms like “near” or “some.” Avoid value-laden words, such as “pristine” or “unsightly”—these are words of judgment and might create an impression of bias. Avoid wording that might be interpreted as blaming; for example, rather than saying, “Prevent water quality degradation in the Douglas River due to domestic animals,” say “Protect water quality in the Douglas River by controlling access of livestock to the river.”



A number of other principles of clear writing that can make a plan’s provisions clearer include:

- use *active voice* instead of passive voice

For example, instead of saying, “water quality will be protected by...,” say “protect water quality by...”

- use the *present tense*

For example, say, “Limit timber harvesting to...”; don’t say, “Timber harvesting *will be* limited to...” However, it would be OK to say, “If timber harvesting is required to control insects, it will be limited to...” because this communicates potential management direction in the future.

- *write positively, where possible*

For example, say, “Protect the scenic quality of...,” don’t say, “Prevent timber harvesting from impacting the scenic quality of...”

Sometimes, however, a point is made more clearly if it is framed negatively. For example “Minimize disruption to mountain goats in critical winter habitat by...”

- *avoid wordiness*

For example, instead of saying, “Cultural and heritage resource values in the vicinity of Cooper Mountain (see map 3) will be protected in order to maintain the integrity of those values,” say, “Protect the cultural and heritage resources shown in map 3.”

- *avoid repeating ideas* in different words
For example, say, “Protect the critical caribou habitat...,” instead of “Protect the regionally significant and critical caribou habitat...”
- use *symbols, abbreviations and measurement units* in a consistent manner throughout the plan document
- use *good sentence structure* (e.g., use parallel structure, no misplaced or dangling modifiers, ensure subject-verb agreement, avoid non-sentences and run-on sentences, use proper punctuation.)

Involving an independent editor at an appropriate stage of plan preparation is always a good idea to ensure that the plan effectively communicates its management intent beyond the group responsible for developing the plan.



Glossary

- Adaptive resource management** – an approach to managing uncertainty that emphasizes learning by trial. Management policies, practices and plans are adopted, based on best available information, and monitored to assess effects. Adaptations to those policies and practices are made periodically, on the basis of research and monitoring information to incorporate “lessons learned.”
- Biodiversity** – 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** – species classified by the Conservation Data Centre as sensitive or vulnerable and therefore “at risk,” but not yet endangered or threatened.
- Community watershed** – a drainage basin that is managed to provide a domestic water supply to a particular community of users. Such areas may be formally designated under the Forest Planning and Practices Regulation, as a basis for the subsequent development of water management objectives.
- Compatibility matrix** – a table that indicates the relative emphasis that will be given to various land use activities within a plan’s zoning designations.
- Connectivity** – a qualitative term describing the degree to which ecosystems are linked to one another to form an interconnected network.
- Consistency** – where resource objectives do not materially conflict with other objectives that have been established (either in a policy-based land use plan, or legally by Order).
- Descriptions of management intent** – supplemental narrative explanations of the desired future condition of land/resources in a particular area.
- Forest resources** – forest values for which forest management practices may be regulated in order to achieve sustainable forest management (e.g., recreation, wildlife, fish, water, visual quality).
- Forest stewardship plan** – an operational plan that guides on-the-ground forest management in the area covered by the plan. Process and content requirements for developing forest stewardship plans are set out in the *Forest and Range Practices Act* and the Forest Planning and Practices Regulation.
- Goal** – broad statements that describe a general, desirable future end-state with respect to a particular subject (environmental, social or economic).

Guideline – a preferred or advisable course of action respecting land and resource management. Guidelines imply a degree of flexibility, based on administrative judgment or feasibility to apply the guideline, and are consequently not normally enforceable through legal means.

Indicator – a measurement criterion used during plan monitoring to assess the effectiveness of plan strategies in achieving plan goals and objectives.

Issues – problems and unrealized opportunities respecting land and resources that a resource planning process will address. Identification and documentation of planning issues is an important step in resource planning as a basis for assembling relevant planning information and for developing appropriate resource goals and objectives.

Land and Resource Management Planning – an integrated sub-regional, consensus-based planning process requiring public participation that produces a Land and Resource Management Plan for review and approval by government. The plan establishes direction for land use and specifies broad resource management objectives and strategies.

Landscape – a land area with generally homogeneous characteristics, based on topographic or geographic features such as a watershed or grouping of watersheds.

Landscape Unit – a landscape management unit that has been identified and mapped to support resource management planning including resource analysis, information management and the development of biodiversity conservation objectives.

Land use designation – a category that communicates a land or resource management direction for the land that is covered by the designation.

Legal objective – a land or resource management objective that has been established by Cabinet or an authorized minister (or minister's delegate) for the purpose of guiding subsequent resource management planning and decision making. Making land use plan objectives 'legal' (by Cabinet or ministerial Order) is a primary means in British Columbia of ensuring that the plan objectives are implemented consistently over time.

Management unit – a geographic subdivision within a broader plan area that has been identified for the purpose of assigning particular resource management prescriptions to that land area.

Map scale – the ratio between the distance travelled between two points on a map and the equivalent true distance that this represents on the ground. For example, the ratio of 1:50 000 means that one unit of measure on the map represents 50 000 units of measure on the ground. The level of detail on a map generally increases as the ratio increases, thus a 1:100 000 scale map (small scale) covers a large area in coarse detail, while a 1:5000 scale map (large scale) covers a much smaller area in greater detail. The scale determines the level of map accuracy that can be expected.

Mitigation – resource management practices targeted at improving the compatibility between resource uses. Mitigation strategies include efforts to avoid, minimize, rectify, reduce or compensate for the impact of one resource use on another.

GLOSSARY

- Objective** – a concise, measurable statement of a desirable future condition for a resource or resource use that is attainable through management action.
- Old Growth Management Areas (OGMAs)** – areas identified in a land use plan (and/or a legal objective) that are managed to maintain structural old-growth attributes.
- Operational plans** – plans that specify the detailed methods, schedules, and responsibilities for developing and managing resources. Operational plans are typically developed by resource tenure holders and are approved by the agency with regulatory responsibility for the resource sector. Operational plans for forest management in British Columbia include ‘forest stewardship plans and ‘range stewardship plans.’
- Plan monitoring** – a post-planning exercise that involves checking to see if the plan is being implemented and/or whether the plan content is effective in achieving the plan’s goals and objectives.
- Planning hierarchy** – a continuum of interdependent planning levels ranging from broad land and resource management principles and policies, to strategic level land and resource use plans, to sustainable resource management plans, to operational-level planning.
- Planning system** – the laws, policies, procedures and institutional structures that exist within any given jurisdiction to prepare, implement and monitor land and resource use plans.
- Policy-based plans** – land use plans that are formally approved by government, but are not implemented by legal means.
- Protected area strategy** – British Columbia’s strategy to develop and expand the provincial system of protected areas. 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.
- Red-listed species** – threatened or endangered species as identified by the Conservation Data Centre. The taxa of the red list are either extirpated, endangered or threatened, or are being considered for such status.
- Resource management direction** – the content of a land use plan that provides information and guidance on the future vision for resource use and conservation in the plan area, and the way(s) that the vision will be achieved over time.
- Resource management planning** – the activity of describing a desirable future end-state for land, water or other natural resources within a particular geographic area, and of identifying the means by which that end-state will be achieved. Resource management planning involves the collection and analysis of diverse information to develop resource goals and objectives and a preferred package of measures to achieve those goals and objectives.
- Resource management prescription** – a resource management goal, objective, strategy, standard, guideline or procedure, or a combination of these, that defines (prescribes) a resource management direction or approach for a particular resource or resource use.

Resource plan – the report that is the product of a land/resource management planning process (see above).

Resource target – a desirable, measurable level of supply or output for a particular resource value or resource use.

Resource trade-off – where a resource objective and/or strategy is written in a way to give priority to a particular resource value or use over another resource value(s) or use(s).

Resource values – categories of natural resources that are valued in human terms. Resource values may be tangible or intangible and are normally represented in natural resource inventories (e.g., recreation, fish, wildlife, cultural heritage, mineral, water or timber resource values).

Spatially-referenced information – biophysical or socio-economic information that is referenced to geographic locations, normally using maps.

Strategic land use planning – a participatory style of planning for relatively extensive geographic areas that focuses on defining land and resource allocation and management goals and objectives and corresponding strategies.

Strategy – a means of achieving a resource objective.

Sustainable Forest Management Plan (SFMP) – a plan for a defined forest area that identifies how forest resources will be managed in order to achieve criteria (objectives) for sustainable forest management. SFMPs are normally prepared voluntarily by forest licensees in order to achieve forest certification (i.e., forest certification systems such as that of the Canadian Standards Association which require licensees to develop and implement SFMPs as a condition of certification).

Sustainable Resource Management Plan (SRMP) – a landscape-level plan that identifies spatially specific and measurable land/resource objectives for the planning area, and strategies for achieving the objectives. SRM Planning is British Columbia's planning program that integrates and replaces the province's former array of landscape and local planning processes under one umbrella (e.g., including local resource planning, coastal planning, pre-tenure planning, recreation management planning).

Two-Zone System for Mineral Exploration and Mining in BC – the two-zone system ensures mining applications are considered, subject to all applicable laws, anywhere but in a park, ecological reserve, protected heritage property or an area where mining has been prohibited by an order under the *Environment and Land Use Act*.

Visual Quality Objective (VQO) – a resource management objective that reflects the desired level of visual quality based on the physical characteristics and social concern for the area. Five categories of VQOs are commonly recognized: preservation, retention, partial retention, modification and maximum modification.

Additional Reading

On Sustainable Resource Management Planning

Ministry of Sustainable Resource Management. May 2002. Sustainable Resource Management Planning: A Landscape-level Strategy for Resource Development. Resource Planning Branch. Available at <http://srmwww.gov.bc.ca/rmd/>.

Ministry of Sustainable Resource Management. June 2004. Sustainable Resource Management Planning: Standards For Creating, Implementing and Administering Sustainable Resource Management Plans. Forests, Lands and Marine Branch. Available at <http://srmwww.gov.bc.ca/rmd/>.

Ministry of Sustainable Resource Management. Sustainable Resource Management Planning: A Guide to Resource Analysis. June 2004. Forests, Lands and Marine Branch. Available at <http://srmwww.gov.bc.ca/rmd/>.

Ministry of Sustainable Resource Management. Sustainable Resource Management Planning: A Guide to First Nations Consultation. June 2004. Forests, Lands and Marine Branch, Available at <http://srmwww.gov.bc.ca/rmd/>.

On Strategic Land Use Planning

Commission on Resources and Environment. 1996. Strategic Land Use Planning Source Book. Province of British Columbia. Victoria, B.C.

Integrated Resource Planning Committee. Land and Resource Management Planning: A Statement of Principles and Process. First Edition. 1993. Province of British Columbia. Available at <http://srmwww.gov.bc.ca/rmd/lrmp/>.

Ministry of Sustainable Resource Management. Provincial Monitoring Framework for Strategic Land Use Plans (July, 1999) and Strategic Land Use Plan Monitoring Procedures (May, 2000). Available at <http://srmwww.gov.bc.ca/rmd/>.

Ministry of Sustainable Resource Management. 2003. Socio-Economic and Environmental Assessment for Land and Resource Management Planning in British Columbia: Guiding Principles (Draft). Economic Development Branch. Available at <http://srmwww.gov.bc.ca/rmd/>.

On Sustainable Forest Management Planning

Ministry of Sustainable Resource Management. 2002. Working Paper: Developing a Sustainable Forest Management Plan. SFMP Working Group. Available at <http://www.for.gov.bc.ca/hfp/pubssfmp.htm>.

Appendix 1

Resource Management Planning in British Columbia

This Appendix provides a brief summary of the planning levels in British Columbia's hierarchy of resource management plans and an overview of how plans are implemented and monitored. A description is also provided of how forestry practices are regulated in British Columbia, given the strong connection to land and resource planning.

A Hierarchy of Planning Levels

Resource management plans for Crown land in British Columbia may be prepared at several levels ranging from broad, strategic land use plans for regions and sub-regions, to detailed operational plans for small areas. Planning at each of the levels has its own characteristics and is undertaken to achieve particular purposes — see Figure A in this Appendix.

Where a government-approved plan is in place, there is an expectation — and a legal requirement in some cases (see 'Ways that Plans are Implemented' below) — that plans and decisions below it in the planning hierarchy will be consistent with the content of the approved plan. On the other hand, upper-level policies and plans are constantly being informed and refined by the practical realities of planning and decision-making at more local, detailed levels. Taken as a whole, the planning levels and organizations responsible for plan development and implementation complement and reinforce each other — to provide an integrated land use decision-making system that is both 'top down' and 'bottom up.'

The levels in British Columbia's resource planning hierarchy are as follows:

Provincial Land and Resource Policy Direction

British Columbia's policy direction for Crown land and resources may take several forms, including resource management statutes and regulations, sector strategies⁶ and 'Governance Principles for Sustainability.'⁷ These sources inform and direct the development of land/resource programs, institutional arrangements, resource management plans, and operational resource management policies and procedures. Policy at this level applies province-wide and is usually approved by Cabinet. Some resource management policy direction may be influenced by national policies and international agreements.

⁶ For example, sector strategies have been developed for energy, tourism, biodiversity and protected areas.

⁷ See Box 6 on page 13.

APPENDIX 1. RESOURCE MANAGEMENT PLANNING IN BRITISH COLUMBIA

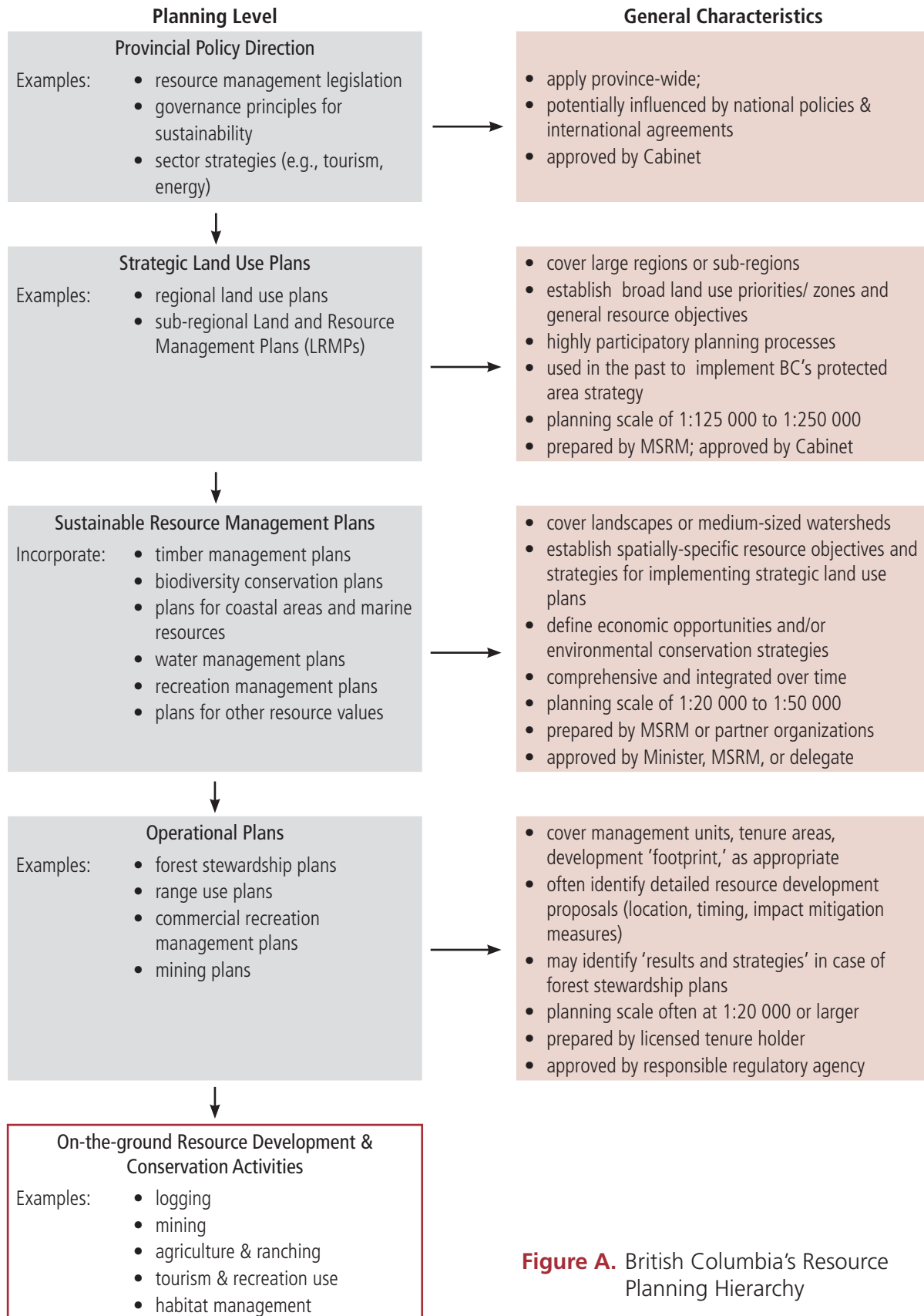


Figure A. British Columbia’s Resource Planning Hierarchy

APPENDIX 1. RESOURCE MANAGEMENT PLANNING IN BRITISH COLUMBIA

Strategic Land Use Plans

The Province is responsible for preparing strategic land use plans for Crown land and resources. Plans at this broad level have been prepared for almost all the provincial land base — see Map A. The process used for strategic land use planning is highly participatory as these plans often lead to fundamental social choices about land allocation and management; for example, British Columbia’s protected area strategy, which resulted in more than doubling the amount of park land in the province, has been implemented through this planning level.

Strategic land use plans normally establish broad land use zones that indicate a management priority for the zoned lands and resources. Land use objectives and strategies that integrate social, economic and environmental goals are typically the main content of strategic land use plans. These plans usually also identify how the plan will be implemented and monitored. See <http://srmwww.gov.bc.ca/rmd/> for online access to all completed strategic land use plans in British Columbia.



Proportion of the Province in Each Plan Status Category:

Strategic Land Use Plans Approved:	73%
* Regional Plans Completed:	21%
* LRMPs Completed and/or Approved:	52%
LRMPs Underway:	12%

Map A.
 Strategic Land Use Plans
 in British Columbia
 (as of March 2004)

Sustainable Resource Management Plans (SRMPs)

These plans are prepared for landscapes or mid-size watersheds (or groupings of these units) to provide more specific and tangible resource management direction than can be accomplished at the regional or sub-regional level. This planning level incorporates other former British Columbia planning programs (including landscape unit planning, local resource use planning, recreation management planning, coastal planning) under a single umbrella.

SRM Planning takes a flexible approach — where and when SRMPs are done, plan boundaries, and the planning process scope are not predetermined. Instead, resource issues and opportunities define the planning area, scope and methods. SRMPs may be limited to addressing resource values that relate to a particular resource sector, such as tourism, forestry or agriculture — or they may be comprehensive plans that address multiple sectors and resource values.

SRMPs may be prepared by planning staff in the Ministry of Sustainable Resource Management, or they may be led by partner organizations such as forest licensees, or particular resource use associations that have an interest in developing a spatial plan for one or more resource values in an area of interest to them. SRMPs must be undertaken according to the ‘standards’ for SRM Planning that have been issued by the Ministry of Sustainable Resource Management.

See <http://srmwww.gov.bc.ca/rmd/> for more information on the SRMP Program, including a description of program elements, planning standards, and various technical guidelines that advise on carrying out SRM Planning. See also the Additional Reading section at page 50 of this Guide.

Operational Plans

Plans at this level in the Province’s planning hierarchy are usually prepared by businesses or individuals as a condition of holding a tenure (lease, licenses permit) for Crown resources. Operational plans describe in some detail the way that resources within the tenured area will be used and managed. The location, timing and methods of resource use and integration are normally defined. Agencies that are mandated to regulate individual resource sectors are responsible for approving and enforcing compliance with operational plans.

Ways that Plans are Implemented

There are two basic ways that the resource management direction contained in approved resource management plans may be implemented — through legal means, or by policy directive, as described below.

Most provincial land use plans identify the specific methods that will be followed to implement the plan’s resource management direction. It’s likely that plan implementation will be achieved through a combination of legal means and policy-based directive.

Legal Means of Implementing Approved Plans

There are numerous legal mechanisms that may be used for implementing resource management plans. These mechanisms all require Cabinet or a Minister (or Minister’s delegate) to employ a specific statutory power for establishing a land use designation or land/resource objectives. Once established, the land designation/objectives provide direction to land use activities that may subsequently occur in the designation, and/or identify the officials that have authority for approving activities in the designation. Through these means, the intent of the land use plan is achieved.

Several examples of legal tools that may be used to implement the direction contained in approved resource management plans are shown in Box A.

Implementing Land Use Plans by Policy Directive

Resource management direction in approved plans for Crown land and resources may also be implemented by *policy directive*. If a provincial land use plan is endorsed by Cabinet or particular resource ministries, staff in the affected ministries are accountable for considering and implementing the plan's provisions when they deliver their respective program responsibilities. Ministries that are involved in activities to help implement land use plans must balance policy-based plan direction with other priorities identified in agency service plans.

Policy-based land use plan provisions may be achieved through various initiatives, including:

- research and inventory initiatives
- public information/education initiatives
- resource tenuring decisions with associated conditions/restrictions on resource use and development
- application of resource use guidelines and best management practices
- habitat and resource enhancement/rehabilitation initiatives.

Box A. Examples of Legal Tools for Implementing Land Use Plans in British Columbia

Forest and Range Practices Act

- Sections 149.1 to 150.3 authorize the establishment of various legal designations and objectives that may be used to implement land use plans. For example, MSRM may designate scenic areas and MOF can then establish visual quality objectives for those areas. Or, MSRM may designate community watersheds, which paves the way for MWLAP to establish water quality objectives. MWLAP is responsible for establishing ungulate winter ranges and wildlife habitat areas, and objectives for these areas. See below for more detail on 'Forest Resource Planning and Practices in British Columbia.'

Land Act

- Section 15 authorizes the provincial Cabinet to reserve specified Crown land from future disposition (i.e., by sale, lease, license).
- Section 17 authorizes the Minister of Sustainable Resource Management to designate specific Crown lands for particular land uses, and to prevent its disposition for other uses.
- Section 66 authorizes the provincial Cabinet, by regulation, to prohibit a specific use of Crown land in a designated area.
- Sections 93.1 and 93.3 authorize the provincial Cabinet to establish geographic designations on Crown land and land use objectives for the designations, and to specify the officials whose regulatory decisions must be consistent with the designation's objectives.
- Section 93.4 enables the Minister of Sustainable Resource Management (or a Minister's delegate) to establish objectives for forest values (such as biodiversity, wildlife, forage and water) for purposes of regulating forest practices under the *Forest and Range Practices Act*. A Land Use Objectives Regulation sets out the procedures that the Ministry must follow when establishing these objectives. Once established, these objectives affect the development of operational forest management plans. See below for more detail on 'Forest Resource Planning and Practices in British Columbia.'

Park Act

- Section 5 enables the provincial Cabinet to establish Crown land as a park or recreation area, the effect of which, is to restrict particular land uses and to transfer management responsibility to the Ministry of Water, Land and Air Protection.

Wildlife Act

- Section 5 authorizes the Minister of Water, Land and Air Protection, with Cabinet's consent, to designate Wildlife Management Areas. Future land and resource use in these areas requires the Ministry's written permission.

Monitoring Land Use Plans

Resource management plans are monitored to assess the extent to which the commitments contained in the plans are being implemented — are we doing what we said we would?; and to gauge how effectively the plan is achieving its goals — is the plan working? Monitoring results enable staff to know if the plan’s provisions need to be re-visited to identify ways for improving plan implementation or effectiveness. Guidelines for performing land use plan monitoring are available at <http://srmwww.gov.bc.ca/rmd/>.

Forest Resource Planning and Practices in British Columbia

Forest practices regulation in British Columbia has a strong connection to land use planning, and this connection is set out in law. This relationship is shown in Figure B.

The *Forest and Range Practices Act* (and the associated regulations) and the amended *Land Act* were enacted in 2003/04 to introduce a ‘results-based’ approach to forest management that is characterized by a ‘partnership’ between the Province as the land owner, and forest and



Figure B. Forest Resource Planning and Practices in British Columbia

Note:

The word ‘objective’ has particular meaning when used in the context of forest practices regulation in British Columbia. In this context, ‘objective’ is a legally-defined term and has specific application that goes beyond the general ‘planning usage’ of the term. Readers are directed to the Forest and Range Practices Act and the associated regulations for specifics on forest practices regulation in British Columbia. These are available at <http://for.gov.bc.ca/tasb/legregs/frpa/>

range licensees as authorized managers and users of forest resources. Each of the partners has specific responsibilities, as described below. Taken together, they ensure that the forest and range practices that are implemented on-the-ground throughout British Columbia are consistent with government’s objectives and standards for forest resource management.

The *Province* is responsible for:

- 1. Identifying the government’s objectives for forest resource values** that forest licensees must observe when they develop operational forest management plans, and implement approved operational plans. Objectives for forest resource values may originate from several sources:
 - land use objectives established by Cabinet⁸ for designations on Crown land. These objectives may originate from provincially-approved land use plans.
 - land use objectives established by the Minister of Sustainable Resource Management or the Minister’s delegate.⁹ These also normally originate from provincially-approved land/resource plans such as Sustainable Resource Management Plans.¹⁰
 - general objectives established in Forest Planning and Practices Regulations that have province-wide application (See Box B)
 - objectives for managing and conserving non-timber forest resources that are established by various Ministers or their delegates, as authorized under the *Forest and Range Practices Act* and the Government Actions Regulation. (See Box C for a list of the forest values for which provincial ministries have regulatory authority to establish resource management objectives.)
- 2. Reviewing and making determinations on operational plans** proposed by licensees.
- 3. Enforcing** the provisions contained within approved operational plans and other provisions in the Act and regulations, and addressing non-compliance.

Forest Licensees are responsible for:

- 1. Preparing operational plans** (e.g., Forest Stewardship Plans) that conform with the requirements for operational plans that are set out in the Act and regulations. For FSP holders, this includes developing results or strategies that are consistent with government’s objectives. For some objectives, it may involve

⁸ Using sections 93.1 and 93.3 of the *Land Act*.

⁹ Using section 93.4 of the *Land Act*.

¹⁰ This includes ‘higher level plan objectives’ that were established under the former *Forest Practices Code of British Columbia Act* for resource management zones, landscape units, sensitive areas, recreation sites/trails, and interpretive forest sites. These objectives are continued under the current forest practices legislation.

complying with ‘default’ forest practices requirements that are established in regulation. Licensees are responsible for ensuring the proposed FSP is available for public review and comment, and must address public comments before submitting the FSP for MoF approval.

2. **Preparing site plans** that show how the results and strategies in the approved FSP apply to the site. Site plans are available for public viewing on request.
3. **Obtaining cutting permits and road permits** before undertaking logging and road building in areas covered by operational plans in a manner that is in compliance with the approved operational (e.g., forest stewardship) plan.
4. **Meeting other practices requirements and standards** of forest management that are defined in the Act or regulations.

Box B. Forest Resource Objectives Established in Regulation

These objectives for forest resources are authorized in the *Forest and Range Practices Act*, section 149, and are contained in the Forest and Range Practices Regulation. To the extent that any of these forest resource objectives conflict with a land use objective established by MSRM under section 93.4 of the *Land Act*, the land use objective prevails.

Forest Value	Objectives
Soils	Without unduly reducing the supply of timber from British Columbia’s forests, to conserve the productivity and hydrologic function of soils.
Timber	Maintain or enhance an economically valuable supply of commercial timber from British Columbia’s forests; and enable an agreement holder, in the exercise of timber harvesting rights granted by the government, to be vigorous, efficient and world competitive.
Wildlife	Without unduly reducing the supply of timber from British Columbia’s forest, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for: (a) the survival of species at risk, and (b) the survival of regionally important wildlife, and (c) the winter survival of specified ungulate species.
Water, Fish, Wildlife and Biodiversity within Riparian Areas	Without unduly reducing the supply of timber from British Columbia’s forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.
Wildlife and Biodiversity	At the Landscape Level: Without unduly reducing the supply of timber from British Columbia’s forests, to design areas, on which timber harvesting is to be carried out, that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape. At the Stand Level: Without unduly reducing the supply of timber from British Columbia’s forests, to retain wildlife trees.
Cultural Heritage Resources	To conserve or, where more appropriate, protect cultural heritage resources that are (a) the focus of traditional use, by an aboriginal people, that is of continuing importance to that people, and (b) not regulated under the <i>Heritage Conservation Act</i> .

APPENDIX 1. RESOURCE MANAGEMENT PLANNING IN BRITISH COLUMBIA

Box C. Forest Resource Objectives that Provincial Ministries May Establish

The *Forest and Range Practices Act* and the Government Actions Regulation authorize certain provincial Ministers to establish objectives or measures and designate areas to manage and conserve specified forest resource values, as follows. These objectives must be consistent with any land use objectives for the subject area that may have been established by MSRM under section 93.4 of the *Land Act*.

Agency	Authority For:
Ministry of Forests	<ul style="list-style-type: none"> • visual quality objectives in scenic areas • lakeshore management zones — and objectives for them • recreation sites, trails and interpretive forest sites — and objectives for them • resource features designation only (no objective-setting power)
Ministry of Water, Land and Air Protection	<p>Authority to Establish Designations and Set Objectives/Measures</p> <ul style="list-style-type: none"> • ungulate winter range • wildlife habitat areas • fisheries sensitive watersheds • species at risk • regionally important wildlife • specified ungulate species <p>Objective-setting Authority Only</p> <ul style="list-style-type: none"> • water quality objectives in community watersheds <p>Designation Authority Only</p> <ul style="list-style-type: none"> • temperature sensitive streams • wildlife habitat features
Ministry of Sustainable Resource Management	may designate community watersheds and scenic areas (NB. In addition, broad objective-setting authority for MSRM is set out in the <i>Land Act</i>).

Appendix 2

Checklist for Writing Resource Objectives and Strategies

For every resource objective and strategy, ask yourself:

Look Up — Look Down — Look Within

Guideline 1. Consider the Planning Environment

- ✓ *Is the objective/strategy consistent with provincial legislation and corporate policy direction?*

If not, then it probably can't or won't be implemented.

- ✓ *Is the objective/strategy consistent with plans above in the planning hierarchy?*

This is a general expectation for all plans, and a legal requirement in the case of legally established objectives.

- ✓ *Is the objective/strategy 'informed by' existing plans below in the planning hierarchy?*

If it deviates from existing resource management direction, give the reasons for changing it.

Guideline 2. Be Internally Consistent

- ✓ *Does the objective/strategy mesh with all others, so that the plan works as an integrated whole?*

If not, it is necessary to change one objective or another so that they don't conflict.

Guideline 3. Make Sure It's Achievable

- ✓ *Is the objective/strategy technically, financially and administratively sound?*

If not, it's unlikely to be implemented.

A Place for Everything — Everything in its Place

Guideline 4. Connect with the Issues

- ✓ *Does the objective/strategy address an issue that the planning process has identified as requiring attention?*

Issues are both problems and unrealized opportunities. Developing a good list of issues and analyzing their symptoms and underlying causes helps to structure appropriate and well-worded objectives and strategies.

Guideline 5. Distinguish Between Goals, Objectives and Strategies

- ✓ *Is the objective so broadly and generally worded that it is really a goal?*

While it is acceptable, and most often desirable, to include resource management goals in a plan, there are differences between goals and objectives. Plans are far clearer and more certain when objectives contain the amount of detail that is characteristic of well-written objectives.

- ✓ *Does the objective mix elements of strategy into the objective?*

Objectives define a desirable future condition and strategies describe the way to achieve that future condition. It is generally preferable to keep the two types of resource management direction separate. The exception to this may be when developing plan objectives that will be implemented by being adopted as legal objectives and decision makers determine that there is a need (see Guideline 11) to have the strategy component also made legal by incorporating it into the objective.

Guideline 6. Supplement Where Necessary

- ✓ *Is the objective/strategy clear on its own, or would some additional explanation help to describe the management direction that is intended by the objective/strategy?*

Supplemental narrative descriptions of general management intent sometimes help clarify the planning vision, but these would not be appropriate as legal objectives.

Make it Clear, Tangible and Specific

Guideline 7. One Thing at a Time

- ✓ *Does the objective/strategy make it clear what specific resource the objective/strategy applies to?*

Don't develop objectives/strategies for broad, overarching concepts like "biodiversity" — instead, break these down into their constituent resources and prepare objectives and strategies for each of them separately.

Guideline 8. Focus Mainly on the Physical

- ✓ *Will the objective/strategy make a difference in how resources are managed on-the-ground?*

While it is acceptable to define process-oriented objectives/strategies, they should not dominate the plan — rather, resource plans should primarily provide direction on physical resource activities.

Guideline 9. Identify Where, When and Who

- ✓ *Does the objectives/strategy identify the geographic extent of its coverage, and the timeframe of its application?*

Cross-referencing to maps, portrayed at an appropriate scale, is the preferred way of communicating the spatial application of objectives and strategies.

- ✓ *Is it clear who is responsible for implementing the objective/strategy?*

Accountabilities will generally be self-evident, but where they are not, roles and responsibilities for implementation can be included in the objective or strategy.

Guideline 10. Make it Measurable

- ✓ *Is it possible to measure whether the objective/strategy is being implemented or achieved?*

Although it's not always necessary or appropriate to include absolute resource supply/output levels in objectives, an objective must be capable of being monitored using measurable indicators. This provides resource managers with information on whether or not the plan is effective in achieving its goals and objectives — the essence of adaptive resource management.

Guideline 11. Provide Detail — As Appropriate

√ *Does the objective/strategy provide the appropriate amount of detail?*

Factors that influence the appropriate amount of detail include:

- planning level and scale
- imminence of future planning processes
- information availability and quality
- inherent nature of resources and resource uses
- degree and complexity of resource conflicts
- relative importance of a predictable outcome
- availability of other resource plans and guidelines

Guideline 12. Say What You Mean

√ *Is the objective/strategy written in a way that eliminates or minimizes the potential for conflicting interpretations?*

Important considerations are selecting appropriate verbs in objectives; enhancing verb meaning with modifying wording; using appropriate terminology; and applying clear writing principles.

Appendix 3

Trouble-shooting Guide

Problem and Suggested Response	Reference	
	Guideline	Page
Objective/strategy is inconsistent with government policy direction... <ul style="list-style-type: none"> review relevant statutes and regulations, corporate policies, sector strategies, provincial principles, agency programs and policies, or regional strategies revise objectives/strategies to conform with provincial policy direction; or obtain executive approval to waive provincial policy direction 	1	12
Objective/strategy varies from existing plans... <ul style="list-style-type: none"> where objective/strategy is inconsistent with a policy plan that is 'above' in the planning hierarchy: <ul style="list-style-type: none"> revise objective/strategy to conform with the policy plan above, or retain the inconsistency and provide rationale for the variance revise the policy plan as necessary where objective/strategy is inconsistent with an objective that has been legally established: <ul style="list-style-type: none"> revise the plan objective/strategy to conform with the legal objective, or revise the legal objective by following regulatory procedures for amending existing legal objectives (executive approval required) where objective/strategy is inconsistent with an existing plan that is 'below' in the planning hierarchy: <ul style="list-style-type: none"> revise the objective/strategy to conform with existing plan below, or retain the inconsistency and provide a rationale for the variance revise the existing plan as necessary 	1	12
Objectives/strategies conflict with each other, or conflict with the plan's land/resource designations... <ul style="list-style-type: none"> revise the objectives/strategies to prevent or mitigate resource conflicts by <ul style="list-style-type: none"> separating conflicting activities in space or time limiting particular resource activities or levels of activity identifying resource restoration/rehabilitation actions reconciling inconsistencies in logic limit inconsistencies between particular objectives and strategies and land use designations to occasional site-specific occurrences, or modify the land use designation boundary to exclude the area affected by the conflicting objective/strategy. 	2	16
Objectives/strategies are not technically feasible, too expensive, or create administrative problems... <ul style="list-style-type: none"> revise the objectives/strategies to ensure compatibility with: <ul style="list-style-type: none"> known resource capability and suitability current technological capacity best estimates of available resources for implementing objectives/strategies current and foreseeable costing realities existing major land/resource commitments 	3	19

APPENDIX 3. TROUBLE-SHOOTING GUIDE

Problem and Suggested Response	Reference	
	Guideline	Page
Objectives/strategies don't address the identified planning issues... <ul style="list-style-type: none"> review the list of resource issues analyze the issues in terms of symptoms and underlying causes revise the objectives/strategies to correspond to symptoms and causes 	4	23
Objectives/strategies are too broad and general... <ul style="list-style-type: none"> re-visit the list of resource issues (see Guideline 4) review or construct resource goals for the plan area, as a basis for differentiating between the characteristics of 'goals' versus 'objectives' 	5	25
Objectives include too much strategy-like direction... <ul style="list-style-type: none"> review the defining characteristics of 'goals' versus 'objectives' versus 'strategies' (see Chapter 1) separate objectives and strategies, but keep them linked separate considerations of 'plan writing' from 'plan implementation' incorporate strategy content into objectives only where the criteria listed in Guideline 5 are evident and after consideration of Guideline 11 	5	25
Objectives/strategies provide insufficient resource management vision and context... <ul style="list-style-type: none"> supplement objectives and strategies with statements of 'general management intent' or 'desired future condition' consider developing these for the whole planning area, for subsets of the planning area, or for individual resources or resource uses provide appropriate cross-references to existing resource management guidelines or best management practices consider developing graphic illustrations of the intended future look of the landscape (e.g., forest cover patterns over time) 	6	26
Objectives/strategies are for resources categories that are too all-encompassing... <ul style="list-style-type: none"> break down broad resource management concepts into their constituent parts, and then draft objectives/strategies for the individual parts 	7	28
Objectives/strategies focus overly on future administrative processes, or defer too much to future resource planning processes... <ul style="list-style-type: none"> review resource inventory information with a view towards refining objectives/strategies to contain more spatially-referenced management direction look at the possibility of refining inventory information to make it more useful to the task of developing substantive, physical resource management direction ask whether or not it is realistic to assume that a future planning process will take place to address unresolved issues relocate objectives/strategies respecting administrative and future planning processes into a separate section in the planning report on plan implementation 	8	29

Problem and Suggested Response	Reference	
	Guideline	Page
<p>Objectives/strategies are unclear about where and when they apply...</p> <ul style="list-style-type: none"> • review resource inventory information to assess possibilities of being more spatially specific • revise objectives/strategies to incorporate cross-references to maps of resources, geographic zones or management units; or, to appropriate narrative, spatial descriptions of resources or zones • ensure that maps are portrayed in planning report at an appropriate scale • be explicit about the period or seasons that objectives and strategies apply to; clarify what event triggers an objective or strategy to occur, or to expire. If no timeframes are named, it's assumed that the objective/strategy applies always 	9	31
<p>Objectives/strategies are unclear about who is responsible for implementation...</p> <ul style="list-style-type: none"> • check with planning participants to see if there are uncertainties about implementation roles and responsibilities. If there are, word objectives and strategies to identify the agency or group that is responsible for delivering the objective or strategy 	9	31
<p>Objectives/strategies include resource targets or outputs that are unrealistic; or it's not clear how objectives will be measured...</p> <ul style="list-style-type: none"> • include absolute values or numerical rates of resource production in objectives only where there is certainty that the defined outputs can always be achieved • if certainty cannot be guaranteed, incorporate the 'metric' into companion resource strategies, or provide a range of target values • identify indicators that would be relevant for measuring objectives. Where appropriate, include these in the plan's section on plan implementation and monitoring 	10	35
<p>Objectives/strategies are not detailed enough, or provide an inappropriate amount of detail...</p> <ul style="list-style-type: none"> • match the amount of prescriptive detail contained in objectives/strategies with the following factors: <ul style="list-style-type: none"> – planning level, and the associated scale/resolution of spatial information – whether or not future resource planning processes are imminent – information availability and quality – inherent nature of the resources and resource uses in question – degree and complexity of resource conflicts – relative importance of a predictable outcome – availability of other relevant resource plans and guidelines 	11	38
<p>Objectives/strategies are unclear and open to interpretation...</p> <ul style="list-style-type: none"> • review objectives and strategies to replace: <ul style="list-style-type: none"> – ambiguous verbs, or to add modifying/clarifying wording – jargon words – subjective descriptions – value-laden terms • include a glossary of terms • apply good drafting habits • involve an independent editor to clean up language and report organization 	12	42

Appendix 4

Definitions of Verbs Commonly Used in Resource Objectives and Strategies

Achieve: carry out successfully; to attain a desired end or aim (*syn* accomplish, perform)

Adopt: accept formally and put into effect (*syn* establish, institute)

Allocate: apportion to a specific purpose or to particular persons or things; to distribute

Allow: permit; to make possible

Apply: put into operation or effect

Assess: determine the importance, size or value of (*syn* estimate)

Avoid: refrain from; to prevent the occurrence or effectiveness of

Classify: assign to a category

Coordinate: bring into a common action, movement or condition; to act together in a smooth concerted way (*syn* harmonize)

Conserve: keep in a safe or sound state; to avoid wasteful or destructive use of

Control: exercise restraining or directing influence over (*syn* regulate)

Decrease: grow progressively less (as in size, amount, number, or intensity), [in a resource planning context, normally compared to the existing state or condition] (*syn* lessen, reduce, diminish)

Delineate: to indicate by lines drawn; to represent accurately

Deliver: produce the promised, desired, or expected results (*syn* implement, produce)

Design: conceive and plan out

Develop: bring or come to an active or visible state; convert (land) to a new purpose so as to use its resources more fully

Disallow: deny; to prohibit

Distribute: spread out so as to cover something; to scatter

Enforce: carry out effectively

Enhance: make greater (as in value, desirability, attractiveness or quality) (*syn* heighten, intensify)

Ensure: make sure, certain or safe (*syn* secure, guarantee)

Establish: institute permanently by enactment or agreement; to bring into existence (*syn* set, found, create)

Evaluate: determine the significance or worth of usually by careful appraisal and study; to identify the consequences of (*syn* estimate, assess)

APPENDIX 4. DEFINITIONS OF VERBS COMMONLY USED IN RESOURCE OBJECTIVES AND STRATEGIES

- Examine:** inspect closely; to inquire into carefully (*syn* investigate)
- Exempt:** free or release from some requirement
- Expand:** increase the extent, number, volume, or scope of (*syn* enlarge)
- Formulate:** put into a systemized statement of expression (*syn* devise)
- Generate:** bring into existence (*syn* produce)
- Harvest:** gather a natural product
- Identify:** establish or select by consideration or analysis
- Implement:** to carry out; to give practical effect to and ensure of actual fulfillment by concrete measures (*syn* accomplish)
- Improve:** enhance in value or quality; to make better [in a planning context, normally compared to the existing state or condition]
- Increase:** become progressively greater (as in size, amount, number, or intensity) [in a resource planning context, normally compared to the existing state or condition] (*syn* enlarge, augment)
- Initiate:** cause or facilitate the beginning of; to set going (*syn* begin)
- Integrate:** unite with something else; to form or blend into a whole
- Investigate:** observe or study by close examination and systematic inquiry
- Oversee:** survey, watch or supervise
- Issue:** officially give out or make available
- Limit:** curtail or reduce in quantity or extent; to restrict to set bounds (*syn* restrict, confine)
- Maintain:** preserve from failure or decline; to cause to continue
- Manage:** treat with care (*syn* husband); to alter by manipulation; to gain influence with or maintain control over
- Maximize:** increase to the greatest quantity or value attainable
- Minimize:** reduce to the least quantity assignable, admissible, or possible
- Mitigate:** cause to become less harsh or hostile; to make less severe or painful (*syn* alleviate)
- Obtain:** gain or attain, usually by planned action or effort
- Permit:** give leave; to give an opportunity; to consent to expressly or formally (*syn* authorize)
- Phase in:** gradually commence or increase operations or activities
- Phase out:** gradually decrease or stop operations or activities
- Plan:** determine, through a systematic consideration of alternatives, the goals and objectives of an enterprise and select the policies, programs and procedures for achieving them; an activity devoted to clearly identifying, defining and determining courses of action before their initiation

APPENDIX 4. DEFINITIONS OF VERBS COMMONLY USED IN RESOURCE OBJECTIVES AND STRATEGIES

- Preserve:** keep safe from injury, harm or destruction; to keep alive, intact or free from decay (syn protect)
- Prevent:** to keep from happening or existing; to hold back
- Promote:** to help bring into being
- Produce:** give being, form or shape to; to manufacture; to accrue or cause to accrue
- Prohibit:** forbid by authority; to prevent from doing something (syn preclude)
- Protect:** keep safe, defend or guard
- Provide:** supply for use (syn furnish)
- Recruit:** fill up the number of with new members, examples, etc. (syn replenish)
- Refer:** send or direct for comment, aid, information, or decision
- Regulate:** govern or direct according to rule; to bring order, method, or uniformity to; to fix or adjust the time, amount, degree, or rate of
- Rehabilitate:** restore to a former capacity or state; to restore to a condition of health or useful and constructive activity or function (syn reinstate)
- Resolve:** deal with successfully: clear up; to find an answer to
- Respect:** to refrain from interfering with
- Restore:** bring back to or put back into a former or original state (syn renew)
- Restrict:** confine within bounds (syn restrain, limit)
- Retain:** hold secure or intact (syn keep)
- Review:** give critical evaluation of; to examine or study again
- Revise:** correct or improve; to make new, amended, improved, or up-to-date
- Subject:** make liable; to bring under control
- Survey:** examine as to condition, situation, or value; to view or consider comprehensively (syn inspect, scrutinize)
- Sustain:** give support or relief to; to keep up; to maintain or keep going continuously
- Undertake:** set about doing
- Use:** cause or act or serve for a purpose; to employ something
- Utilize:** make use of; to turn to practical use or account



This Guide is a reference for natural resource planners who want to write effective plans. It's aimed at promoting high quality plans that are easy to interpret, implement and monitor.

Although the Guide has broad application to most spatial land use and resource management planning processes, the emphasis is advising on the development of Sustainable Resource Management Plans (SRMPs), within a British Columbia Crown land planning context. SRM Planning is British Columbia's main vehicle for translating existing, broad strategic land use plans into more specific and tangible resource management direction.

The Guide focuses on recommended 'best practices' for writing land and resource objectives and strategies. Although resource management plans may contain various contents, resource objectives and strategies are normally the main elements employed in a plan for communicating resource management direction.

Twelve separate guidelines are described to promote effective resource management plans. These guidelines apply to most spatial planning situations that are likely to arise, including planning for environmental conservation and economic development of Crown land and resources. Examples of good construction of objectives and strategies are provided throughout to demonstrate the guidelines.

