Guide to Writing Resource Objectives and Strategies

BRITISH
COLUMBIA
Ministry of Forests

Guide to Writing Resource Objectives and Strategies

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Ministry of Forests

Forest Practices Branch
Strategic Planning and Policy Section

in cooperation with

Ministry of Environment, Lands and Parks
&
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About This Guide

Why a Guide?

Objectives and strategies in strategic resource management plans should do two things:

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

Those who prepare strategic resource management plans must decide what resources to address and how much to say about them. Getting the content of plans "right" is important because plans that provide unclear or inappropriate objectives or strategies lead to disputes over interpretation. The inevitable result is that these plans are not implemented in the way they were intended, or perhaps not at all.

Aside from concerns about the ineffectiveness of poorly drafted plans, there are economic reasons for preparing good, clear plans. Planning processes for large regions or sub-regions are expensive in financial terms and in the time commitment of citizens who volunteer to participate. While planning for smaller land areas such as landscape units or watersheds is less expensive, costs are still sizable. We cannot afford to make these investments without producing excellent products that effectively address resource management issues and that can be readily implemented.

These concerns have come sharply into focus in British Columbia with the enactment of the *Forest Practices Code of British Columbia Act* (the Forest Practices Code). The Forest Practices Code creates a *legal* framework for planning timber harvesting,

road and bridge access, reforestation, range development and related forest practices. A hierarchy of plans is established under which "operational plans" that directly govern "on-the-ground" practices must be consistent (i.e. must not materially conflict) with "higher level plans" that provide an overarching framework of strategic objectives. The importance of this strategic framework under the Forest Practices Code underscores the need to articulate clear and appropriate objectives. Where these objectives are formally established as higher level plans, they have "legal force" and must be considered in all subsequent planning decisions.

However, clarity and appropriateness are equally important in drafting objectives (and strategies) in other resource management contexts. For this reason, this guide attempts to speak to all types of resource management plans, and not just higher level plans under the Forest Practices Code.

Scope

As a tool to help planning practitioners write effective objectives and strategies, especially objectives that will be established as legally enforceable higher level plans under the Forest Practices Code, this Guide aims to:

- encourage the preparation of objectives and strategies that are consistently high in quality
- promote the writing of objectives and strategies that are easy to interpret and thus implement, and
- help make all strategic resource management planning processes more efficient and effective.

This is accomplished through the use of guidelines and examples of resource objectives and strategies that demonstrate the concepts presented in this Guide. Some of the examples are directly applicable to the higher level plan context. These examples are shown in green text. Examples that appear in standard black text are not appropriate higher level plan material. All the examples are designed to be illustrative in nature and are not intended to represent government policy on resource management.

The Guide also includes an insert to demonstrate the flow of objectives and strategies between planning levels. The insert provides example objectives and strategies, maps and graphic renderings to show how these examples from various planning levels might look when implemented on the ground. The insert is

intended to give planners an "operational" perspective to aid in the preparation of practical and effective strategic objectives and strategies. It is not intended to guide Forest Practices Code operational planning.

As each resource planning process is unique, it may not be possible or reasonable to apply all of the advice contained in this document. That is why the document is organized in a guidelines format – flexibility and discretion are vital to producing objectives and strategies that suit particular areas.

Although the Guide was prepared using the best information available on writing objectives and strategies, the current approach to writing higher level plans is expected to evolve over time. This document will be updated in future as experience with higher level plans highlights the need for potential revisions.[1]

In drafting objectives that may become higher level plans under the Forest Practices Code, this Guide should be used in conjunction with the *Forest Practices Code of British Columbia Act* and regulations and the *Higher Level Plans: Policy and Procedures* manual. Where the advice in this Guide conflicts with the legislation or the *Higher Level Plans: Policy and Procedures* manual, the direction in both the legislation and the manual prevail. Information on developing landscape unit plans can be found in the *Landscape Unit Planning Guide.* See "Further Reading" for a list of additional related references.

Audience

This Guide is intended primarily for provincial agency planners who write objectives that will be established as Higher Level Plans for managing Crown land and resources. The Guide will also be useful and informative to other provincial agency planners and stakeholder representatives who are involved in developing other types of objectives and associated strategies. Although licensees referenced in the Forest Practices Code are required to ensure that operational plans do not materially conflict with objectives established as higher level plans, the onus is on government to implement higher level plans and to oversee their achievement. As a result, higher level plans are ultimately the responsibility of designated government agencies.

Although the Guide reflects the specific characteristics of British Columbia's resource planning system, many of the Guide's principles and advice are transferable to other planning situations and jurisdictions.

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[1] In particular, the Ministry of Forests hopes in the future to provide advice on the development of strategies more applicable to licensees who must prepare operational plans that do not materially conflict with objectives established as higher level plans.

Abbreviations Used in This Guide

CORE   Commission on Resources and Environment (a provincial organization, no longer in existence, that was responsible for preparing regional land use plans).

CRMP   Coordinated Resource Management Plan (an integrated resource management plan that focuses on range management/grazing issues).

ERDZ   Enhanced Resource Development Zone (a land use zone employed in LRMP and Regional Plan processes).

FPC   Forest Practices Code.

IWMP   Integrated Watershed Management Plan (an integrated resource management plan that focuses on water management issues).

LRMP   Land and Resource Management Plan (a sub-regional plan).

LRUP   Local Resource Use Plan (an integrated resource management plan for a drainage, portions of a drainage, or an issue area).

MELP   Ministry of Environment, Lands and Parks.

MOF   Ministry of Forests.

OCP   Official Community Plan (a settlement-oriented plan that is developed and approved under authority of the *Municipal Act*).

RMZ   Resource Management Zone (zone for which resource management direction is provided).

TFL   Tree Farm Licence (an area-based forestry tenure issued under the *Forest Act*).

TSA   Timber Supply Area (a forest management unit).

VQO   Visual Quality Objective.

Chapter 1

Resource Management Planning in British Columbia

The Resource Management Planning System

Resource management plans in British Columbia are prepared at a variety of levels ranging from broad, strategic plans such as regional and sub-regional plans to site-specific and detailed plans for small areas (see Box 1). Planning at each of the levels has its own characteristics and is structured to achieve particular purposes (see Appendix 1).

Prior to the enactment of the Forest Practices Code there was no legislation governing the development of resource management plans, and no regulatory framework for requiring these plans to be considered in subsequent resource management decisions.[2] The Forest Practices Code redefined British Columbia's forest resource planning system by:

- recognizing the importance of all "forest resources" in planning the development of timber and range resources
- recognizing a number of forest resource planning units or "delineations", including resource management zones, landscape units, sensitive areas, recreation sites and trails and interpretive forest sites
- providing provincial officials with the authority to locate the above types of planning units on-the-ground, and to establish associated objectives for managing forest resources within those units. When objectives for resource management zones, landscape units, sensitive areas, recreation sites and trails and interpretive forest sites are formally established according to the procedures laid out in the Act, they are known as "higher level plans"

[2] Exceptions include the Commission on Resources and Environment Act (repealed 1996) which required the Commissioner to undertake regional land use planning processes and the Environment and Land Use Act, which has been employed occasionally to establish a legal basis for implementation of resource management plans. In addition, planning provisions were incorporated into contractual agreements with licence holders.

BOX 1

**Resource Management Planning in British Columbia:
Planning Hierarchy and Relationship to Forest Practices Code**

Provisions in resource management plans that pertain to forest resource uses and management practices may be implemented as legally enforceable provisions by being formally established as a higher level plan under the Forest Practices Code. Provisions of resource management plans that cannot be implemented through operational plans (e.g., provisions respecting non-forest resources) are implemented through other laws, and government programs and policy.

STRATEGIC RESOURCE MANAGEMENT PLANS	HIGHER LEVEL PLANS (Forest Practices Code)
Regional Plans e.g., Regional Land Use Plans	
Sub-regional Plans e.g., LRMPs	**Resource Management Zone Objectives**
Local Plans e.g., Landscape Unit Plans, Coordinated Resource Management Plans, Integrated Watershed Management Plans	**Landscape Unit Objectives**
Sensitive Area Plans e.g., plans for locally significant or unique forest resources	**Sensitive Area Objectives**
Recreation Plans (prepared at MOF district level)	**Recreation Site, Recreation Trail and Interpretive Forest Site Objectives**

Operational Plans
e.g., forest development plans,
silviculture prescriptions, range use plans

Forest Practices in the Field
e.g., logging, road building,
silviculture treatments, grazing

- identifying forest development plans, range use plans, silviculture prescriptions and stand management prescriptions as "operational plans" which are required before forestry development activities may occur and

- requiring operational plans to be consistent with (i.e. not materially conflict with) higher level plans that are in effect for the operating area, and

- requiring forest management practices in the field to be consistent with operational plans.

Although this Guide's primary aim is to advise on how to effectively express objectives that may be established as a higher level plan, and to also advise on how to express strategies for achieving those objectives, the same advice is generally relevant to preparing objectives and strategies for natural resources that fall outside the scope of the Forest Practices Code, such as minerals or natural gas. These "non-code" objectives cannot be implemented through the higher level plan process under the Forest Practices Code. Instead, such objectives and strategies are normally implemented through a range of other statutory and program/policy mechanisms including:

- land designation under other statutes (e.g., *Park Act* designation or a protected area)
- research and inventory initiatives
- public information/education initiatives
- resource tenuring programs with associated conditions/restrictions on resource use and development
- regulatory efforts
- application of resource use guidelines and best management practices
- habitat and resource enhancement/ rehabilitation initiatives.

BOX 2

Content of Higher Level Plans

The *Forest Practices Code of British Columbia Act* directs that provincial forests may be used in a way that is consistent with one or more of the following:
- timber production, utilization and related purposes
- forage production and grazing by livestock and wildlife and related purposes
- recreation, scenery and wilderness purposes
- water, fisheries, wildlife, biological diversity and cultural heritage resource purposes
- any purpose permitted by or under the regulations.

Therefore, higher level plans in provincial forests may only direct the management of these resources and resource uses.

The *Operational Planning Regulation* provides that higher level plans may:
- state that joint approval is required for a type of area subject to a forest development plan or amendment
- contain a visual resource objective that reflects the desired level of visual quality based on the physical characteristics and social concern for the area
- provide direction for green-up requirements and the maximum size of cutblocks
- establish old growth management areas
- identify ungulate winter range
- provide management direction for identified wildlife where the Deputy Minister of Environment, Lands and Parks and the Chief Forester have classified a species at risk as identified wildlife.
- apply to Category A cutblocks and roads in an approved forest development plan and may provide the basis for refusal of a subsequently proposed forest development plan.

The *Strategic Planning Regulation* provides that a district manager may, among other things, address the following matters when establishing landscape unit objectives:
- retention of old growth
- seral stage distribution
- landscape connectivity
- stand structure
- species composition
- temporal and spatial distribution cutblocks.

The *Operational Planning Regulation* also requires that a forest development plan describes, for each cutblock, the measures, if any, proposed to achieve a higher level plan.

Chapter 2

Expressing Resource Management Direction

What is Resource Management Direction?

Objectives and strategies are normally the most important content of strategic resource management plans. However, there are several other elements of plan content that are critical for effective objectives and strategies. This chapter outlines all the major elements that make up the content of strategic resource management plans. This allows the user of this Guide to place objectives and strategies in appropriate context within the broader plan.

To be complete, resource management plans should answer five essential questions about resource use: "what", "where", "when", "how" and "who" (see Box 3).[3]

What goals and objectives (desired future condition) are appropriate for the planning area, and what types of activities are appropriate for achieving the goals and objectives? The "what" could include:

- resource management actions or limitations on actions that physically affect natural resources and resource uses
- research and resource inventories
- public education and information
- monitoring and enforcement, and
- procedures for future decision-making, coordinating and planning.

Where in the planning area will goals and objectives, and actions for achieving them, apply?

[3] Although resource management plans may address all or many of these types of resource questions, not all of them are appropriate for adoption as higher level plans. Resource management direction that is implemented through establishment as higher level plans must pertain to the scope of the Forest Practices Code (i.e., they must deal primarily with forest resource management practices that can be implemented through operational planning). See Chapter 1 for further explanation.

When will the goals and objectives, and the actions for achieving them, have effect?

How will the activities defined in the plan be undertaken?

Who is responsible for carrying out the activities defined in the plan?

Ways to Express Resource Management Direction

Resource management direction in plans may be expressed in relatively broad and general terms, which is usually the case for regional or sub-regional plans, or it may be quite detailed and specific, for example, where a landscape unit or sensitive area is being planned using more refined information. Regardless of planning level, there are a number

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BOX 4

Tools for Communicating Resource Management Direction

GOALS	• describe a future vision • worded generally to establish broad aims • not normally quantitative • no time specified for their achievement • normally apply to the whole planning area
OBJECTIVES	• outline end results that will achieve broader goals • describe desired future conditions for individual resources or resource uses • measurable • time specific • geographically 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, to classifications/zones, or to individual management areas • often stated as conditions that will apply to future resource use activity, but may also direct future processes
ZONES OR GEOGRAPHIC DESIGNATIONS	• zones or geographic designations that communicate a management priority for particular resource objectives (e.g., "special resource management zones", "enhanced resource development zones", "old growth management areas")
OTHER TOOLS	
Maps	• communicate spatial application of objectives and strategies • show location of management areas/zones; biophysical/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
Resource Supply Levels	• represent a projected level of output of resources or the rate at which a desired outcome will be achieved
Descriptions of Management Intent	• supplemental information that more fully describes objectives/strategies or their rationale • help envision the desired "look" of a particular area • sometimes referred to as "statements of desired future condition"
External Guidelines	• Cross-references to desirable existing resource management guidelines or "best management practices"

[4] Some LRMPs in British Columbia have developed statements of "general management direction" which are like goal statements.

of tools, including goals, objectives, strategies and other supporting mechanisms that planners may use to communicate resource management direction. These are described below briefly and are summarized in Box 4. Most resource management plans employ all or many of these tools, although the majority of the content of most plans is taken up with resource objectives and associated resource strategies.

1. Goals

Goals are generally worded statements that describe a desired end state with respect to a particular subject. They are timeless in the sense that no timeframe is identified for their achievement. They are not normally expressed in quantitative terms. Goals typically reflect broad social ideals, aspirations or benefits pertaining to specific natural resources, economic issues, or social systems generally. They often translate provincial level policies or principles into statements of more local relevance. Goals usually apply to the whole planning area, as opposed to a geographic subdivision of the planning area[4] – see Example 1.

2. Objectives

Like goals, objectives describe a desired future state with respect to a particular resource or resource use. They are, however, more specific than goal statements. 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 the resource management direction expressed in the plan is achieving the stated goals and objectives. In addition, objectives are spatially specific – they may apply to the whole planning area or to sub-sets of the planning area such as a particular zone or a geographic unit within the plan area. They may also describe the timeframe within which the objective will be achieved, which may be long- or short-term. See Box 5 for the common structure of resource objectives. See Example 2 for sample objectives at various planning levels. Note that the green text in the examples indicates material that would be appropriate for establishment as a higher level plan in accordance with the Forest Practices Code.

3. Strategies

Whereas objectives define "what" result is to be achieved, strategies describe "how" the result will be achieved. They are normally drafted to correspond directly to the objective they serve – often organized in table format, so that the relationship between objectives and strategies is clearly evident – see Example 3.

**Resource Objectives
(Scenic and Recreation Resources)**

**Resource Management Zone Objective
*(Visual Quality)***
- Protect frontcountry areas visible from Highway 2 and 2-A corridors, as shown on map 4.

Landscape Unit Objective *(Visual Quality)*
- Manage scenic area A as viewed from the Renton Lake trail for a visual quality objective of partial retention as shown on map 2.

Sensitive Area Objective *(Visual Quality)*
- Protect the visual quality of the Mt. Roberts sensitive area in accordance with the visual quality objectives as mapped in Figure 1 and described in Appendix 1.

**Recreation Site Objective
*(See Appendix 2 for suggested template)***
- Maintain a roaded recreation experience at the Anderson Lake recreation site. Retain lake shoreline and coniferous vegetation features. Provide opportunities for swimming, camping, picnicking and canoeing activities.

Strategies Support Objectives (Landscape Unit Example)

Objective	Strategies
Maintain old growth forest attributes throughout each rotation in the old growth management areas, which are hereby established, as shown on map 6.	• permit natural processes of insect feeding and disease within old growth management areas (see map 6), unless infestations threaten to spread outside of these areas • if salvage harvesting is required, apply modified harvesting practices, such as single tree selection (to maintain old growth structure), or small openings (<2 hectares) to create or maintain early seral conditions • avoid road construction within old growth management areas. Primary haul roads are not permitted unless no other reasonable and cost-effective options exist.

In other 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 include descriptions of:

- 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 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 should be at least one strategy for achieving it; there should be no strategies that are not attached to an objective.

4. Zones or geographic designations

Zones or geographic designations communicate where particular management objectives are to be given emphasis or priority. Where they are employed to communicate resource management direction, subdivisions of all of the land base in the planning area are typically assigned one zone/designation or another from a list of categories. They are "draped" over the land base as an expression of broad management intent. As an example, the standard zones that are employed in LRMPs to help communicate general land use intent are shown in Box 6.

See Guideline 4, page 13, "Reflect Zones or Geographic Designations" for further explanation.

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)

BOX 6

LRMP Land Use Zones

- Protected Areas
- Special Management Zones
  → habitat
  → recreation/scenery/tourism
  → community watersheds
- General Resource Management Zones
- Enhanced Resource Development Zones
- Settlement Zones
- Agriculture Zones

- 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., TFL boundary, municipal boundary)
- administrative boundaries (e.g., TSA boundary, regional district boundary)

See Guideline 13, page 27, "Identify Where and When" for further explanation.

Indicators: many plans identify indicators as a component of plan monitoring and, therefore, indicators are not usually thought of as a tool for communicating resource management direction per se. However, the identification of relevant indicators during the development of objectives and strategies can assist planners in preparing more effectively worded objectives and strategies.

See Guideline 15, page 30, "Make it Measurable", and Example 15, page 19.

Resource Supply Levels: represent a projected level of output of resources, or the rate at which a desired outcome will be achieved, and can help to clarify goals, objectives and strategies.

See Guideline 15, page 30, "Make it Measurable", for further explanation.

Descriptions of Management Intent: provide supplemental information to help resource managers more accurately envision resource management objectives in terms of effects on-the-ground.

See Guideline 10, page 22, "Supplement Where Necessary" for further explanation.

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 document.

See Guideline 16, page 31, "Provide Detail – "As Appropriate" for further explanation.

Chapter 3

Guidelines for Writing Resource Objectives and Strategies

This chapter describes seventeen guidelines (summarized in Box 7) to help resource planners effectively communicate strategies and objectives and other types of resource managment direction in their planning documents. The guidelines apply to most resource management planning situations. However, each planning process is unique, and it may not be possible or reasonable to apply all of the guidelines to every planning situation.

An "Objective and Strategy Checklist" that parallels the guidelines is provided at the end of the chapter. A "Troubleshooting Guide" located at the end of the document provides a quick reference on actions to overcome common drafting problems.

Look Up – Look Down – Look Within

This first group of guidelines is concerned with the need for objectives and strategies to reflect or consider relevant laws, government policies and resource use plans (Look Up); to be informed by existing local and sometimes even operational plans (Look Down); and to be internally consistent within the plan itself (Look Within).

Being conscious of the wider environment within which objectives and strategies are developed will help greatly in drafting appropriate content. 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.

Guideline 1   Consider Legislation and Policy

Resource planning processes are expected to work within governments' established legal and policy bounds. In most cases, existing laws and regulations are accepted as firm direction that planning processes must observe; however, in the case of government policy, there is generally more flexibility.

A common challenge for planners is to acquire a clear picture of what government policy is relevant to the planning task. Policy is not always available in convenient formats, there are sometimes policy gaps, and policy is frequently under review or revision.

1. Statutes and Regulations

Many provincial and federal laws have a bearing on objectives and strategies and planners should not create inconsistency with the law. Examples of legislation that commonly direct resource plans include the federal Fisheries Act, provincial Waste Management Act, provincial Heritage Conservation Act and their associated regulations. Where objectives and strategies do not conform with the law, the law will prevail. This includes higher level plans which, although they are legal instruments, are lower in the legal hierarchy than statutes and regulations.

2. Corporate Provincial Policies

Beyond statutes and regulations, certain provincial policies can profoundly affect the nature and wording of objectives and strategies in resource management plans. Those with the greatest effect are "corporate" policies, which reflect Cabinet-level direction. Examples of corporate policies that directly influence land and resource use planning in B.C. include the Protected Area Strategy and the Grizzly Bear Conservation Strategy.

3. Provincial Principles

Another type of provincial policy which can influence the content of objectives and strategies includes provincially approved principles. British Columbia examples include the provincial Sustainable Environment Charter and the Provincial Land Use Charter and, at the inter-agency working level, the Land and Resource Management Plan Statement of Principles and Process.

4. Agency Programs and Policies

Agency-level programs and policies can also significantly influence the way that objectives and strategies are drafted. For

example, Lands' and Tourism's programs and policies to provide access to Crown land for commercial recreation opportunities may result in plan objectives and strategies to support that particular land use. Similarly, Environment's program and policy to offer guide-outfitting and trapping opportunities may influence the development of plan objectives and strategies for wildlife and furbearers. The Forest Practices Code *Higher Level Plans: Policy and Procedures* manual provides direction on formally establishing legally enforceable objectives for forest resources.

5. Regional Strategies

Regional strategies that have government endorsement may also steer plan content. For example, regional landscape unit planning strategies provide important guidance for preparing landscape unit objectives.

Guideline 2   Conform With "Plans Above"

1. Higher Level Plans

As expressed in Chapter 1, a higher level plan must be consistent with any other higher level plan that precedes it in the hierarchy (see Box 8). Although there should be a reasonable "flow" between different types of higher level plans, the legal test of consistency is whether or not there is "material conflict". Plans lower in the hierarchy may contain substantially different content than plans above, provided they do not materially conflict with one another. If there is conflict, then the higher level plan above prevails. See Example 4 for a sample of inconsistency between resource management zone (RMZ) and landscape unit objectives.

2. Resource Plans and LRMPs

There is no legal requirement for higher level plans to be consistent with strategic land use plans, such as regional plans or LRMPs, but relevant provisions in cabinet-approved plans should obviously provide guidance. Where higher level plans do not conform to regional plans or LRMPs, a clear explanation should be offered.

Guideline 3   Take Account of "Plans Below"

In many locations where resource management plans are being formulated, existing local resource plans will cover portions of the planning area. For example, within a given planning area, there may already exist local resource use plans (LRUPs), coordinated

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BOX 8

Higher Level Plan Hierarchy

↓ 1. Resource Management Zone Objectives
↓ 2. Landscape Unit Objectives
↓ 3. Sensitive Area Objectives
↓ 4. Recreation Site, Recreation Trail
        & Interpretive Forest Site Objectives

↓

Operational Plans

resource management plans (CRMPs), integrated watershed management plans (IWMPs), or official community plans (OCPs)/ rural land use bylaws prepared by a regional district. These plans provide basic information that is likely to be very helpful in developing objectives and strategies in an overlapping, broader plan. Moreover, there exists a certain responsibility to them – particularly if they reflect the agreement of agencies and local stakeholders.

It may be possible to incorporate the general direction contained in these local resource plans directly into the relevant objectives and strategies of the broader plan (see Example 5); although, in cases where there are substantial differences in planning scale, the provisions in the local resource plans may be too detailed for this to reasonably occur.

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

Regardless of the planning level being worked at, it is necessary to consider existing operational plans in effect for the area. If the objectives and strategies being developed have major implications for existing operational plans, then the provisions in the Code respecting transition could apply.

Guideline 4 Reflect Zones and Geographic Designations

Zones or geographic designations are a standard tool to communicate resource management objectives and strategies (see Box 4, page 5). Where these are used, objectives and strategies for the various resources located within a zone or geographic designation should be consistent with the category's general intent.

Occasionally, it may be appropriate to identify objectives and strategies for smaller, distinct areas within a zone or geographic designation that differ from the category's broader purpose. This flexibility allows for smaller areas with important values to be accommodated across the larger zone – see Example 6.

EXAMPLE 4

Inconsistency Between Higher Level Plans

The following two higher level plans would materially conflict and, therefore, the RMZ objective would prevail.

RMZ objective: "Maintain opportunities for backcountry recreation in an undeveloped wilderness setting in the areas shown on map 3".

Landscape unit objective: "Apply a visual quality objective of modification to the areas shown on map 4".

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

EXAMPLE 5

Incorporating Objectives and Strategies from Local Resource Plans

- An existing Coordinated Resource 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 landscape unit plan over the same area could reflect/restate CRMP provisions in its objectives.

* This would be appropriate higher level plan material only if measures "to restore" can be accomplished through an operational plan.

EXAMPLE 6

Recognizing Variability Within Zones and Geographic Designations

- The resource management priority within the LRMP **"Enhanced Resource Development Zone – Timber"** (ERDZ–Timber) is intensive timber management, as characterized by:
  - → even age stand management
  - → predominance of clearcut 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)

- Objectives and strategies, at both the resource management zone and the landscape unit levels, that reflect the management intent of the ERDZ–Timber category would be appropriate: e.g.,
  - → at the ***RMZ level***: an objective might be to "Promote short- and mid-term opportunities for timber harvesting in the areas designated for 'Enhanced Resource Development (Timber), as shown on map 5'." Corresponding strategies that give some general guidance on the characteristics of this land use category would be appropriate. Possibly low or intermediate biodiversity emphasis options could be assigned to landscape units within the ERDZ.
  - → at the ***landscape unit level***: consistency with the ERDZ–Timber category could be achieved by objectives that intensively manage timber resources. Objectives could possibly vary basic Forest Practices Code standards such as green-up height and clearcut size.
  Strategies could identify intensive silviculture measures. Old growth management areas could be located outside of the ERDZ.

- Despite the ERDZ–Timber category, it may be appropriate to draft a conservation-oriented objective and strategy(ies), that diverge from this general direction for the zone, provided that it was for a particular resource in a restricted location:
  e.g., "Protect the class A wetland habitat by including a no harvest reserve around the wetland as shown on map 2."

- It would *not* be appropriate, however, to draft "conservation-maximizing" objectives with general or widespread application to the ERDZ–Timber category. It may instead be necessary to revise the ERDZ boundary to exclude substantial areas requiring conservation measures.

Guideline 5 Be Internally Consistent

Resource objectives and strategies in a plan must not conflict with one another. Otherwise, implementation will be difficult or impossible.

There are several ways to prevent or mitigate conflict:

Separate the Conflict in Space or Time: by preventing conflicting activities from occurring at the same place, or at the same time. This will normally require a trade-off decision, where one resource use is given priority over another – see Examples 7 and 8.

Minimize the Conflict: by limiting or constraining an activity that may lead to a resource conflict if constraints on that activity were not specified – see Example 9.

Rectify the Conflict: by allowing a conflict or resource impact to occur, subject to measures to redress the problem through some means – see Example 10.

Another aspect of internal consistency is to write objectives that work together to achieve an overall aim, or at least that do not work against each other because of inherent conflicts – see Example 11.

Estimating the magnitude and distribution of the impacts of draft plan objectives and strategies (e.g., though modelling and other analytical techniques) provides an indication of whether or not the overall effect of a resource management plan conforms with government policy or is socially acceptable. Where evaluation results show undesirable or unsuitable impacts and conflicts relative to desired conditions, then the plan's objectives and strategies need to be revised so that the plan is more compatible with the established policy or vision.

EXAMPLE 8

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.

OBJECTIVE	STRATEGY
Minimize seasonal reductions in water quality in critical fish bearing streams, as shown on map 7.	• road construction in areas adjacent to fish bearing streams, as shown on map 7, is restricted from November 1 to April 30 each year.

[*] This is an example of where the objective alone would not make an effective higher level plan. The resource management direction provided in the strategy could also be established as part of the higher level plan to clarify operational expectations (see Guideline 9).

EXAMPLE 7

Preventing Conflict Through Spatial Separation

Writing an objective that assigns a "retention" visual quality objective to an area with high timber values 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 in 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 on map 4.

EXAMPLE 9

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 cutting 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.

EXAMPLE 10

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.

- Or, logging of beetle damaged old growth stands in an OGMA might be permitted, provided that less mature stands of the same type are identified for recruitment into old growth condition.

- Or, 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).

EXAMPLE 11

Drafting Objectives that are Consistent With Each Other (Landscape Unit Example)

Objectives:

1. "Reduce fire hazard and optimize timber productivity by salvaging trees within areas identified as moderate to severe hemlock looper kill, as shown on map 4."

2. "Manage scenic area C, as shown on 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 on map 4 as having moderate to high hemlock looper damage until such time as the replacement forest has reached visual green-up." Alternatively use a silvicultural system other than clearcutting where possible to remove infection, but meet the retention VQO.

Guideline 6 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 12.

Another aspect of technical achievability is to ensure that lands and resources that are assigned a particular land or resource use possess 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, insects and fire can have significant impact on forest resources. Ensure that your objectives and strategies have the flexibility to deal with these occurrences.

2. Financially Achievable

Ensure 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 applies primarily to process-oriented objectives and strategies that are subject to normal budget allocation decisions. This type of resource management direction would not be relevant as a higher level plan since it does not affect on-the-ground forest operations. Although plans can have a strong bearing on future administrative and spending priorities, they do not in themselves represent budget commitments. Objectives and strategies cannot dictate budget allocations – they are not administrative work plans.

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 13.

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 numerous statutory designations

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EXAMPLE 12

Drafting Technically Sound Objectives and Strategies

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

- propose to retain a high percentage of small patch sizes with very few or no large patch sizes in a landscape that is in NDT3 and, historically, has had few small patches

- promote salmon aquaculture activities in sites of high wind/wave exposure that exceed the currently feasible technological capacity of the industry.

EXAMPLE 13

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.

**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 Environment,
Lands and Parks is responsible for approving
resource activities in Wildlife Management
Areas.

(e.g., federal or provincial protected areas, wildlife management
areas, agricultural land reserve, forest land reserve). Or, a variety
of resource tenures may have been issued over the land (e.g., tree
farm licences, guide-outfitting certificates, mineral claims, utility
rights-of-way).

 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
– see Example 14. 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, excep-
tions to this, such as where protected area decisions resulting from
a strategic land use planning process revise past land/resource al-
location decisions. Where changes to existing allocation patterns
are being proposed, their reasons should be clearly explained.

A Place For Everything
– Everything In Its Place

This group of guidelines advises planners on appropriate use of
all the tools, including objectives and strategies (see chapter 2 –
Box 4, page 5) that are used to express resource management
direction in plans. 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, where
indicators are the criteria employed to measure whether or not
goals and objectives are being realized by the strategies). Note,
however, that higher level plans are defined in the Act to be only
"objectives". See Guideline 9, page 22, "Distinguish Between
Objectives and Strategies".

 Example 15 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, to declaration of a goal to address 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 15

Flow of Resource Management Direction Within a Plan

ISSUE ➜	GOAL ➜	OBJECTIVE ➜	STRATEGY ➜	INDICATOR
Air Quality (LRMP level)				
Periodic/seasonal deterioration of air quality (smoke particulate matter) in the Andrews Valley, with consequent effects on human health	Maintain air quality and human health	Meet or exceed provincial ambient air quality standards in the Andrews Valley at all times	• phase out wood waste burners in the Andrews valley in favour of woodwaste recycling technology • limit prescribed burning in the Andrews Valley to spring and early summer only	• airborne particulates
Wildlife – Moose (Landscape unit level)				
Declining moose density in the Landscape unit due to habitat reductions	Maintain a viable moose population throughout the Landscape unit	Maintain the functional integrity of critical moose winter habitat shown on map 5*	• 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, weeding and 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	• % of mapped winter range retained in thermal cover • density of browse species • stocking ratios • moose populations

* This is another example of where the associated strategies would need to be part of the higher level plan in order to provide sufficient operational direction.

Characteristics of Issue Statements

Issues should:
- pertain to an 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 than can actually be addressed via a plan
- be stated in neutral terms

Issues should *not*:
- normally describe a problem than 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

Guideline 7 Connect with the Issues

Resource management planning is most frequently undertaken in response to particular resource issues – be they problems or unrealized opportunities. Generally speaking, if there are no large issues, there is no need for a plan – standard laws, policies, guidelines and management practices 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 16 where 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) is the cause. 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.

As shown in Example 16, if issues are properly framed, goals and objectives will virtually write themselves, and appropriate strategies will be almost self-evident. Despite the importance of the issue identification step, many planning processes perform this task poorly.

Guideline 8 Distinguish Between Goals and Objectives

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 detailed strategies. This significantly decreases the effectiveness of a plan, particularly where objectives from a resource plan become

EXAMPLE 16

Issue Analysis and Relationship to Goals, Objectives and Strategies

ISSUE		RESPONSE
Symptom	**Cause**	
1. Diminished water quality in … (locations)	• sedimentation	• limitation on logging and road building • watershed restoration
Goal: To protect water quality … (location)	*Objective:* Maintain water quality in … (location) at … standards.	*Strategy:* Logging practices in steep and unstable locations will …; and restoration will occur in … (location)
2. Declining deer/elk populations in … (locations)	• habitat loss	• limitations on logging and road building • habitat restoration
Goal: To maintain deer/elk populations … (location)	*Objective:* Retain critical deer/elk habitat in … (location)	*Strategy:* Logging practices in critical winter range will be … ; and restoration will occur in … (location)
3. Declining forage capacity on forested permanent range, and increasing grazing pressure on grasslands	• forest ingrowth and encroachment due to fire suppression and disruption of natural fire regime	• reclaim permanent range sites and manage for sustained forage production
Goal: To maintain forage capacity on forested permanent range; prevent overuse of grasslands	*Objective:* Restore natural stand structure on forested permanent range … (location); prevent dense forest stocking levels … (locations)	*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 base
4. Declining timber supply in ... (locations)	• enhanced measures to conserve other forest resources • poor utilization • low growth and yield	• gradual lowering of harvesting rates • amended utilization standards in selected locations • commercial thinning • enhanced forestry initiatives
Goal: To maximize short-term timber harvesting opportunities.	*Objective:* Apply intensive forestry practices in … (location); undertake commercial thinning opportunities in … (locations)	*Strategy:* Implement intensive silviculture practices including … in … (locations); stands in 40-60 yr. age class will be evaluated for commercial thinning opportunities …

**Goals Bridge Between Issues
and Objectives/Strategies**

- An LRMP process might identify the *issue* that the planning area faces a timber supply falldown within the next decade, relative to local timber processing capacity.

- A corresponding *goal* might be, "To provide short-term timber supply opportunities throughout the plan area."

- *Objectives* for achieving that general goal might be to, "Identify commercial thinning opportunities in all operable areas".

- More particular *strategies* could then be identified for achieving the objective, such as, "Priority for commercial thinning will be stands in the 40-60 year age class that are located within the Enhanced Resource Development Zone – Timber, as shown on map 3."

established as a higher level plan, and thus where operational planners need to be able to readily interpret the higher level plan material.

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 – see Example 17.

As suggested by Example 17, developing general resource goal statements may be more helpful at the sub-regional planning level than at other more refined levels. Many LRMPs in British Columbia have developed statements of "general management intent" or "intent statements" that are, in effect, resource management goals.

Guideline 9 Distinguish Between Objectives and Strategies

As described in chapter 2, 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 in accordance with the criteria specified in the Guide, and corresponding strategies aimed at achieving those objectives should be drafted and presented independently. Respecting higher level plans, however, statutory decision-makers may wish to establish direction that is more prescriptive than normally expressed in an objective. Where this is the case, the decision maker may choose to translate selected strategies into objectives for the purpose of the higher level plan – see Example 18.

As a general rule, mixing objectives and strategies in a statement that will become a higher level plan should be limited to situations where the strategy is:

- technically sound
- achievable
- viewed as the best way to achieve the objective, and
- not likely to be amended in the foreseeable future.

Guideline 10 Supplement Where Necessary

The standard convention for writing resource management plans that has emerged in British Columbia is to structure objectives and strategies in table format, where resource objectives and supporting strategies are linked, side by side, in two columns in a table. While 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, if not enhanced with supplemental descriptions of management direction, can limit the amount of contextual resource management information that is provided in a plan.

There may be situations where additional descriptions of the desired future condition would help interpret the plan's intended meaning. Although this type of information is often quite broad and informational, and would not be appropriate for adoption as a higher level plan, it may help resource managers, when they are developing or approving more detailed plans, to better envision the desired outcome and management emphasis between resources. Three examples of descriptions of supplemental general management intent are shown in Example 19. These 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 modelled renderings that show how resource conditions would be expected to look over time.

Make it Clear, Tangible and Specific

This group of seven guidelines focuses on drafting objectives and strategies that are specific and worded clearly, as a basis for narrowing the possibility of conflicting interpretation of meaning.

These guidelines can present challenges to multi-stakeholder planning processes that are heavily invested into developing consensus land and resource use recommendations (e.g., LRMP planning round-tables). Participants in such processes are often able to agree to generally worded, or perhaps even ambiguously worded, plan provisions because this leaves open the possibility that their interest will be recognized. Precision on resource trade-offs and priorities can potentially frustrate or delay consensus. Nonetheless, planning participants should recognize that clarity of plan direction is actually consistent with their longer-run interests, given that plans with unclear or overly generalized content may be delayed in their implementation, or perhaps not be implemented at all.

EXAMPLE 18

Incorporating a Strategy into a Resource Objective (Landscape Unit Example)

Objective:
"Maintain representative examples of ecosystems in old growth condition throughout each rotation."

Strategy:
"Commercial harvesting will not be permitted within the old growth management areas shown on map 3."

More prescriptive Objective – Suitable for Establishment as a Higher Level Plan:
"Maintain representative examples of ecosystems in old growth condition throughout each rotation *by* not permitting commercial harvesting within the old growth management areas, which are hereby established, as shown on map 3."

EXAMPLE 19

Supplemental Descriptions of General Management Intent

A sensitive lake environment **(could be a resource management zone, a portion of a resource management zone, or a portion of a landscape unit.)**

The management intent for the Brewster Lake management area (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 viewscapes.

Enhanced Resource Development Zone - Timber

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 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 standards specified in the Forest Practices Code and other laws of common application will have effect.

A landscape unit

The Blueberry Ridge landscape unit, comprising 67,000 ha, will be managed in a manner consistent with the Kamloops LRMP which covers all of the landscape unit. The unit will be assigned a "low" biodiversity emphasis rating. Biodiversity will be maintained primarily through the careful placement of old growth managment areas (OGMAs). Wherever possible, representative areas of blue-listed plant communities will be incorporated into OGMAs. In addition, no harvesting will be permitted in OGMAs. Outside of OGMAs, 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 managed 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 affected portions of 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, visual buffers around traditional camping sites will be established.

Guideline 11 One Thing at a Time

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

Sometimes, however, plans group management direction under resource or resource use headings that are very general and all-encompassing. This can sometimes cause 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 20.

Again, preparing a well-defined list of issues at an early stage in the planning process (see Guideline 7, page 20, "Connect with the Issues") can help define the particular resources or resource uses for which management objectives and strategies are needed.

Guideline 12 Focus Mainly on the Physical

From an operational perspective, the most valuable objectives and strategies are those that guide how future on-the-ground resource management activities will occur. Indeed, this is a basic requirement of higher level plans, which pertain to the type and level of forest resource management activities that are appropriate for particular locations.[5]

Many objectives and strategies in regional and sub-regional plans, however, tend to be dominated by provisions that direct future process, such as what and how administrative or decision-making activities will be carried out – see Example 21(a). While objectives and strategies that direct future process are generally easier to write – because they defer trade-off and integration decisions to a later time – it is important to try to extract from every planning process, including strategic land use planning processes, as much direction on physical resource management as is possible and reasonable. Compare Example 21(a) with 21(b) which provides increased prescription in the strategies, in an effort to influence physical resource management without the need for a lot of future process. Some future process is, however, still identified (e.g., inventory initiatives in identified areas).

If objectives such as the one shown in Example 21(a) were to be established as resource management zone objectives under the Forest Practices Code, operational planners would be legally

EXAMPLE 20

Separate Broad Concepts into Individual Resources

Overarching concepts like "biodiversity" or "terrestrial ecosystems" or "aquatic ecosystems" might be broken down into their constituent parts. In the case of biodiversity, objectives and strategies could, at the landscape level, be organized under the following sub-headings:

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

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[5] Higher level plans may, however, include process direction where provided for in legislation (See Box 2, page 3).

EXAMPLE 21

**Procedural Versus Substantive
Resource Management Direction (RMZ Example)**

(a) Example of Heavily Process Oriented Direction

OBJECTIVES	STRATEGIES
Maintain high capability ungulate winter range	• identify and map high capability ungulate winter range at the landscape level • incorporate the maintenance of high capability ungulate wintering range (e.g., thermal and escape cover, sustainability of forage and browse) into local plans • plan and develop new access routes to avoid direct disturbance within, or in close proximity to, high capability ungulate wintering range

(b) Example of More Substantive Direction

Protect the existing quality of high capability ungulate winter range, which is hereby established, as shown on map 5	• 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) in accordance with priorities established in annual MELP ungulate habitat management plans • enhance the quality of ungulate winter habitat inventories in those areas recognized to have inventory deficiencies, as shown on map 6

obligated when preparing operational plans for that area to develop operational 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 a future planning process will provide the substantive resource management direction. This would place both the operational planner and the approving officer in a difficult situation – they would be required to observe the stated legal objectives, but would have very little information on how to implement them. Operational plans that are approved on the basis of this type of resource management direction may be subject to challenge, given the lack of specificity and the possibility of conflicting interpretation.

Certainly there are scale limitations at the strategic land use planning level that constrains the amount of prescriptive resource management direction that can be provided in plans (as well as other factors – see Guideline 16, page 31, "Provide Detail – As Appropriate"). But, even using reconnaissance-level inventory information, more prescriptive direction such as that shown in Example 21(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 provide direction on filling information gaps, institutional arrangements for future decision-making, future planning priorities, etc. See Example 27, page 30, as an indication of where process-oriented direction might be relevant in an LRMP situation. Where possible, process-related

direction should be contained in the section of the planning 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 the spatial application of physical resource management actions, not on administrative processes used to make decisions. Again, process-oriented direction of this nature is not relevant as a higher level plan.

Finally, it is not necessary to provide direction on what would be considered routine operating procedures that are already established through 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 13   Identify Where and When

1. Location of Objectives and Strategies

By definition, resource management planning is spatial; therefore, identifying "where" the objectives and strategies are to apply is essential. The "where" could be an extensive geographic area or a particular site – see Box 10.

Maps are the preferred method of communicating the spatial application of objectives and strategies, but resource management direction can also be expressed using narrative description of geographic location – see Example 22.

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, etc.).

Where a map reference is contained in a resource objective that becomes established as a higher level plan, the map should be appended to the objective so it is incorporated into the higher level plan. Resource managers are legally accountable to ensure that the higher level plan is carried out in the location specified on the map. Therefore, where a map will become part of a legal instrument, it is 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 procedure set out in the legislation for amending higher level plans must be followed.

EXAMPLE 22

Options for Expressing the Spatial Applications of Objectives

- An objective might say, "Protect deer and elk winter range on the *south-facing slopes of Stewart Ridge."* This may be acceptable if it is clear where the south-facing slopes of Stewart 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, or "valuable" old growth areas, or "critical" grizzly habitat. Unless these terms are defined in some way which allows resource managers to spatially locate the resources, the intent will be open to conflicting interpretations.

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 sub-region, landscape unit or a recreation trail
- a broad zone or geographic designation within the planning area
- an individual management area or unit
- a particular location or class of locations, such as a habitat type, or
- a site or feature.

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 protected areas are being defined in a plan that will completely prevent or substantially constrain future commercial activities in those 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.

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 23.

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 24.

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 25.

A plan might also stipulate that an objective is to cease to have effect following a specified event – see Example 26.

Where a resource objective is drafted to commence or expire following a prescribed event or until a certain set of conditions are met, it is important to be clear on what will automatically trigger its expiry. This is particularly important when drafting resource objectives that are to become higher level plans. If it is not clear when the higher level plan begins or ceases to have effect, it will be necessary to go through the administrative procedures of cancelling or revising the higher level plan, as provided for in the Act.

Guideline 14 Name Names

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 the decision-making or program activities of management agencies. Or, in some situations it may be desirable to identify certain qualifications required of individuals that have a role in delivering objectives and strategies.

The need to "name names" may be most relevant in strategic land use planning exercises where, given the broad scope and scale of planning, there is a greater tendency to identify

EXAMPLE 24

Time-Specific Resource Management Direction

OBJECTIVE	STRATEGIES
Mountain Goats Minimize disruption of mountain goats in and adjacent to important winter habitat features, as shown on map 5.	• forestry operations in locations within 200 metres of the areas shown on map 5 are prohibited between October 1 to April 30 each year

EXAMPLE 25

Resource Objective that takes Effect Following a Specified Event

OBJECTIVE	STRATEGIES
Maintain important grizzly habitat features in areas of known high density of grizzly bears, as shown on map 6. This objective will come into effect *following* completion of an inventory of grizzly bear habitat attributes for the area of known high grizzly density, as shown on map 6.	• a 100 metre no development buffer will be maintained around the following grizzly bear habitat attributes (as determined through future inventory): → denning sites → concentrated feeding/foraging sites → primary travel corridors (e.g., avalanche chutes) → breeding areas

EXAMPLE 26

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 future availability of new range areas, following scheduled harvesting.

OBJECTIVE	STRATEGIES
Rehabilitate forage resources in the North Pipers Ridge area, as shown on map 2.	• Allow extensive cattle grazing in the North Pipers Ridge area until temporary range opportunities in the South Pipers Ridge area (see map 2) are created and approved by the district manager. Develop a rotational grazing system that encourages restoration of the desired plant community.

EXAMPLE 27

Identifying Roles and Responsibilities (LRMP Example)

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

OBJECTIVE	STRATEGIES
Salmon Aquaculture Provide opportunities for salmon aquaculture in suitable coastal areas, as shown on map 1, subject to consultation with local First Nations and local government.	• salmon aquaculture tenure applications will not be accepted in the areas shown on map 1. • regional Fish Farm Review Committees will refer all applications for salmon aquaculture tenures to the relevant local First Nation bands and local governments. • regional Fish Farm Review Committees will facilitate dialogue and information exchange between tenure applicants and local First Nations groups and local governments, as a basis for adjudicating tenure applications.

administratively oriented objectives and strategies. The need to clarify responsibilities is most likely to occur where jurisdictional arrangements are more complex or potentially overlapping – see Example 27. 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 plan implementation strategy.

In the case of higher level plans, the stipulation of roles and responsibilities within objectives would not normally be required as it is the district manager's responsibility to ensure that they are implemented.

Guideline 15   Make It Measurable

1. Indicators

"If you can't measure it you can't manage it." This adage refers to the need to define measurable objectives that enable effective monitoring which informs resource managers of whether or not a plan is working. Are the plan's resource management strategies successfully achieving the plan's objectives? If they are not, then the strategies need to be changed. This is the essence of adaptive resource management.

Resource management plans sometimes identify the specific indicators that will be used to monitor the achievement of the plan's objectives – see Example 15, page 19. Knowing what indicators will be used to measure the achievement of objectives can help planners draft sensible and attainable objectives and strategies.

2. Resource Supply Levels

Resource supply levels (sometimes referred to as resource targets) – representing a projected level of output of resources, or the rate at which a desired outcome will be achieved – can help to clarify goals, objectives and strategies. However, because they are often difficult to set with confidence, it is often better to treat them as guidelines (i.e., by including the absolute values as non-legal statements in strategies, or descriptions of general management intent that are not established as a higher level plan) – see Example 28 for an indication of where including resource supply levels in objectives may be problematic.

Committing to a specific level of resource outputs in resource objectives that are established as higher level plans should be restricted to situations where there is a solid information base that demonstrates the commitment to be achievable (e.g., old growth retention as a landscape unit objective based on targets in the *Landscape Unit Planning Guide*). Where it is considered appropriate to include a specific value in a higher level plan, but if there is some remaining uncertainty, it may be a good idea to provide a range of values as illustrated in Example 29.

Guideline 16 Provide Detail – As Appropriate

One of the biggest challenges in drafting objectives and strategies is knowing how much detail to include – how much of the "what", "where", "when", "how" and "who" to supply. On one hand, certainty of outcome is important, suggesting that objectives and strategies should be as detailed as possible. On the other, there are practical limitations (e.g., map scale, and time and cost constraints) that affect how much detail can realistically be provided in any objectives and strategies. And, importantly, there can be downsides to creating detailed legal prescriptions that may unreasonably limit future management flexibility. The following factors influence the amount of detail that objectives and strategies should contain:

- 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
- whether or not the intent is to alter basic Forest Practices Code requirements, where permitted by legislation, and
- availability of other resource plans and guidelines.
  Each of these factors is considered below briefly.

EXAMPLE 28

Problems Encountered by Including Resource Supply Level in Objectives

The following objectives would be inappropriate, particularly if they were established as higher level plans where a legal requirement would be created to meet the objective in all circumstances.

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 wood annually from the south-east portion of the landscape unit, as shown on map 4."
- Market conditions and cut control specifics may prevent achievement of the objective. Identifying absolute timber harvesting levels should be avoided. Rate of harvest determinations for management units should be 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.

EXAMPLE 29

Providing a Range of Values

"Maintain 50-70% of permanent rangeland in late seral condition in the Upper Ashburton management unit."

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 and resource management zones) are normally planned using small-scale map information (e.g., 1:250,000 working scale; 1:500,000 to 1:1,000,000 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. These factors are major determinants in how much detail is appropriate. Invariably, RMZ objectives and strategies will be less detailed than landscape unit or sensitive area objectives and strategies, where the land area is smaller and the planning scale larger, based on intensive resource inventories. LRMP content will generally concern itself with provincially or regionally significant resources. Landscape unit and sensitive area planning processes will primarily deal with locally significant resources.

> **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 always be a subsequent plan to clarify and refine resource management direction. Thus, when drafting objectives and strategies, the goal should be to develop as much resource management detail as possible, but commensurate with the planning level and scale, and subject to the other considerations identified below in this section. 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 imminent 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 prescriptive 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 limits the amount of prescriptive direction that can be reasonably provided in objectives and strategies. For example, undersurface resources such as minerals and petroleum and natural gas are typically not exposed at the surface where they are easily measured and mapped – inventory information on resource quality and quantity is normally limited to broad mineral resource potential maps, modelled

EXAMPLE 31

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 on 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 objective 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, prescriptions on the percentage of old growth management areas, the 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.

on the known distribution of geological formations and deposits, and past exploration and development activity – see Example 30.

The same situation applies for resource uses that are more site-specific in nature. For example, areas or sites with future potential for commercial recreation in the backcountry are seldom pre-identified on maps. Rather, the information base is normally limited to general tourism or recreation potential or opportunity maps. The extent of available information therefore affects the level of detail that can be reasonably contained in objectives and strategies.

5. Degree and Complexity of Resource Conflicts

Guideline 7, page 20, "Connect with the Issues" reminds us that the job of objectives and strategies is to address issues. These are normally a result of conflicting resource uses. The main tools available to planners to address conflict are to separate incompatible uses by designating one use a priority over others (i.e., prevent conflict) or to identify ways to integrate uses with each other (i.e., mitigate conflict). See Guideline 5, page 15, "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 tradeoff 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 should communicate trade-off and integration direction – see Example 31.

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 32.

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 is reflected in objectives and strategies that minimize the potential for conflicting interpretation.

7. Alteration of Basic Forest Practices Code Requirements

The Forest Practices Code sets out basic requirements for certain operational forest practices that will apply unless those requirements are varied by a higher level plan – see Example 33 and Box 2, page 3.

Therefore, wherever the management intent is to alter the basic provisions of the Forest Practices Code, the higher level plan must clearly spell out the standards that are expected. If it is unstated or unclear, the basic provisions will prevail.

Where standard Forest Practices Code provisions are desired, it is not necessary or appropriate to repeat these in resource objectives, as they are already required by law.

8. Availability of Other Resource Plans and Guidelines

There may be situations where an existing local resource plan or a set of resource management guidelines already supplies appropriate objectives and strategies for all or a portion of a plan area in question. Where this occurs, the appropriate provisions of the existing objectives and strategies could be incorporated into the new plan.

Guideline 17 Say What You Mean

1. Action Verbs

All resource objectives and most strategies contain a verb which indicates what is to happen to the resource in question. e.g., To "protect", "increase", "retain", "conserve", etc.

Where objectives are established as higher level plans, clarity of the meaning of the verbs used in the objectives is always important. Concerns may arise where a verb implies a particular management direction, but is unclear on the expected outcome.

The planner's challenge is to try to narrow or eliminate subjectivity and the associated potential for conflicting interpretations. There are several ways to increase the precision of the meaning of verbs. One is to define the 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.

EXAMPLE 32

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 mill closure, if particular management actions are not followed, and certain impacts are exceeded.

EXAMPLE 33

Detail Is Needed Where Basic Code Requirements Are Being Modified

The Operational Planning Regulation identifies a maximum cutblock size in forest development plans unless a higher level plan overrides that maximum. The Operational Planning Regulation also enables standard green-up requirements to be varied by a higher level plan.

Clarifying Verb Meaning with Modifying Language

Objective: "Maintain water quality in the Blaine 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 Blaine 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 would assume that relevant ambient air quality criteria are in place, and that it is possible to achieve those criteria in the planning area.

Appendix 3 provides common definitions of action verbs that may be 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 verb's meaning – see Example 34.

Certain verbs, such as "recognize", "acknowledge", "address", "consider", "manage", do little to help communicate a clear management direction or establish a management obligation. Such verbs should be avoided unless accompanied by words that help clarify management direction. For example, "Manage the Hope Creek recreation site for a semi-primitive recreation experience" is an acceptable objective because it communicates the objective 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 35.

If the terms shown in Example 35 are used in drafting objectives or strategies, their meaning should be clarified in a definition or interpretation section in the planning report. If they are not defined, use of terms like "should", "may" and "whenever possible" should be avoided, as they leave too much room for interpretation.

3. Good Drafting Habits

The way that objectives and strategies are constructed and the selection of particular words can significantly reduce interpretation problems.

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 prevent interpretation difficulties include:

- **use *active voice* instead of *passive voice***

  For example, instead of saying, "water quality will be protected by...", say "protect water quality by..." Resource strategies should also be expressed in active voice unless terms like "will", "should" or "may" are used in strategy statements (see Example 35) which may require the use of passive voice. Passive voice typically has verbs ending in "ed" or "en". (e.g., "Road construction in areas shown on map 3 *should* be limit*ed* to ...")

- **use the *present tense* except where it is necessary to refer to future events**

  For example, say, "Limit timber harvesting to ..."; don't say, "Timber harvesting *will be* limited to ..."(unless the word will is being used to communicate firm management commitment – see Example 35). However, it would be acceptable 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 …"

- ***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.."

Words that Communicate Degree of Commitment

- Using the word "will" would normally indicate that the action is required as a standard practice, whereas the word "should" would indicate 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 required.

- Use of the word "may" would allow for activities that may or may not be appropriate, depending on circumstances, thus providing a relatively high degree of discretion to resource managers.

- 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 resource plans are able to effectively communicate their management intent beyond the group responsible for originally developing the plan.

An Illustrated Example

Flow of Objectives and Strategies Between Planning Levels

Objectives and strategies in plans should flow through planning levels – from strategic to operational. Objectives and strategies for a resource management zone provide strategic land and resource management direction that is reflected in more detailed planning for smaller areas, such as landscape units. In turn, objectives and strategies in landscape unit plans are meant to provide guidance and be reflected in operational plans like forest development plans, silviculture prescriptions and stand management prescriptions.

This insert demonstrates the flow of resource management objectives from resource management zones through landscape units to operational plans. Example objectives are provided for the Easton River resource management zone, the Blueberry Creek landscape unit, and a forest development plan and silviculture prescription for a particular area within the landscape unit. All areas used in this insert are hypothetical.

To support the example objectives, a map and graphic renderings show how the objectives and strategies contained in higher level plans, and as interpreted in the operational plans, might look when implemented over time. This shows, in a general sense, what the desired future conditions might look like on the ground.

The Overview Map portrays the Blueberry Creek landscape unit, which comprises a portion of the Easton River resource management zone. The Overview Map shows several colour-themed layers of key resource information that are referenced in the plan objectives and strategies for the area. Also shown is one potential long-term harvesting concept, which spans at least three harvesting periods, with green-up.

Three locations within the landscape unit (see Overview Map) have been selected to view future conditions that achieve the objectives. Graphic renderings provide a panoramic view of the future condition of forest cover for the existing state and the first three harvesting periods. Viewpoint A and B are at treetop level, and viewpoint C is approximately 1000 meters above treetop for a broader overview.

Maps referenced in this insert (with the exception of the Overview Map) are not included here.

OVERVIEW MAP
Blueberry Creek Landscape Unit

MINISTRY OF FORESTS
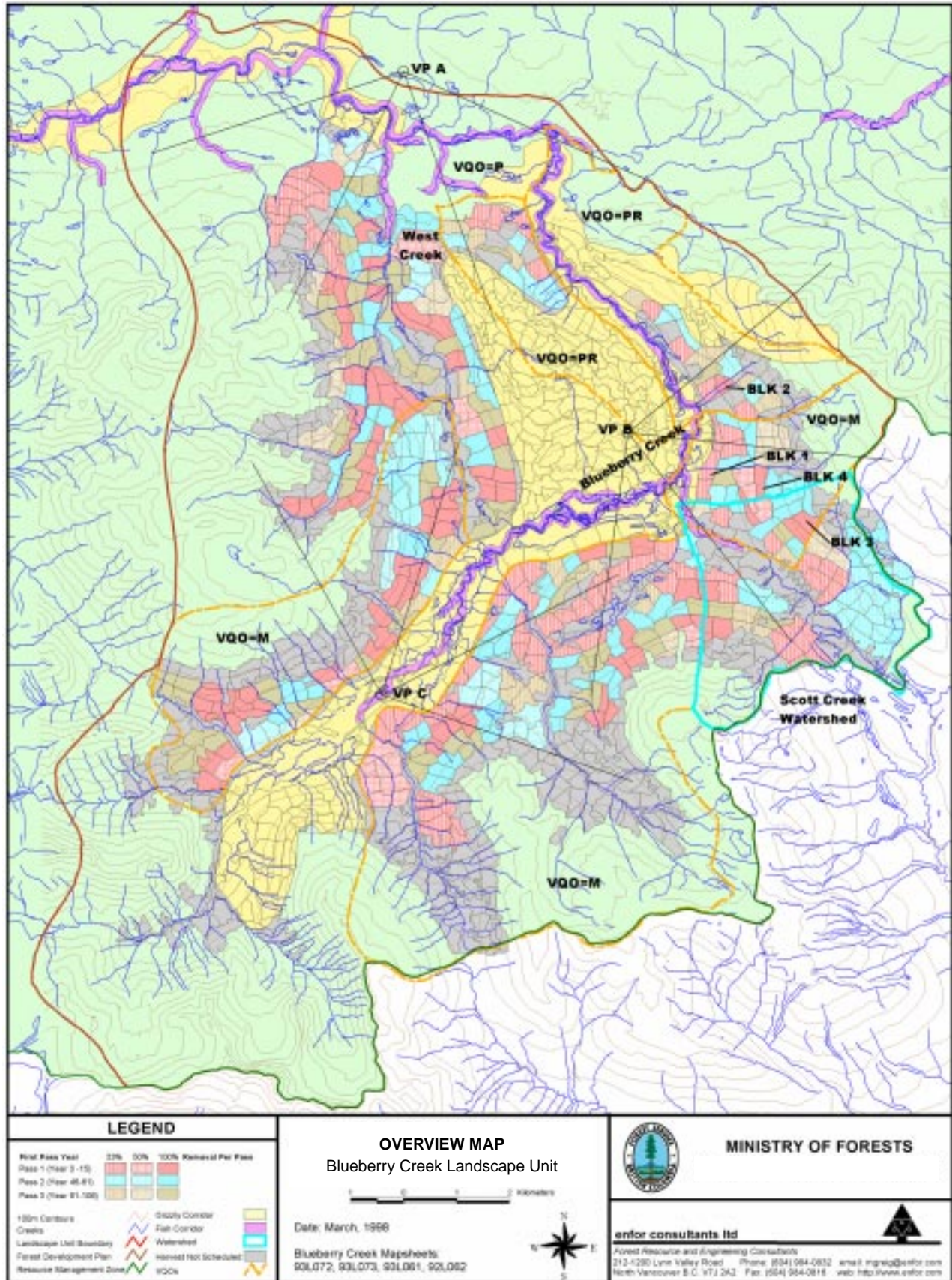
Resource Management Zone Objectives and Strategies

Easton River Resource Management Zone*

EASTON RIVER RMZ OBJECTIVES	EASTON RIVER RMZ STRATEGIES
Wildlife: Grizzly Bears	
Retain high value grizzly bear habitat in the Easton Creek Resource Management Zone. Minimise the period that grizzly bears are exposed to disturbances resulting from forestry activities in the Easton Creek Resource Management Zone.	• Minimise forestry activities, including road building, in the following key areas: seepage areas, riparian floodplains, meadows, fens, wetlands, deciduous south-facing slopes, and avalanche chutes. • Schedule harvesting activities to maximise periods of inactivity between forestry operations. • Control access into areas of high value grizzly bear habitat. • Approximate a four-pass system for forest harvesting with 30-year leave periods. • Defer all operational activities in the Upper Blueberry Creek grizzly corridor pending further assessment of appropriate silviculture systems.
Fish Habitat	
Maintain the quality of high value fisheries spawning and rearing habitat, as shown in map 2.	• Minimise the impacts of surface erosion and sedimentation from forest harvesting, silviculture, road building and road maintenance activities.
Visual Quality	
Protect visual quality in areas of significant scenic importance for recreation and tourism, as shown on map 7.	• *Complete a detailed visual landscape inventory to refine visual sensitivity unit boundaries within the areas depicted on map 7.* • Manage landscape disturbances in the areas shown on map 7 according to the following guidelines: → in visible foreground areas and important or prominent midground areas, disturbance may be discernible but not prominent in the landscape; → in less important or prominent foreground areas, most midground areas and important background areas, disturbance should remain visually subordinate in the landscape; and → in most background areas and less important midground areas, landscape alterations may be visually apparent, but should be designed to blend into the landscape in form and colour. → the areas identified on Map 7 are known scenic areas for the purpose of section 18 (1) (e) (viii) of the Operational Planning Regulation.

* The objective and strategies shown in *italicized black text* in this insert do not meet the criteria for a higher level plan. They are appropriate as policy guidance, however, and were used to build the scenario reflected in this example. For information on linking strategies and objectives for the purpose of a higher level plan, see Guideline 9 on page 22 of the Guide.

Landscape Unit Objectives and Strategies

Blueberry Creek Landscape Unit

BLUEBERRY CREEK LANDSCAPE UNIT OBJECTIVES	BLUEBERRY CREEK LANDSCAPE UNIT STRATEGIES

Wildlife: Grizzly Bears

Protect high value (class 1 and 2) grizzly bear habitat in areas of known high and moderate grizzly bear density, as shown in map 6.	• Where areas of operable timber and class 1 and 2 grizzly bear habitat (seepage areas, riparian floodplains, meadows, fens, wetlands, deciduous south-facing slopes and avalanche chutes) coincide, apply the following guidelines: → locate roads at least 150 m from grizzly bear habitat; → retain areas of mature forest cover of approximately 100 m in width adjacent to class 1 and 2 grizzly bear habitat to provide for bedding and security cover. The degree of cover will vary with the density of coniferous trees in forested areas; and → use non-clearcut systems adjacent to areas of mature forest cover retained for grizzly bear use.
Minimise disturbance to grizzly bears by avoiding extended periods of access into the Blueberry Creek drainage and limiting harvesting to winter activity wherever feasible.	• Permanently deactivate the Carmen West Forest Service Road (west of Blueberry Creek) from the km 16 signpost. From that point, control non-industrial access during forest operations. Reopen when harvested areas reach rotation age. • After plantations are satisfactorily re-stocked, restrict access on the Carmen West Forest Service Road and on the McDonald Forest Service Road by access control points and permanent road deactivation. Do not re-enter this watershed for harvesting until mid-way through the rotation.

Water Quality and Fish Habitat

Protect water quality and critical fish habitat in the Blueberry Creek drainage (see map 7) from sedimentation effects from logging, silviculture and road development and maintenance.	• For the Scott Creek watershed, no more than 15% of the total harvestable area is to be less than 10 m tall. • Minimise the number of stream crossings throughout the rotation. • Conduct annual inspections of all drainage structures on the road network by September 30th, and complete all identified repairs by October 15th of the same year.

Visual Quality

Manage scenic areas to meet the visual quality objective as identified on Map 4.	• The Visual Resource Management Guide Book provides the specifications/guidelines for achieving VQOS. For the purposes of this plan, foreground is considered to be approximately 40 m to either side of the road.

Forest Development Plan (FDP) and Silviculture Prescription (SP)

(for portions of Blueberry Creek Landscape Unit – see Overview Map)

The appendices referred to in the FDP and SP are not contained in this insert. They are included in the text to provide a more representative example of the content of operational plans. For simplicity, the content supplied in the SP only deals with how a single block will be managed with respect to the issue raised in the FDP. In reality, an SP may deal with many management issues in each block. The language used in both the FDP and SP examples is a generalized description of content. It does not convey the complete legal requirements nor does it reflect standard format.

FOREST DEVELOPMENT PLAN

Wildlife Habitat: Grizzly Bears

- Mapping for known grizzly bear habitat was considered for locating and designing road and cut block locations and forest practices. Areas under the plan, which encompass grizzly bear habitat, are shown on mapsheet 93L012 (portions of the Blueberry Creek drainage).

- In accordance with the maps provided and MELP review comments, and consistent with the Easton River resource management zone objectives and strategies and the Blueberry Creek landscape unit objectives and strategies, the following measures will be undertaken to protect high value grizzly bear habitat in the Blueberry Creek drainage:

  → no roads will be located within 150 m of mapped habitat;

  → roads will be deactivated once harvesting is complete (3-year schedule is included);

  → timber development will be scheduled for a relatively short period 1998-2003 (see Appendix I), followed by a prolonged period of inactivity (30 years);

  → cutblocks developed to maintain a minimum 100 m unharvested buffer will be adjacent to all seepage sites, meadows, fens, avalanche tracks, and south facing deciduous slopes; and

  → CP 175 blocks 2 & 3, which border on mapped habitat areas, will be harvested using a group selection silvicultural system to help maintain security cover.

SILVICULTURE PRESCRIPTION

Management Objectives (CP 175, Block 2)

- Consistent with the Blueberry Creek landscape unit objective, the High Mountain Timber Co. Forest Development Plan (1998-2003) identifies high value grizzly bear habitat immediately adjacent to the western boundary of this block (Block 2). The long-term management objective for this habitat is to protect it from disturbance.

Required Site Conditions – Wildlife Resources

- The complex of wetlands and meadows on the western boundary of this block will be protected by maintaining a 100 m buffer of mature forest cover next to them. In addition, standard unit A will be harvested using a group selection system and unit B will be harvested with a single tree selection system to help retain security cover.

- Within grizzly bear habitat areas, the maximum opening size will be 1 ha for unit A and unit B will retain a minimum of 60% of existing basal area in a range of diameter classes (see stand and stock table under stocking requirements).

- Subhygric sites in unit B will be planted at reduced levels (target 600 SPH) with a reduced minimum intertree spacing of 1 m. This will encourage a clumped distribution of trees and better herb and forb production for bear forage.

- avoid mechanical site preparation in areas that had >20% vaccinium ground cover prior to the harvest.

- In areas of excessive in-growth, spacing will be carried out to maintain low stocking densities and promote forage production.

Forest Development Plan and Silviculture Prescription *(continued)*

FOREST DEVELOPMENT PLAN	SILVICULTURE PRESCRIPTION

Water Quality and Fish Habitat

- No area in this Forest Development Plan is within a community watershed. Watershed assessments were completed for the Scott and Seymour Creek drainages and were made available for review at the same time the FDP was submitted. In addition, a watershed assessment has been completed for the Blueberry Creek drainage. To date, no harvesting has occurred in the drainage, however, the Blueberry is directly tributary to the Easton River, which has been designated as constituting a significant downstream fishery (as determined by the District Manager and the Designated Environment Official).

- Riparian classification is known for Blueberry Creek. Appendix III, Table B contains the classification of all reaches adjacent to proposed blocks and roads. There are no lakes within the area under the plan.

- Stream crossings in the Blueberry Creek drainage will be minimised. No crossings have been proposed along lower reaches. All in-stream work will be conducted in accordance with MELP guidelines on in-stream work windows and culverts, and other crossing structures on fish streams will be placed in a way which allows fish passage.

- The road layout and design will be developed after the approval of this FDP and will ensure that impact to water quality and fish habitat will be minimized consistent with RMZ and landscape unit objectives.

Management Objectives (CP 175, Block 1)

- The western boundary of this block is adjacent to an S3 stream. The management objective for the Riparian Management Area in this block is to minimize erosion and sedimentation in order to maintain water quality and aquatic ecosystems.

Riparian Management Strategies

- A 20 m no-harvest riparian reserve will be maintained along the S3 stream runs into Scott Creek. Machinery will not be permitted to operate within this reserve except to directionally fall hazardous snags away from the creek. No equipment will be permitted within 5 m of streambanks. A 20 m riparian management zone will also be established adjacent to the reserve.

- This riparian management zone will be partially harvested leaving a minimum basal area of 20 m^2 per ha., in diameter classes greater than 7.5 cm (breast height). Partial cutting in the management zone is intended to reduce potential windthrow in the reserve. Windthrow hazard was rated as moderate.

- Cross-stream skidding or yarding will not be permitted. Any debris landing in the creek as a result of falling hazardous snags will be bucked and removed manually. Both the management zone and reserve are expected to provide adequate shade to maintain water temperatures and minimise siltation.
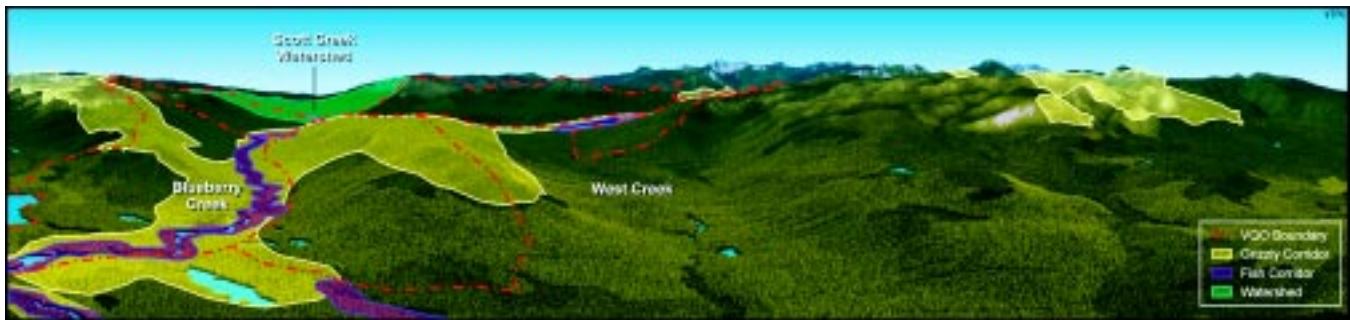
Forest Development Plan and Silviculture Prescription *(continued)*

FOREST DEVELOPMENT PLAN	SILVICULTURE PRESCRIPTION
Visual Quality	**Management Objectives (CP 175, Block 4)**
• Harvesting operations will be conducted in accordance with recommendations in the VIA report contained in Appendix IV.	• This block will meet a partial retention VQO when viewed from viewpoint 3 and from km 13-23 of the Carmen Forest Service Road and is consistent with the VQO established by landscape unit objectives.
• Known scenic areas will be managed to meet visual quality objectives as indentified on Map 4 of the Blueberry Creek Landscape Unit Plan and consistent with the Blueberry Creek Landscape Unit Objectives for visual quality.	**Required Site Conditions – Visual Quality**
	• Known scenic areas are identified on FDP maps.
	• A visual impact assessment has been completed and is attached.
	• The block will be harvested using a clearcut system with reserves. Reserve patches will not be harvested and will occupy approximately 5% of the gross cutblock area. Block boundaries will be irregular responding to lines of force, in part, reflecting the shape of naturally existing openings.
Access	**Management Objectives (CP 175, Block 3)**
• The forest road network will be designed to optimise hauling safety and efficiency and minimise environmental impacts. Road construction/ modification, deactivation, and maintenance schedules are contained in Appendices VIa, VIb, and VIc. The status of roads with respect to deactivation, use, and agency responsibilities, for roads in the planning area, is shown on the road network maps attached.	• Motorised access into this block is to be restricted to the period beginning from the commencement of road construction to completion of crop establishment. The period of total motorised access shall not exceed 10 years.
• Consistent with the Blueberry Creek Landscape Unit Objectives, road use in the Blueberry Creek drainage will occur over a relatively short period (~12 years) to minimise disturbance to grizzly bears in the watershed. Approximately 33% of available timber in the operable land base will be harvested over a five-year period.	**Required Site Conditions – Other Values**
	• Roads shall be in a fully deactivated state upon completion of crop establishment.
• Use of the Carmen West Forest Service road by non-industrial users during this period will be prevented through the use of gates between May 1st and June 15th and between August 15th and October 30th each year. Once forest operations are completed, the Carmen West Forest Service Road beyond km 16, and the McDonald Forest Service Road, will be permanently deactivated until the next entry.	
• Other measures to be undertaken to reduce disturbance in the watershed include:	
→ avoiding road locations on hazardous terrain, within 150 m of critical wildlife habitat, and in riparian areas; and	
→ minimising stream crossings.	

Viewpoint A

Blueberry Creek: Viewing Southeast to Scott Creek Watershed

A-1 Existing state with resource layers for visual quality objectives (VQO), grizzly habitat (corridor), fish habitat (corridor) and watershed boundaries

A-2 Years 0-15

A-3 Years 46-61

A-4 Years 91-106

Viewpoint A shows a portion of the Blueberry Creek Landscape Unit, which comprises Blueberry Creek, Scott Creek and West Creek. Harvesting activity has been directed away from the identified grizzly corridor to retain high value grizzly habitat, and high value fish habitat. Lesser constrained areas in West Creek may have a higher rate of harvest. Visually sensitive areas in the back of West Creek and the front of Blueberry Creek receive a lower rate of harvest. Harvesting is scheduled over at least three entries, 15 years each with 30-year periods of inactivity between.

Viewpoint B

Blueberry Creek: Viewing Southeast to Scott Creek Watershed

B-1 Existing state with resource layers for visual quality objectives (VQO), grizzly habitat (corridor), fish habitat (corridor) and watershed boundaries

B-2 Years 0-15

B-3 Years 46-61
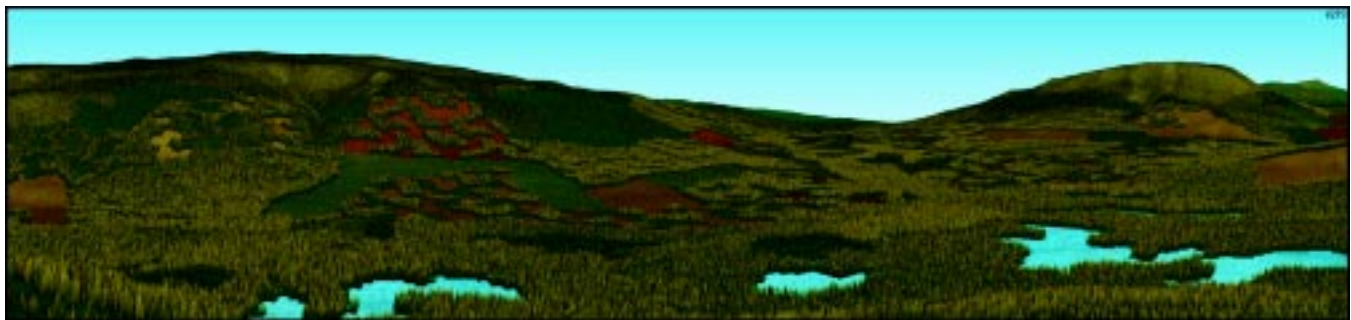
B-4 Years 91-106

Viewpoint B shows the area within Blueberry Creek Landscape Unit, including the Scott Creek watershed. Activity next to grizzly habitat has been minimised, with adjacent openings being small multiple pass blocks. Development in the Scott Creek watershed will ensure that at least 85% of the area will be forested with free growing trees larger than 10m. The development pattern will also protect high value fish habitat.

CP 175 Block 1 is adjacent to an S3 stream and is designed to maintain water quality with its reserve and management zones. CP 175 Block 2 is within the area denoted as VQO-PR from viewpoint B. It is being managed to ensure that visual disturbances are kept below 15% alteration for the entire VQO. Visual quality is less of an issue in the other foreground areas. In the background of all areas, alterations are designed to blend into the landscape form.
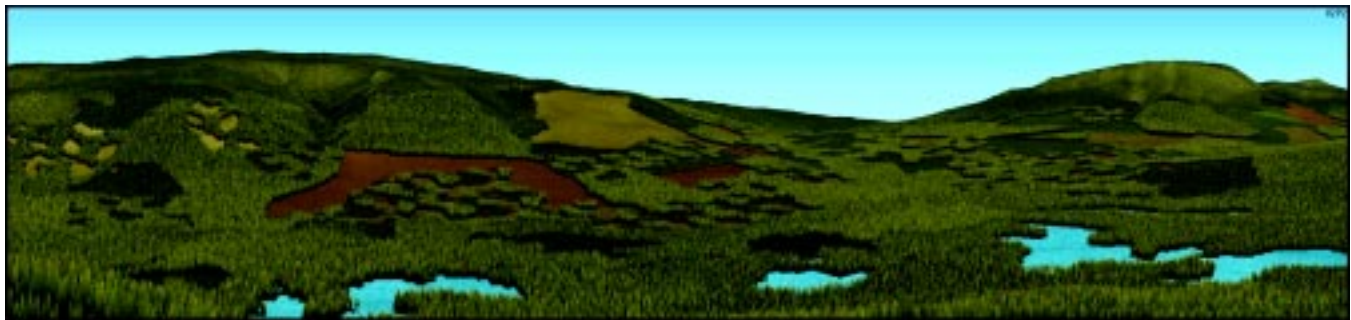
Viewpoint C

Blueberry Creek: Viewing Northeast down Blueberry Creek


C-1   Existing state with resource layers for visual quality objectives (VQO), grizzly habitat (corridor), and fish habitat (corridor)

C-2   Years 0-15

C-3   Years 46-61
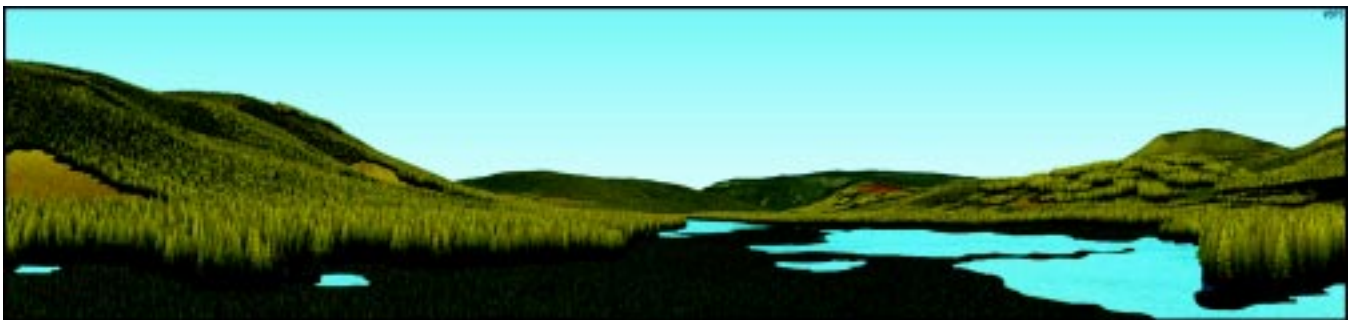
C-4   Years 91-106

Viewpoint C shows the area within Blueberry Creek Landscape Unit. Activity next to grizzly habitat has been minimised, with several buffer areas located next to habitat along the westerly (left) side. Here too, visual quality is less sensitive, though cutblocks are designed to blend into the landscape form. Refer to the close up view below for items regarding the east (right) side.

C-4 Years 91-106, close-up view

This view of the east side of Blueberry Creek shows that grizzly habitat (corridor) and high value fish streams have been left intact, and that a series of patch cutblocks have been used to harvest this area over time. Visual quality will be altered over time within the modification VQO, though cutblocks have been designed to fit the landscape. Overall, this type of development pattern is consistent with objectives set at the resource management zone, landscape unit and operational level.

Guidelines for Writing Effective Resource Management Direction

LOOK UP – LOOK DOWN – LOOK WITHIN

1. Consider legislation and policy
2. Conform with "plans above"
3. Take account of "plans below"
4. Reflect geographic designations or zones
5. Be internally consistent
6. Make sure it's achievable

A PLACE FOR EVERYTHING – EVERYTHING IN ITS PLACE

7. Connect with the issues
8. Distinguish between goals and objectives
9. Distinguish between objectives and strategies
10. Supplement where necessary

MAKE IT CLEAR, TANGIBLE, AND SPECIFIC

11. One thing at a time
12. Focus on the physical
13. Identify where and when
14. Name names
15. Make it measurable
16. Provide detail – as appropriate
17. Say what you mean

Resource Objective and Strategy Writing Checklist

For every Objective and Strategy, ask:

Look Up – Look Down – Look Within

Guideline 1   Consider Legislation and Policy

Does the objective/strategy accord with provincial laws and regulations and government policy?

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

Guideline 2   Conform with "Plans Above"

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 higher level plans. In the Act, consistent means, "does not materially conflict with".

Guideline 3   Take Account of "Plans Below"

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 4   Reflect Zones and Geographic Designations

Is the objective/strategy consistent with any zone or geographic designation that applies to the same land area as the objective/ strategy?

It is acceptable for discrepancy to occur occasionally on a site-specific basis, but there should not be a general or widespread discrepancy.

Guideline 5   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 6   Make Sure It's Achievable

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

If not, it is unlikely to be implemented.

A Place for Everything – Everything in its Place

Guideline 7   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 resource issues helps to structure appropriate and well-worded objectives and strategies.

Guideline 8   Distinguish Between Goals and Objectives

Is the objective so broad and general that it is really a goal?

While it is acceptable, and most often desirable, to write resource management goals, 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.

Guideline 9   Distinguish Between Objectives and Strategies

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 statements separate, unless linking them adds important detail to higher level plans.

Guideline 10   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 descriptions of general management intent sometimes help clarify the planning vision, but these would not be appropriate as higher level plans.

Make it Clear, Tangible and Specific

Guideline 11 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 12 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. Objectives that do not deal with physical forest resource management activities should not be established as higher level plans except where specified in the Forest Practices Code regulations.

Guideline 13 Identify Where and When

Does the objective/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.

Guideline 14 Name Names

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

Accountabilities will generally be self-evident, especially in the case of higher level plans and operational plans prepared under the Forest Practices Code. Where they are not, roles and responsibilities can be identified in the objective or strategy.

Guideline 15 Make It Measurable

Is it possible to measure whether or not the objective is being achieved over time?

Although it is not always necessary or appropriate to define absolute resource supply 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's strategies are effective in achieving the objectives – the essence of adaptive resource management.

Guideline 16 Provide Detail – As Appropriate

Does the objective and 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 predicable outcome
- whether or not Forest Practices Code basic requirements are to be varied, and
- availability of other resource plans and guidelines

Guideline 17 Say What You Mean

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

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

Glossary

Act: the *Forest Practices Code of British Columbia Act*

Adaptive resource management: an approach to managing uncertainty that emphasizes learning by trial. Management policies and practices 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 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 Ministry of Environment, Lands and Parks 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 as community watersheds pursuant to the *Forest Practices Code of British Columbia Act,* which establishes certain management requirements including planning, public participation in decision-making, and pre-development terrain stability assessment.

Connectivity: a qualitative term describing the degree to which ecosystems are linked to one another to form an interconnected network. The degree of interconnectedness and the characteristics of the links vary in natural landscapes based on topography and natural disturbance regime.

Consistency: management objectives in one plan that direct on-the-ground activities do not materially conflict with management objectives in another plan.

Enhanced resource development zone (ERDZ): an LRMP or regional plan resource management zone that indicates areas that are suitable for relatively intensive development of resources such as timber, minerals, petroleum and natural gas or destination resorts.

Forest development plan: an operational plan guided by the principles of integrated resource management which details the logistics of timber development, usually over a five-year period. Methods, schedules and responsibilities for accessing, harvesting, renewing and protecting forest resources are set out to enable site-specific operations to proceed.

Forest ecosystem network (FEN): an area that serves to maintain or restore the natural connectivity within an area.

Forest practices: activities that are carried out on forest land to facilitate uses of forest resources, including but not limited to: timber harvesting, road construction, silviculture, grazing, recreation, pest control or wildfire protection.

Forest Practices Code (FPC): legislation *(Forest Practices Code of British Columbia Act)*, regulations made pursuant to that Act, and technical guidebooks, that together govern forest practices in British Columbia.

Forest resources: defined in the *Forest Practices Code of British Columbia Act* as resources and values associated with forests and range including, without limitation, timber, water, wildlife, fisheries, recreation, botanical forest products, forage and biological diversity.

Goal: broad statements that describe a future vision with respect to a particular subject (environmental, social or economic).

Geographic information system (GIS): a computerized information system that uses a spatially referenced database to provide answers to queries of a geographic nature through a variety of manipulations such as sorting, selection retrieval, calculation, spatial analysis and modelling.

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.

Higher level plan (HLP): defined in the *Forest Practices Code of British Columbia Act* as an objective for:
- a resource management zone
- a landscape unit or sensitive area
- a recreation site, recreation trail, or interpretive forest site

Indicator: a measurement criterion used during plan monitoring to assess the effectiveness of plan strategies in achieving plan goals and objectives over time. Indicators may express an expected absolute, numerical outcome (e.g., number of recreation user days), or they may be more subjective (e.g., "low" impact on recreational experiences".)

Interpretive forest site: a site established under the *Forest Practices Code of British Columbia Act* (or previously designated under the *Forest Act*) for the purpose of providing and demonstrating public education information respecting forest management.

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 (LRMP): 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 units: areas of land and water used for long-term planning of resource management activities. They are important for designing strategies and patterns for landscape-level biodiversity and for managing other forest resources. Landscape units may be used by the district manager to establish objectives for any purpose permitted under section 2 of the *Forest Practices Code of British Columbia Act.*

Land use plan zone or geographic designations: a zone or geographic designation that communicates an intended general land or resource management direction for the area of land that is covered by the category. LRMP processes typically apply at least six land use categories to the sub-regional land base to communicate a priority for particular resource management objectives. They include: protected areas, special resource management zones, general resource management zones, enhanced resource development zones, agricultural zones, settlement zones.

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 1:5,000 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.

Objective: a concise, measurable statement of a desirable future condition for a resource or resource use which is attainable through management action.

Old growth management areas (OGMAs): defined in the *Forest Practices Code of British Columbia Act* Operational Planning Regulation as an area established under a higher level plan which contains or is managed to replace structural old growth attributes.

Operational plans: within the context of the *Forest Practices Code of British Columbia Act*, operational plans detail the logistics for forest and range development in particular locations. Methods, schedules and responsibilities for accessing, harvesting, renewing and protecting the resource are set out to enable site-specific operations to proceed. Operational plans include forest development plans, logging plans, range use plans, silviculture prescriptions and stand management prescriptions.

Planning hierarchy: a continuum of interdependent planning levels ranging from broad land and resource management principles and policies, to strategic land use plans, to operational and site level plans.

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.

Protected area: a designation of areas of land and water set aside to protect natural heritage, cultural heritage or recreational values (may include national park, provincial park or ecological reserve designations.)

Protected area strategy (PAS): British Columbia's strategy to develop and expand the provincial protected area system to protect 12 per cent of the provincial land base by the year 2000. The goals of the strategy are to protect viable, representative examples of natural diversity in the province, and special, natural, recreational and cultural heritage features.

Range use plan: an operational plan that describes the range and livestock management measures that will be implemented in a given area to ensure that range resources are protected and that the management objectives for other identified resource values are achieved.

Recreation sites and trails: sites or trails established under the *Forest Practices Code of British Columbia Act* (or previously designated under the *Forest Act*) for the purpose of providing public recreational experiences in provincial forests.

Red-listed species: threatened or endangered species as identified by the Ministry of Environment, Lands and Parks. The taxa of the red list are either extirpated, endangered or threatened, or are being considered for such status.

Resource management planning: the activity of describing a desirable future end-state for land or 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 adopt a preferred package of measures to achieve those goals and objectives.

Resource management zone (RMZ): a geographic area within the larger planning area that is distinct from other geographic areas with respect to biophysical characteristics, resource issues, or resource management direction. RMZs are normally delineated, and corresponding resource management objectives and strategies defined, as a consequence of a regional or sub-regional planning process. RMZs are a planning unit that may be established under the *Forest Practices Code of British Columbia Act.*

Resource management prescription: a resource management goal, objective, strategy, standard, guideline or procedure, or a combination thereof, that defines (prescribes) a resource management direction or approach for a particular resource or resource use.

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

Resource supply level: projected level of output of resources, or the rate at which a desired outcome will be achieved.

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, fisheries, wildlife, cultural heritage, minerals, water, timber).

Sensitive area: small area (up to a maximum of 1,000 ha) established under the *Forest Practices Code of British Columbia Act* by the district manager to manage or conserve unique or locally significant forest resources.

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.

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

Further Reading

On Higher Level Plans

Ministry of Forests. June 1996. *Higher Level Plans: Policy and Procedures (under revision).* Forest Practices Code. Province of British Columbia. Victoria, B.C.

On Land and Resource Management Plans

Integrated Resource Planning Committee. 1993. *Land and Resource Management Planning: A Statement of Principles and Process.* First Edition. Province of British Columbia. Victoria, B.C.

Land Use Coordination Office. 1998. *Land and Resource Management Planning: Guide To Spatial Land and Resource Information.* Victoria, B.C.

Ministry of Environment, Lands and Parks. December 1995. *Handbook for Land and Resource Management Planning.* Province of British Columbia. Victoria, B.C.

On Landscape Unit Planning

Ministry of Forests and Ministry of Environment, Lands and Parks. *Landscape Unit Planning Guide* (in preparation). Victoria, B.C.

On Strategic Land Use Planning

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

Appendix 1

Types of Resource Management Plans: Main Characteristics and Purposes

PLANNING TYPE	MAIN CHARACTERISTICS AND PURPOSES
REGIONAL PLANS	• large regions or river basins • establish broad, strategic management direction for environmental, social and economic sustainability • may be spatial or non-spatial plans • may be a delivery mechanism for Protected Area Strategy • highly participatory, using multi-stakeholder round tables • planning scale of 1:500,000 to 1:250,000 (presentation scale up to 1:1 million) • approved by Cabinet
SUB-REGIONAL PLANS	• large sub-regions (0.5-6 million ha) • delivered through Land and Resource Management Planning (LRMP) program • establish broad, strategic management direction for environmental, social and economic sustainability • spatial plans • a primary delivery mechanism for Protected Area Strategy • resource management zones and objectives a standard plan product (which may potentially be established as resource management zone objectives under Code by three ministers) • highly participatory, using multi-stakeholder round tables • planning scale of 1:250,000 to 1:125,000 • approved by Cabinet
LOCAL RESOURCE PLANS	• plans for drainages, portions of drainages, or "issue areas" • special purpose planning conducted in response to particular issues (e.g., domestic water supply–logging interactions; range management issues) • spatial plans • normally undertaken on inter-agency basis, with participation on planning committee by local stakeholders • planning scale approximately 1:50,000 • normally approved by MELP and MOF regional/district managers
LANDSCAPE UNIT PLANS	• planning "unit" recognized in Code • plans for watersheds, groups of watersheds or defined ecological units (normally up to 100,000 ha) • focus on integrating forest development and biodiversity objectives • resource management direction from landscape unit plans implemented by establishment of landscape unit objectives under Code; must be consistent with RMZ objectives in effect for area • MOF/MELP planning process with opportunities for public review and comments • planning scale 1:20,000 to 1:50,000 • approved by MOF district managers/MELP designated environment official

Appendix 1 *(continued)*

PLANNING TYPE	MAIN CHARACTERISTICS AND PURPOSES
SENSITIVE AREA PLANS	• planning "unit" recognized in Code • plans for areas with locally significant or unique forest resources (up to 1,000 ha) • resource management direction from sensitive area plans implemented by establishment of sensitive area objectives under Code; must be consistent with RMZ or landscape unit objectives in effect for area • MOF/MELP planning process with opportunities for local public review • planning scale 1:20,000 to 1:10,000 • approved by MOF district managers/MELP designated environment official
RECREATION SITE AND TRAIL & INTERPRETIVE FOREST SITE PLANS	• planning "unit" (i.e., small sites or linear trails) recognized in FPC • plans for areas with recognized opportunities to provide public recreation experiences or forest education experiences, as identified through recreation plans prepared at MOF district level • management direction for sites and trails implemented by establishment of recreation site/trail and interpretive forest site objectives under Code • MOF planning process with opportunities for local public consultation • planning scale approximately 1:5,000 or smaller, depending on features • objectives established by Chief Forester or delegate (i.e., district manager) • must be consistent with RMZ, landscape unit, or sensitive area objectives in effect for area
OPERATIONAL PLANS	• plans required under Code to direct forest management activities and practices • include forest development plans, logging plans, range use plans, silviculture prescriptions, stand management prescriptions • must be consistent with RMZ objectives, landscape unit objectives, sensitive area objectives, or recreation site/trail and interpretive forest site objectives in effect for area • normally prepared by forest industry • approved by MOF district managers

Appendix 2

**Suggested Template for Drafting Recreation Site and
Trail and Interpretive Forest Site Objectives**

Objectives for sites and trails are expressed in terms of:
- recreation opportunity spectrum objectives
- recreation feature objectives
- recreation activity objectives, and
- forest site interpretation/education objectives for interpretive forest sites.

The following template is suggested when developing objectives under the Forest Practices Code:

TYPE OF OBJECTIVE	SUGGESTED TEMPLATE
RECREATION OPPORTUNITY OBJECTIVE	• To provide opportunities for [enter *Recreation Opportunity Spectrum Class*] recreation experiences. ***Recreation Opportunity Spectrum Classes****:* primitive, semi-primitive non-motorized, semi-primitive motorized, roaded resource, roaded resource natural, rural, urban.
RECREATION FEATURE OBJECTIVE	• To [enter the degree of protection, e.g., "preserve," "protect," "maintain," "retain"] the [enter *recreation feature*]. ***Recreation features*** *include:* aquatic flora/fauna, historic, landform, wildlife, shoreline, volcanic, hydrologic, trail, vegetation, waterbody, etc.
RECREATION ACTIVITY OBJECTIVE	• To provide opportunities for [enter *recreation activity*] recreation activities. ***Recreation activities*** *include:* air sport, hunting, climbing, water sport, camping, snow sport, motorized, fishing, viewing, exploring, etc.
FOREST INTERPRETATION OBJECTIVE	• To provide forest interpretation and education opportunities as follows: - enter primary themes (e.g., historical use, forest ecosystem, land use issues, resource management challenges or current forest practices). - enter primary media (e.g., signs, trails, displays, guided tours, brochures).

EXAMPLES

Recreation Site Objectives

- Manage the **Anderson Lake Recreation Site** for a roaded recreation experience.
- Retain shoreline and coniferous vegetation features.
- Provide opportunities for swimming, camping, picnicking and canoeing activities.

Recreation Trail Objectives

- Manage the **Blue Joint Recreation Trail** for a semi-primitive recreation experience.
- Retain alpine features and over-storey vegetation features.
- Provide opportunities for nature walking and exploring activities.
- Maintain access to the trail for travel by foot, horse, mountain bike or cross country skis.

Interpretive Forest Site Objectives

- Manage the **Far North Interpretive Forest Site** for a roaded recreation experience.
- Retain upland cave features and the lake shoreline and overstorey vegetation features.
- Provide opportunities for forest education, interpretive walking and exploring activities.

Appendix 3

Definitions of Verbs in Resource Objectives and Strategies

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

Adopt: to accept formally and put into effect. (*syn* embrace)

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

Allow: to permit; to make possible.

Apply: to put into operation or effect.

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

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

Classify: to assign to a category.

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

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

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

Decrease: to 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: to produce the promised, desired, or expected results. (*syn* implement, produce)

Design: to conceive and plan out.

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

Disallow: to deny; to prohibit.

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

Enforce: to carry out effectively.

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

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

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

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

Examine: to inspect closely; to inquire into carefully. (*syn* investigate)

Exempt: to free or release from some requirement.

Expand: to increase the extent, number, volume, or scope of. (*syn* enlarge)

Formulate: to put into a systemized statement of expression. (*syn* devise)

Generate: to bring into existence. (*syn* produce)

Harvest: to gather a natural product.

Identify: to establish or select by consideration or analysis.

Implement: to carry out; to given practical effect to and ensure of actual fulfillment by concrete measures. (*syn* accomplish)

Improve: to enhance in value or quality; to make better *(in a planning context, normally compared to the existing state or condition).*

Increase: to 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: to cause or facilitate the beginning of; to set going. (*syn* begin)

Integrate: to unite with something else; to form or blend into a whole.

Investigate: to observe or study by close examination and systematic inquiry.

Oversee: to survey, watch or supervise.

Issue: to officially give out or make available.

Limit: to curtail or reduce in quantity or extent; to restrict to set bounds. (*syn* restrict, confine)

Maintain: to preserve from failure or decline; to cause to continue.

Manage: to treat with care (*syn* husband); to alter by manipulation; to gain influence with or maintain control over.

Maximize: to increase to the greatest quantity or value attainable.

Minimize: to reduce to the least quantity assignable, admissible, or possible.

Mitigate: to cause to become less harsh or hostile; to make less severe or painful. (*syn* alleviate)

Obtain: to gain or attain usually by planned action or effort.

Permit: to give leave; to give an opportunity; to consent to expressly or formally. (*syn* authorize)

Phase in: to gradually commence or increase operations or activities.

Phase out: to gradually decrease or stop operations or activities.

Plan: to undertake a detailed formulation of a program of action.

Preserve: to 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.

Produce: to give being, form or shape to; to manufacture; to accrue or cause to accrue.

Prohibit: to forbid by authority; to prevent from doing something. (*syn* preclude)

Protect: to keep safe, defend or guard.

Provide: to supply for use. (*syn* furnish)

Recruit: to fill up the number of with new members, examples, etc. (*syn* replenish)

Refer: to send or direct for comment, aid, information, or decision.

Regulate: to 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: to restore to a former capacity or state; to restore to a condition of health or useful and constructive activity or function. (*syn* reinstate)

Resolve: to deal with successfully: clear up; to find an answer to.

Restore: to bring back to or put back into a former or original state. (*syn* renew)

Restrict: to confine within bounds. (*syn* restrain, limit)

Retain: to hold secure or intact. (*syn* keep)

Review: to give critical evaluation of; to examine or study again.

Revise: to correct or improve; to make new, amended, improved, or up-to-date.

Subject: to make liable; to bring under control.

Survey: to examine as to condition, situation, or value; to view or consider comprehensively. (*syn* inspect, scrutinize)

Sustain: to give support or relief to; to keep up; to maintain or keep going continuously.

Undertake: to set about doing.

Use: to cause or act or serve for a purpose; to employ something.

Utilize: to make use of; to turn to practical use or account.

Trouble-shooting Guide

PROBLEM AND SUGGESTED RESPONSE	REFERENCE	
	Guideline	**Page**

Objective/strategy inconsistent with government policy ...   1   11
- review relevant statutes and regulations, corporate policies, agency programs and policies, regional strategies and provincial principles
- revise objectives/strategies to conform, or provide recommendations to government (either within planning report or under separate cover) for policy reform.

Objective/strategy varies from existing plans ...   2   12
- Where objective/strategy is inconsistent with *higher level plan above*:   3   12
  - → revise objective/strategy to conform with higher level plan, or   4   13
  - → revise higher level plan by following FPC procedures
- Where objective/strategy is inconsistent with *policy plan above*:
  - → revise objective/strategy to conform with policy plan above, or
  - → retain the inconsistency and provide rationale for the variance
- Where objective/strategy is inconsistent with *existing plan below*:
  - → revise objective/strategy to conform with existing plan below, or
  - → retain the inconsistency and provide rationale for the variance

Objectives/strategies conflict with each other,   4   13
or conflict with geographic designations or zones ...   5   15
- revise objectives/strategies to prevent or mitigate resource conflicts by
  - → 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 geographic designations/zones in plans to occasional site-specific occurrences, or modify the geographic designation/zone boundary to exclude the area affected by the conflicting objective/strategy.

Objectives/strategies are technically impossible, too expensive,   6   17
or create administrative problems ...
- revise objectives/strategies to ensure compatibility with:
  - → 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

Objectives/strategies don't address problems   7   20
(or unrealized opportunities)...
- review list of resource issues
- analyze issues in terms of symptoms and underlying causes
- revise objectives/strategies to correspond to symptoms and causes

PROBLEM AND SUGGESTED RESPONSE	REFERENCE	
	Guideline	**Page**
Objectives/strategies are too broad and general ...	8	20
• re-visit list of resource issues (see Guideline 7)		
• review or construct resource "goals" for the plan area, as a basis for differentiating between the characteristics of goals versus objectives		
Objectives include too much strategy-like direction ...	9	22
• review the defining characteristics of goals versus objectives versus strategies (see chapter 2)		
• separate objectives and strategies, but keep them linked		
• incorporate strategy content into objectives only where the criteria listed in Guideline 9 are evident		
Objectives/strategies provide insufficient resource management vision and context ...	10	22
• supplement prescriptive 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		
Objectives/strategies are for resources that are too all-encompassing ...	11	25
• break down broad resource management concepts into their constituent parts, and then draft objectives/strategies for the individual parts		
Objectives/strategies focus overly on future administrative processes, or defer too much to future resource planning processes ...	12	25
• review 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		
Objectives/strategies are unclear about where and when they apply ...	13	27
• review resource inventory information to assess possibilities of being more spatially specific		
• revise objectives/strategies to incorporate cross-references to maps of resources or zones, or to appropriate narrative spatial descriptions of resources or zones		
• ensure that maps are portrayed in planning report at appropriate scale		
• be explicit about the period/seasons that objectives/strategies applies to; clarify what event triggers an objective /strategy to occur or to expire. If no timeframes are named, it's assumed that the objective/strategy applies always		

PROBLEM AND SUGGESTED RESPONSE	REFERENCE	
	Guideline	**Page**
Objectives/strategies are unclear about who is responsible for implementation ...	14	28

  • check with planning participants to see if there are varying interpretations
    about roles and responsibilities. If there are, word objectives and strategies
    to include the agency or group that is responsible for delivering the objective
    or strategy

Objectives/strategies include resource supply levels/outputs that are unrealistic; or it's not clear how objectives will be measured ...	15	30

  • include absolute values or numerical rates of resource production only
    where there is certainty that the outputs can always be achieved
  • if certainty cannot be guaranteed, include a range of values, or reword the
    objectives/strategies to make them more general
  • identify indicators that would be relevant for measuring objectives.
    Where appropriate, include these in the plan's section on plan implementation
    and monitoring

Objectives/strategies are not detailed enough, or provide an inappropriate amount of detail ...	16	31

  • match the amount of prescriptive detail contained in objectives/strategies
    with the following factors:
    → 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
    → whether or not the intent is to alter basic FPC requirements
    → availability of other relevant resource plans and guidelines

Objectives/strategies are unclear and open to interpretation ...	17	35

  • review objectives and strategies to replace:
    → 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

This Guide is intended primarily for provincial agency planners who write objectives that will be established as Higher Level Plans for managing Crown land and resources. The Guide will also be useful and informative to planners and stakeholder representatives who are involved in developing other types of objectives and associated strategies.

This Guide will assist planning practitioners to write effective objectives and strategies, especially objectives that will be established as legally enforceable higher level plans under the Forest Practices Code.

This is accomplished through the use of guidelines with accompanying examples of relevant resource objectives and strategies. The Guide also includes an insert to provide objectives and strategies, maps and graphic renderings to show how these examples from various planning levels might look when implemented on the ground.

Although the Guide reflects the specific characteristics of British Columbia's resource planning system, many of the Guide's principles and advice are transferable to other planning situations and jurisdictions.