

VANCOUVER ISLAND SUMMARY LAND USE PLAN

February 2000



Canadian Cataloguing in Publication Data

British Columbia.

Vancouver Island summary land use plan

ISBN 0-7726-4080-7

1. Land use - British Columbia - Vancouver Island -
Planning. 2. Land use - Government policy - British
Columbia - Vancouver Island. 3.
Environmental policy - British Columbia - Vancouver
Island. I. Title.

HD319.B7B74 2000 333.73'09711'2 C99-960407-4

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	
ACRONYMS.....	
1.0 INTRODUCTION	
1.1 THE PLAN AREA	
1.2 LAND USE PATTERN.....	
1.3 SOCIO-ECONOMIC PROFILE	
2.0 THE PLANNING PROCESS.....	
2.1 THE CORE PROCESS	
2.2 GOVERNMENT LAND USE DECISION.....	
2.3 COMPLETING THE PLAN	
2.4 FIRST NATIONS PARTICIPATION.....	
2.5 RELATED INITIATIVES	
3.0 STRATEGIC DIRECTION.....	
3.1 ESTABLISH A PROTECTED AREAS NETWORK.....	
3.2 SECURE THE FOREST LAND BASE.....	
3.3 PROVIDE REGIONAL BIODIVERSITY DIRECTION	
3.4 SUPPORT FOOD PRODUCTION ACTIVITIES.....	
3.5 RECOGNIZE SETTLEMENT LANDS.....	
3.6 MAINTAIN ENERGY AND MINING OPPORTUNITIES	
3.7 ADDRESS INTEGRATED COASTAL MANAGEMENT.....	
3.8 PROMOTE COMMUNITY STABILITY	
4.0 LAND USE DESIGNATIONS.....	
4.1 INTRODUCTION.....	
4.2 PROTECTED AREA ZONE	
4.3 RESOURCE MANAGEMENT ZONES	
4.3.1 SPECIAL MANAGEMENT ZONE RMZ	
4.3.2 GENERAL MANAGEMENT ZONE RMZ	
4.3.3 ENHANCED FORESTRY ZONE RMZ	
4.4 AGRICULTURAL AND SETTLEMENT LANDS	
4.5 PRIVATE LANDS.....	
4.6 COASTAL PLANNING UNITS	
5.0 SOCIO-ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS.....	
5.1 BACKGROUND AND LIMITATIONS.....	
5.2 FORESTRY	
5.3 TOURISM AND RECREATION.....	
5.4 MINING AND ENERGY	
5.5 FISHERIES.....	
5.6 AQUACULTURE AND AGRICULTURE.....	
5.7 ENVIRONMENTAL/BIODIVERSITY IMPACTS.....	
5.8 SOCIAL IMPACTS / TRANSITION AND MITIGATION.....	

6.0 PLAN IMPLEMENTATION, MONITORING & AMENDMENT

6.1	GENERAL PROVISIONS.....
6.2	ROLES AND RESPONSIBILITIES
6.3	PLAN MONITORING.....
6.4	PLAN AMENDMENTS
6.5	FUTURE PLANNING INITIATIVES AND PRIORITIES

Maps

Map 1:	Vancouver Island Location Map
Map 2:	Vancouver Island Land Use Plan Area
Map 3:	Ecological Classification of Vancouver Island
Map 4:	Vancouver Island Forest Cover
Map 5:	Minerals and Energy
Map 6:	Selected Fish and Wildlife Resources
Map 7:	Pre Decision Land Use Patterns.....
Map 8:	Land Use Designations
Map 9:	Regional Planning Priorities
Map 10:	Visual Resources in SMZs

Tables

Table 1:	Population Growth on Vancouver Island by Regional District
Table 2:	Current (1996) Basic Sector Resident Income Dependencies.....
Table 3:	Experienced Labour Force for Vancouver Island and BC by Industry
Table 4:	Land Use Guide for VILUP Land Use Zones
Table 5:	Management Regimes for Individual SMZ Units
Table 6:	Management Regimes for Individual GMZ Units
Table 7:	Management Regimes for Individual EFZ Units

Figures

Figure 1:	Components of Strategic Plan Development for Vancouver Island.....
Figure 2:	Distribution of Land Base to Land Use Designations

Appendices

1. Planning Priorities, Issues and Needs
 - A. Planning Priority for Regional Landscape Units
 - B. Planning Priority for Special Management Zones
 - C. Planning Priority for Coastal Planning Units
 - D. Planning Priority for Protected Areas
2. Special Management Zone Development Review Process
3. Planning Framework Statements for Special Management Zones
4. Planning Framework Statements for Coastal Planning Units

ACKNOWLEDGEMENTS

The completion of this summary document has been made possible by the dedication of a number of government agency staff and contractors. Special credit is due to Rudi Mayser, Doug Janz, Michael Coon, Rolf Schmitt, Gordon Goodman, Barron Carswell, Bruce Whyte, John Bones, Don Howes, and Susan Westmacott.

Acknowledgements are also due to Rob Paynter, Gary Holman, Anne Ferdinands and Jackie Henderson for assisting with completion of key sections of the report.

ACRONYMS

AAC	Allowable Annual Cut	MOE	Ministry of Environment
CORE	Commission on Resources and Environment	MOF	Ministry of Forests
CPU	Coastal Planning Units	MPU	Marine Planning Unit
CRIS	Coastal Resource Interests Studies	MSBTC	Ministry of Small Business, Tourism and Culture
CWAP	Coastal Watershed Assessment Procedure	OGMA	Old Growth Management Area
CWD	Coarse Woody Debris	PAS	Protected Areas Strategy
CWS	Canadian Wildlife Service	PFS	Planning Framework Statement
ESA	Environmentally Sensitive Area	RLUPS	Regional Landscape Unit Planning Strategy
FEN	Forest Ecosystem Network	RMZ	Resource Management Zone
FPC	Forest Practices Code	SBFEP	Small Business Forest Enterprise Program
FRBC	Forest Renewal BC	SMZ	Special Management Zone (Low Intensity Area)
GPS	Global Positioning System	TFL	Tree Farm Licence
HLP	Higher Level Plan	TSA	Timber Supply Area
IAMC	Interagency Management Committee	TSR	Timber Supply Review
IR	Indian Reserve	VILUP	Vancouver Island Land Use Plan
LIARC	Low Intensity Areas Review Committee	VIRT	Vancouver Island Resource Targets
LRHL	Long Run Harvest Level	VQOs	Visual Quality Objectives
LUCO	Land Use Coordination Office	NDT1	Natural Disturbance Type 1
MFISH	Ministry of Fisheries	NDT3	Natural Disturbance Type 3
MB or M&B	MacMillan Bloedel Ltd.	WFP	Western Forest Products
MELP	Ministry of Environment, Lands and Parks	WHA	Wildlife Habitat Area

1.0 INTRODUCTION

1.1 The Plan Area

Location

Vancouver Island is located on the Pacific Coast of Canada, separated from the British Columbia mainland by Georgia Strait, Johnstone Strait, and Queen Charlotte Strait (**Map 1**). At its southern end, the Strait of Juan de Fuca separates the Island from the State of Washington, USA.

Vancouver Island is approximately 3.35 million hectares in size, representing 3.5% of the land area of British Columbia. The majority of its 702,000 residents are located along the eastern coast, with over half concentrated in the urban centres of Victoria, Nanaimo, and Campbell River.

The portion of Vancouver Island addressed in this Land Use Plan (the Plan Area) is shown in **Map 2**. The Plan Area includes all of Vancouver Island except for the Clayoquot Sound area, which has been subject to a separate planning and management process. It also includes the adjacent nearshore coastal zone and some offshore islands.

Physical Geography, Climate and Ecology

Vancouver Island's physical features are characterized as coastal plains in the east, long fjords on the western coast, and a chain of glaciated mountains running along its north-south axis.

The Island's climate is maritime, with warm, dry summers and wet, mild winters. The average annual temperatures range from 3°C to 14°C, with a mean annual temperature of 9°C. Average annual precipitation ranges from greater than 3500 mm on the western side of the Windward Island Mountains to less than 750 mm near Victoria. The majority of precipitation occurs in the fall and winter, which at higher elevations creates a snow pack that feeds the Island's stream network. The Island's west coast is one of the wettest places in North America.

Numerous large rivers flow to the coast through broad glacial valleys and terminate in extensive deltas and estuary complexes. Many of the Island's smaller streams are contained in steep and narrow valleys, reflecting rugged topography, particularly on the western side of the Island.

Vancouver Island has been classified by ecologists into five separate ecosections that represent these varying physical features and climatic conditions. Eleven of the province's biogeoclimatic subzone variants are found on the Island. These different ecosystems are shown in **Map 3**.

Forest Resources

Forests cover about 91% of the Island. Just under half of this cover is original old growth forest, while the remainder is managed second growth forest. Second growth forests are concentrated in the easily accessible southeastern and other low elevation areas of the Island, while old growth forests are mainly in the higher elevations and the more remote western and northern parts of the Island. **Map 4** shows the distribution of forest age according to thematic mapping derived from 1992 satellite data interpretation.

The Coastal Douglas Fir Zone comprises 4% of Vancouver Island, and has been heavily modified by human settlement, infrastructure and cultivation use and contains very few remaining areas of original forest. The Coastal Western Hemlock Zone occupies 84% of Vancouver Island, and occurs from sea level to about 900 metres elevation. The Mountain Hemlock Zone covers 12% of the Island, and is found above the Coastal Western Hemlock Zone up to 1,800 metres in elevation. **Map 3** shows the physical distribution of these zones across Vancouver Island.

The remainder of the Island's land area is primarily cultivated land or land converted to settlement uses, as well as natural, non-forested areas such as alpine meadows, rock, glaciers, and estuaries. **Map 4** shows the distribution of forest cover types according to the three broad biogeoclimatic zones with which they are associated.

Forestry is one of the most important industries on Vancouver Island. In recent times, however, the value of forests has substantially increased for their non-timber values, such as recreation, scenery and tourism, First Nations traditional uses, as well as wildlife, environmental and biodiversity values. The importance of these forest values has increasingly been recognized and reflected in provincial forest legislation, culminating in the enactment of the *Forest Practices Code of BC Act* in 1995. The Code applies to all forest land under Crown provincial forest tenure, or about two thirds of the Island's forests, with the remainder either privately owned and managed or under protected status.

As a result of increasing recognition and conservation of non-timber forest values, timber harvest rates for most forest management units on the Island have been decreasing in recent years, and most are projected to decline further from current harvest levels in the years to come.

Mineral and Energy Resources

Vancouver Island contains rich and diverse mineral and energy resources, ranking it amongst the most highly mineralized regions of BC (See **Map 5**). The BC Geological Survey's mineral inventory database documents over 1,300 known mineral occurrences on Vancouver Island. Recent exploration has focused on prospective zones in the "Island Copper belt" north of Quatsino Sound, Esperanza Inlet, Barkley Sound, San Juan Ridge, Mount Sicker, Taylor River Valley, and extensions of Westmin-type geology north of Strathcona Park primarily for copper and gold deposits.

The Island contains a variety of energy resources. Hydroelectric energy development occurs on the Campbell River, Puntledge River near Comox, Elsie and Doran Lakes near Port Alberni, and Jordan River. Additional electrical energy needs are furnished by high voltage transmission lines from the Lower Mainland, and by diesel-electric generation at remote communities. The sedimentary basins underlying the eastern edge of Vancouver Island and extending beneath Georgia Basin have potential for hydrocarbons, mainly natural gas. Offshore oil and gas resource development is under a provincial moratorium. Currently, natural gas is transported to the Island via the Vancouver Island Natural Gas pipeline from northeast BC.

Other undeveloped energy resources on the Island include: thermal coal and coal-bed methane deposits in the sedimentary basins along the eastern coast, low-head hydro-electric development, industrial co-generation, geothermal, wind, tidal and wave.

Map 1: Vancouver Island Location Map

MAP 1: Vancouver Island Location Map

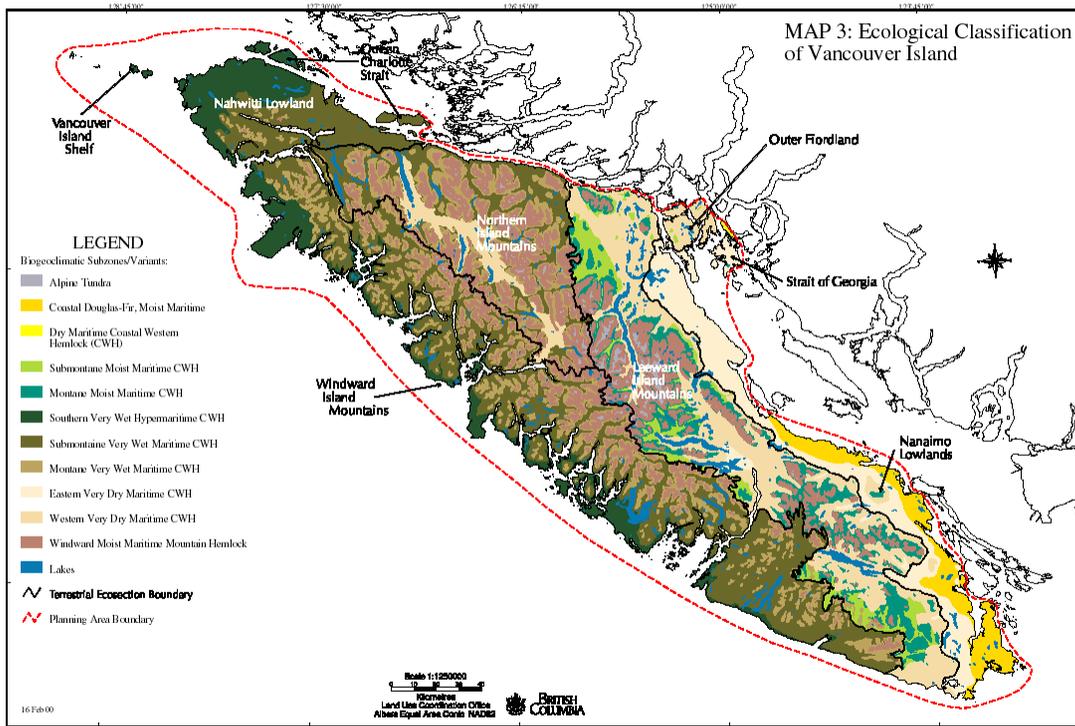


Map 2: Vancouver Island Land Use Plan Area

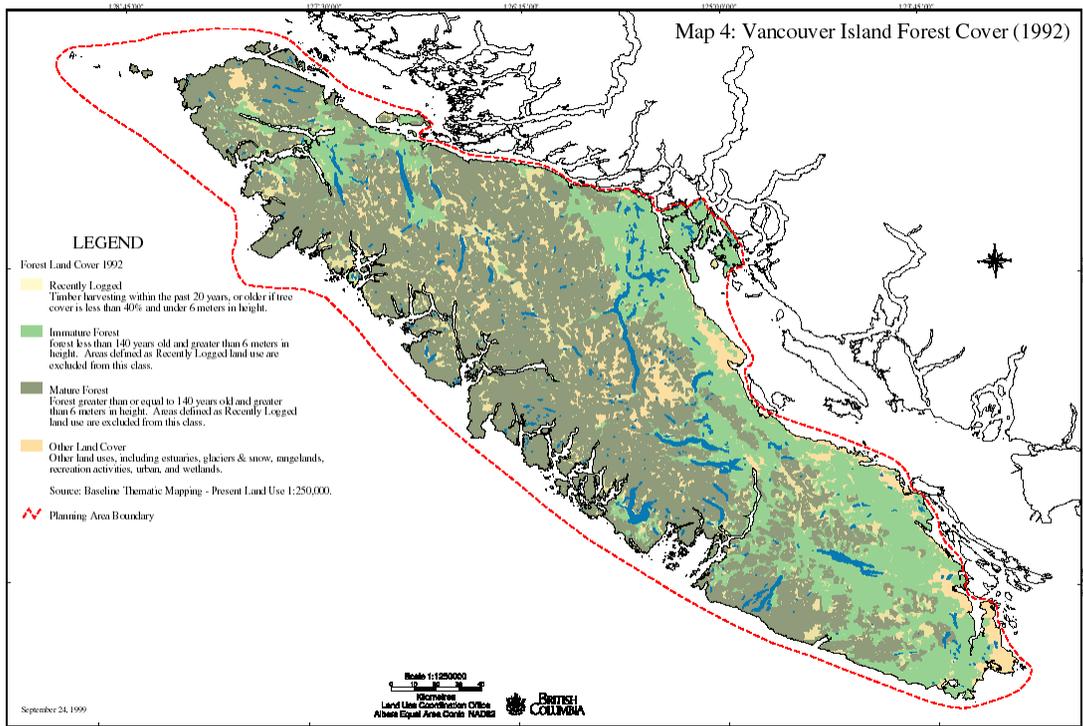
MAP 2: Vancouver Island Land Use Plan Area



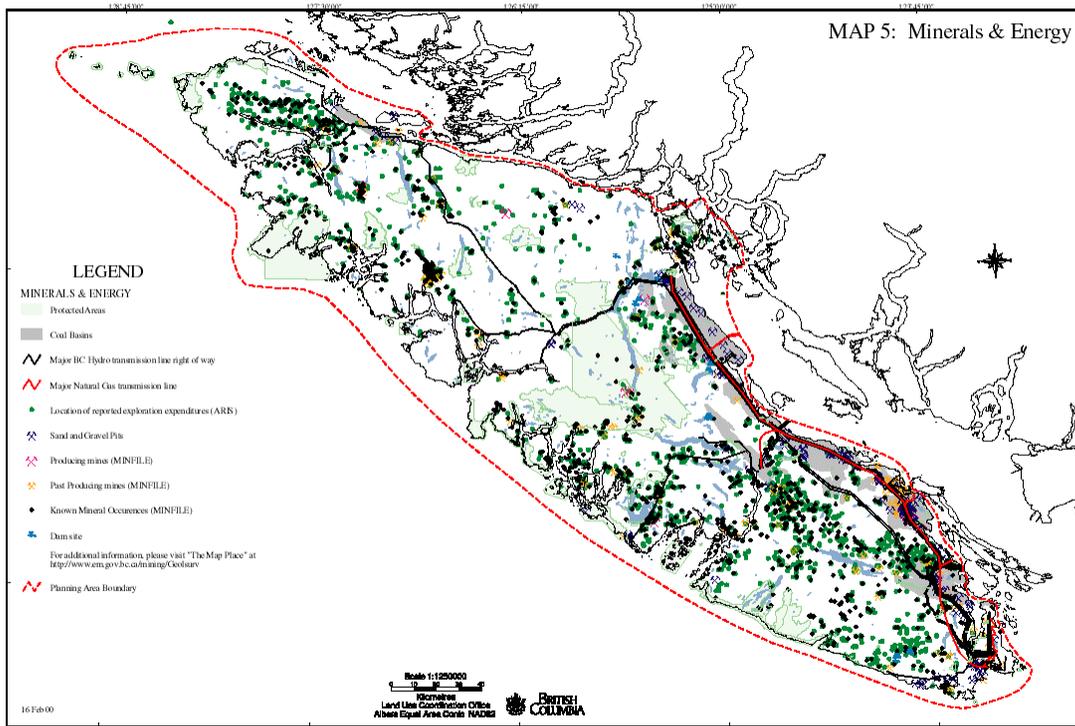
Map 3: Ecological Classification of Vancouver Island



Map 4: Vancouver Island Forest Cover



Map 5: Minerals and Energy



Fish and Wildlife Resources

The ecosystem types on Vancouver Island support a rich diversity of fish and wildlife, although settlement and human activities have modified populations and distribution of species (see **Map 6** for the distribution of selected fish and wildlife resources on Vancouver Island). There are 30 indigenous mammal species (excluding marine mammals), six of which are on the provincial Red list (candidates for legal designation as endangered or threatened) and three on the Blue list (species considered to be vulnerable or sensitive to human activities or natural events). Some of these are recognized as distinct subspecies, such as the Water Shrew, Townsend's Vole, and Ermine, associated with island isolation. The Sea Otter and Vancouver Island Marmot are legally designated as endangered under the provincial *Wildlife Act*. The Island also supports healthy populations of Black Bear, and a dynamic predator-prey system consisting of cougar, wolf, Roosevelt Elk and Black-tailed Deer.

There are about 140 bird species that breed on Vancouver Island, representing 37% of the bird species breeding in Canada. Eight of these species are Red listed, notably the Northern Goshawk and Marbled Murrelet, and another eight are on the Blue list. Seabird breeding colonies surround Vancouver Island. The most well known colonies are found on the Scott Islands, which support some of the most important breeding areas on the Pacific coast. In addition, the low gradient shorelines and coastal wetlands located on the east side of Vancouver Island from Comox south to Cowichan Bay support internationally significant populations of migrating and wintering shorebirds and waterfowl. Isolated estuaries along western Vancouver Island provide critical "islands" of habitat along an otherwise inhospitable coastal shoreline.

High profile water bird species and populations supported by these habitats include the largest wintering population of Trumpeter Swans in the world and the entire population of Pacific Black Brant during the spring migratory period.

Nine indigenous amphibian species (five salamanders, four frogs), and seven species of reptiles (one Red and one Blue) inhabit Vancouver Island. The majority of these species are forest dwellers, many requiring specific habitat elements to provide for all or part of their annual life cycle. For example, about 23% of the forest-dwelling birds and 48% of the mammals are cavity users. Balancing the habitat needs of these species with the demands of economic development continues to be a major challenge and a key issue for land use planning processes.

Resident and anadromous fish values of Island streams and lakes are extensive. Many waters possess fisheries values that support the commercial and sport fishing sectors as well as aboriginal sustenance fishing. Past human activities have resulted in destruction of spawning and rearing habitats, while changing biophysical conditions and increasingly efficient fishing techniques in the open ocean have all impacted the number of anadromous fish returning to spawn in Island streams.

Past management of fish and wildlife resources has focused primarily on consumptive practices, such as hunting and fishing. In recent years, a burgeoning tourism industry has begun to capitalize on the value of fish and wildlife for non-consumptive uses.

Fresh Water Resources

Water resources of Vancouver Island include numerous large and small lakes, extensive stream systems, wetlands, and ground water. Water storage on a number of lakes has been increased to support hydroelectric projects, community water use, irrigation, and fisheries flow enhancement.

Streams on the Island generally flow out from the interior lakes and snow packs of the Island to the ocean. Stream flows commonly peak during winter months, with low flows during the summer and fall. Critically low summer flows are experienced in the southeast, with smaller streams having negligible to zero flow. A considerable number of forested watersheds supply drinking water for communities on Vancouver Island. Many of those watersheds are classified under the Forest Practices Code (FPC) as "community watersheds," and are subject to particular FPC regulations to ensure water quality, quantity and timing of flow are protected.

Groundwater use is common for agricultural, rural residential and some commercial/industrial purposes. There are groundwater concerns both in water quantity and quality within some areas on southeastern Vancouver Island.

Agricultural Resources

The soils, climate and terrain of Vancouver Island support a range of agricultural activities. Although early settlements placed great emphasis on local food self-sufficiency, most agricultural activity is currently in the form of highly diversified mixed farming. Most agricultural activity now takes place on small holdings. Lands currently either under cultivation or demonstrating a high potential for agriculture amount to 98,000 hectares.

Major commodities produced on Vancouver Island include dairy (milk), beef, vegetables, sheep, grapes and berries. Livestock and dairy production account for approximately 63% of the agricultural operations found on Vancouver Island. Vegetable, fruit and other plant production amount to an additional 27% of the Island's farms, with other specialized products accounting for the remainder.

Coastal Resources

The coastal resources of the plan area are extensive, and have historically played a significant role in the social, cultural and economic development of adjacent communities, including First Nations communities. The coastal zone contains a diverse array of marine habitats, which range from the nutrient-rich inlets and rocky shores of the west coast, to the extensive beaches of the Strait of Georgia. The northern and southern ends of the Island are highly variable environments where the inshore and offshore marine waters meet. This variability is responsible for the diverse biological communities at the southern (e.g. Race Rocks) and northern (e.g. Browning Passage) parts of the Island.

The Strait of Georgia is a deep, productive, inland sea that supports large populations of wintering and migratory birds, 89 southern resident killer whales, and a significant commercial, aboriginal, and recreational fishery. The narrow channels of Johnstone Strait provide an important migratory corridor for salmon and marine mammals as well as a significant marine transportation and recreation corridor. Queen Charlotte Strait is characterized by well mixed, nutrient-rich waters that support numerous fisheries and a growing marine tourism sector. The extensive aboriginal, commercial, and recreational fisheries along the west coast of Vancouver Island are driven by one of the largest upwelling systems in the Pacific. The Strait of Juan de Fuca is a deep, glacially scoured trough, where cold, nutrient-rich ocean water travels at depth towards the Strait of Georgia, while surface freshwater plumes flow out to sea. The Strait of Juan de Fuca is also an important transportation and migratory corridor.

Gray, humpback, right, blue, sei, minke, killer, false killer and fin whales are known to occur in Vancouver Island's coastal regions, along with harbour and Dall's porpoises, and Pacific White-sided dolphins. Sea otters were reintroduced to northwestern Vancouver Island between 1969-1972; their current range has expanded to include Barkley Sound and Queen Charlotte Strait. Harbour, elephant, and northern fur seals, as well as California and Stellar's sea lions are also found in this area. With the exception of killer whales, Dall's porpoises, Pacific White-sided dolphins, California sea lions, and harbour seals, all the above marine mammals are red or blue listed provincially, nationally, or internationally.

Harvested fish species include herring, Pacific cod, Pacific hake, walleye, pollock, lingcod, blackcod, rockfish, halibut, sablefish, dogfish, salmon, and eulichan. Harvested invertebrates include clams

(including geoducks), crabs, prawns, shrimp, mussels, abalone, scallops, sea urchins, sea cucumbers, squid, octopus, and barnacles. Some of these stocks are currently depleted and subject to special management direction, including prohibitions from harvesting.

Baynes Sound is one of Canada's most productive shellfish growing areas and is BC's most significant oyster producing area. However, many shellfish harvesting areas are permanently closed primarily due to contamination from settlement areas.

Recreation, Tourism and Visual Resources

Vancouver Island offers a diverse range of tourism and recreational opportunities that have received international attention and acclaim. Such opportunities include cultural features, built amenities such as golf courses and ski hills, and wilderness adventures on land and at sea. Benefiting from a mild climate, accessibility and a reputation for unspoiled natural surroundings, Vancouver Island's tourism industry has developed into a major employer and generator of economic activity.

Vancouver Island's natural and cultural resources are important underpinnings of the tourism industry. The Island's east and west coasts provide contrasting opportunities – wild storms and remoteness on the Pacific-swept west, with protected waters and the amenities of larger urban centres on the sheltered eastern side. Inland, legendary stands of old-growth forests attract nature-lovers from around the world, with rugged mountains and cave-riddled karst topographies each offering unique attractions. An abbreviated list of tourism and recreational opportunities includes saltwater sport fishing, marine cruising charters, resorts and backcountry lodges, kayak touring, coach or auto touring, camping, nature appreciation and scenic/wildlife viewing, hiking, cycling, beachcombing, scuba diving, caving, and cultural tours to wineries, farms, museums, galleries and other attractions.

1.2 Land Use Pattern

Map 7 shows the general pattern of land use in 1993 as a basis for comparing the Vancouver Island Plan outcome with previous conditions (i.e. a base case). For ease of comparison, the same land use categories are used for the pre-decision land use pattern.

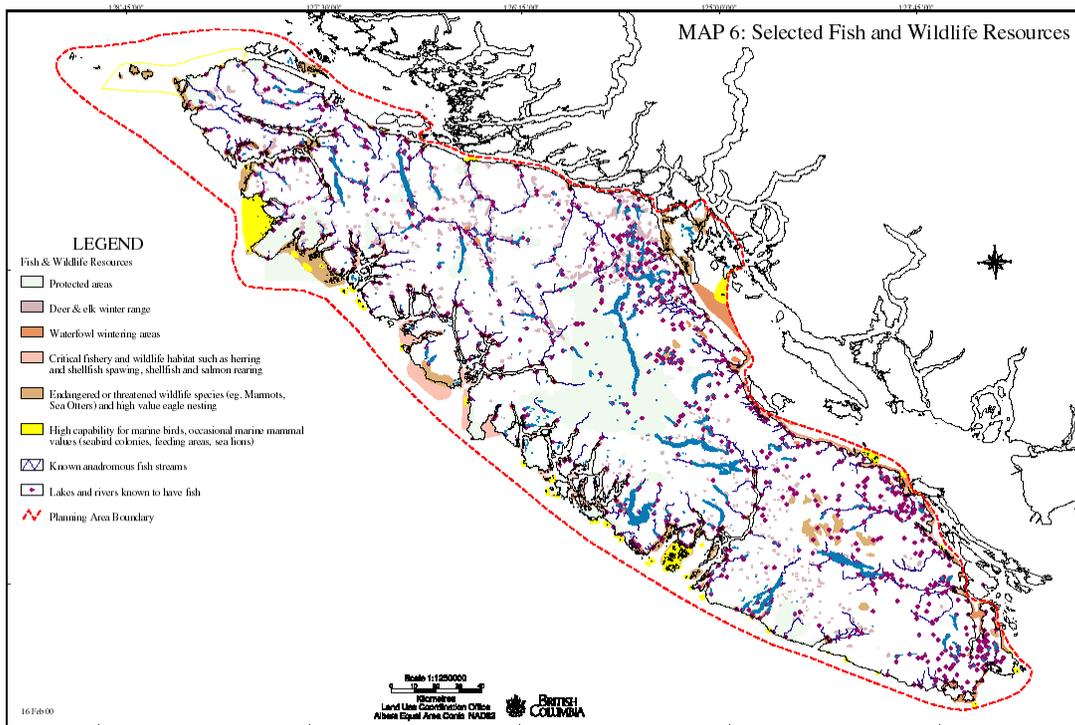
Due to the scale of **Map 7**, areas smaller than 250 hectares do not appear and consequently a land use category may have pockets of different uses within it that is inconsistent with the intent of the category. The map does not specifically identify federal lands, First Nations Reserve lands or traditional territories.

Map 7 shows Protected Areas before 1994 occupying approximately 345,000 ha of land and surface water (10.3% of the Island). Included are land and nearshore coastal areas within the boundaries of national parks, provincial parks, ecological reserves and recreation areas under the *Park Act*. Many different types of recreational activities occur within existing protected areas designated as parks. They tend to be seasonal in nature. Some “non-conforming” uses or activities occur and are under permit through the authority of the *Park Act*. These pre-date the establishment of the protected areas.

A small number of Special Use areas are shown in **Map 7** as sites used for large surface extraction activities and for intensive-use commercial and recreational facilities. The sites identified on the map included the Island Copper mine (now closed) near Port Hardy, and the Mount Washington ski hill complex west of Courtenay.

Approximately 1.8 million ha of Crown land and water (52.6% of the Island) is shown as General Management, which accommodates a wide variety of resource values and uses. It includes the majority of forested Crown lands managed as provincial forest in Timber Supply Areas, as well as Crown and private land contained in Tree Farm Licences. Forest lands in this category include legally designated

Map 6: Selected Fish and Wildlife Resources



Wildlife Management Areas, as well as ungulate winter range and other small areas managed as "environmentally sensitive areas." Nearly all forested lands in this designation are committed under some form of Crown tenure. The category also contains community watershed areas and local government parks.

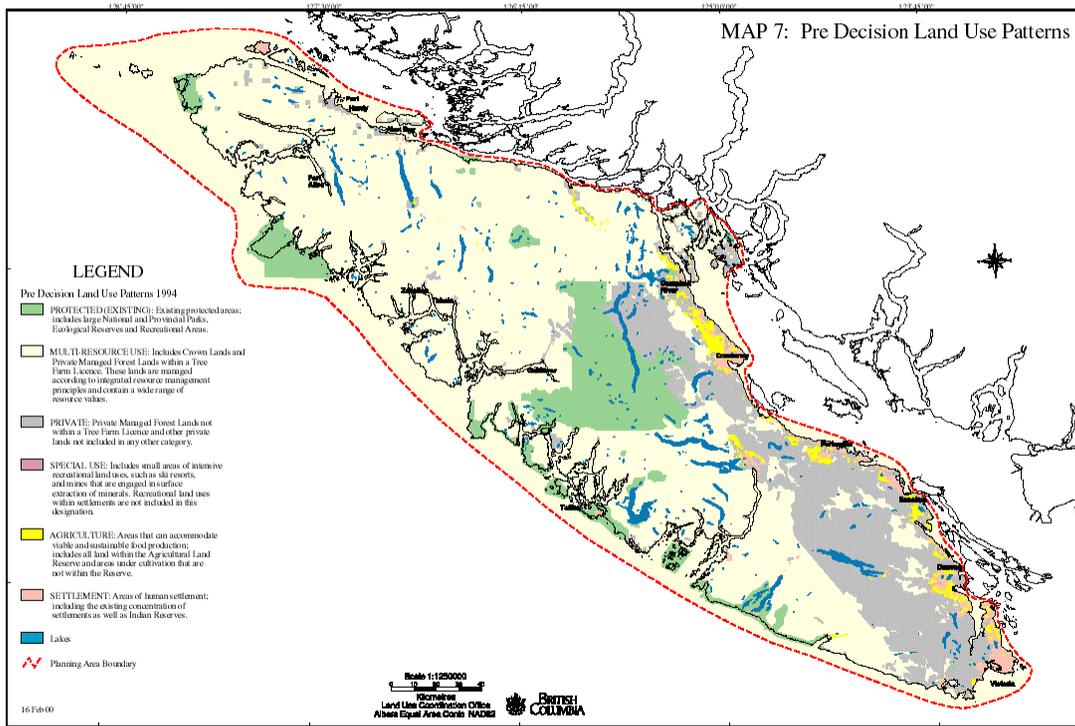
Timber production and related harvesting and silviculture practices are the predominant uses in this category. Coastal activities occurring in this category include log-handling facilities, floating camps, aquaculture, floating homes, private structures and facilities, fishing and other industrial and commercial uses. Ecotourism, recreational boating, commercial fishing and aboriginal fishery activities also occur.

Agricultural Use Areas incorporate all existing Agricultural Land Reserve (ALR) land parcels greater than 250 hectares in size, including those within municipal boundaries and within settlement concentration areas. Areas not within ALR boundaries but used for agricultural production are also included in this category (98,000 ha or 2.9% of the Island). Land-based agricultural activities are the major uses identified in this category, although they are undifferentiated as to crop. The majority of these lands are private. The ALR was established in 1973 to minimize the conversion of BC's agricultural lands to urban and associated uses.

The Private Lands category shows forest land under private ownership in 1993. There are approximately 678,000 ha of private land on the Island (20.2%). A large component of this area is classified as Managed Forest (MF) under the *BC Assessment Act*. The benefit of this land classification is primarily tax-related, but the owner must commit this land to remain in forest production, in the process addressing the need for sustainable forestry in the future. Timber harvesting and forest-related activities are the dominant use of land in this category; although water production and supply is also significant, as are utility lines. The majority of community watersheds and water supply areas are found in this category, as are important fish streams and watersheds, and related recreational uses. For non-forest uses, this same land may be subject to individual bylaws and zoning regulations of municipalities or regional districts due to their proximity to settlement areas.

Map 7 also shows Settlement Lands, which are primarily found along a narrow strip of the Island's southeast coast. They include all existing settlement use concentrations and First Nations Reserves that were developed or had concentrated development. The category does not include unorganized areas within regional district boundaries. The land use category in **Map 7** primarily reflects existing municipal boundaries and areas of concentrated or dispersed residential development. Land use is normally administered in these areas by the appropriate local government or First Nations council.

Map 7: Pre Decision Land Use Patterns



1.3 Socio-Economic Profile

1.3.1. Population

The population on Vancouver Island in 1997 was 702,000, representing about 18% of the total BC population. Over the 1991-97 period, population on the Island increased by 112,000 or 19%. While increases occurred in all areas of the Island, most of the growth during this period took place in the southeast, in the Capital, Nanaimo and Cowichan Regional Districts. With the closure or downsizing of several wood processing facilities in Port Alberni and the closure of the Island Copper mine in Port Hardy, population growth in the Alberni-Clayoquot and Mt. Waddington Regional Districts was the lowest on the Island over the 1981-97 period.

There are 49 individual First Nations with 271 Indian Reserves on Vancouver Island. The main First Nations groups include the Coast Salish whose territory includes the southeast portion of the Island and adjacent areas, the Kwakwaka'wakw in the northwestern and northeastern portion of the Island, and the Nuu-chah-nulth First Nations on the west coast of the Island, from Jordan River to Brooks Bay. The proportion of the population on Vancouver Island with aboriginal origins is about 7%, approximately double the proportion for BC as a whole. Census data indicates that First Nations populations are growing faster than total populations for the Island and BC as a whole.

As shown in **Table 1**, total population is forecast to grow by 20% over the 1997-2012 period, despite expected population declines in the Alberni-Clayoquot and Mt. Waddington Regional Districts. This annual average growth rate is lower than in recent years.

Table 1: Population Growth on Vancouver Island by Regional District

Regional District	1981	1991	1997	% Change 1991-97	2002	2012	% Change 1997-2012
Capital	249,473	299,734	337,980	13	348,506	387,485	15
Cowichan Valley	52,701	60,683	76,620	26	81,002	96,314	26
Nanaimo	77,101	101,736	130,177	28	144,512	181,313	39
Alberni-Clayoquot	32,558	31,224	34,689	11	32,520	31,131	-10
Comox-Strathcona	68,621	82,886	107,050	29	111,455	130,583	22
Mount Waddington	14,671	13,896	15,715	13	15,237	15,253	-3
Vancouver Island Total	495,125	590,159	702,231	19	733,232	842,079	20

Source: BC STATS

1.3.2. Economic Structure

The economy of Vancouver Island reflects its geographic and ecological diversity. Economic diversity is reflected in economic dependency estimates in **Table 2**, which show “basic” income, or income flowing into local economies. Basic income includes wages and salaries earned in primary industries (e.g. forestry, tourism, mining) and related supplier industries, as well as non-employment sources of income from outside the region (e.g. pension and investment income, government transfer payments).

Economic dependency estimates for 1996 show that the central and northern areas of the Island are dominated by the forest sector, whereas the economy of the southeast is more oriented to service sector activities driven by government employment, retirement incomes and tourism. Other resource sectors such as fishing and mining are also more important sources of basic income in the central and northern parts of the Island. Agriculture is more important in the southeast region.

**Table 2: Current (1996) Basic Sector Resident Income Dependencies
On Vancouver Island by Regional District
(% of Total Basic Income)**

REGIONAL DISTRICT	FOR	MIN	Fish/ Trap	AGR	TOU	PUB	CON	OTH ^(a)	TRAN ^(b)	ONE ^(c)
Capital	2	-	-	1	7	39	6	10	18	18
Cowichan Valley	22	1	1	2	4	23	8	5	21	14
Nanaimo	11	1	2	1	5	23	10	9	23	15
Alberni-Clayoquot	35	-	3	1	7	21	5	1	18	8
Comox-Strathcona	22	3	4	1	7	22	8	3	18	11
Mount Waddington	45	4	7	1	7	18	3	2	10	3

Source: Ministry of Finance and Corporate Relations: Preliminary estimates.

FOR	Forestry	PUB	Public Sector
MIN	Mining	CON	Construction
Fish/Trap	Fishing/ Trapping	OTH	Other
AGR	Agriculture	TRANS	Transfer payments
TOU	Tourism	ONEI	Other non-employment income

(a) "Other" includes other basic industries including parts of manufacturing, "hi-tech" and transportation.

(b) Transfer payments include Employment Insurance, Canada Pension, Old Age Security and Income Assistance.

(c) "Other non-employment income", includes income from pensions other than CPP, and investments.

In the past two decades, the Island economy has experienced a decline in primary industries. Changes in commodity prices, technology and other factors have caused upswings and downswings in the level of mining, which was instrumental in the establishment of many coastal communities. The richest mine on the Island was the Island Copper mine at the head of Rupert Inlet which operated from 1971 to 1995, producing copper, molybdenum, gold, silver, and rhenium. In late 1998, only one metal mine was in operation, the Boliden-Westmin copper-zinc-lead-silver-gold mine (1968 to present) at Buttle Lake near Campbell River. A coal mine near Quinsam Lake still produces high quality coal for export, and adjacent coal deposits are under evaluation for possible mining in the near future.

Changes in the traditionally dominant forest industry have been particularly rapid over the past 20 years, due to substantial rationalization and technological change within the industry. Employment in logging and processing in absolute terms and per cubic metre of harvest has declined significantly since 1980. Declines in forestry employment have been accentuated in recent years by timber harvest reductions. Those areas of the Island that are more reliant on forestry and other primary industries have been vulnerable to the "boom and bust" cycles of international commodity markets. These trends have resulted in higher levels of unemployment and social assistance and population declines in some areas (e.g. Mt. Waddington Regional District).

The past two decades have also demonstrated growth in the importance of service industries and light manufacturing. Particularly strong growth has been evident in tourism, and high technology industries. The attractiveness of the Island quality of life with all of its natural amenities, has encouraged growth in these new businesses, and has attracted retirees and “urban refugees” that are not dependent on resource sector activity.

The 1996 Tourism Resource Inventory for Vancouver Island identified 2,300 businesses directly involved in tourism. This is exclusive of companies such as restaurants, gas stations and other retail businesses that derive a part of their income from tourism. Accommodation facilities (motels, hotels, lodges and campgrounds) are a key indicator of the health of the tourism industry, and Vancouver Island has traditionally accounted for about 20 per cent of the province’s total earnings from this segment. Almost half of Vancouver Island’s total accommodation earnings come from sport fishing lodges, which rely on healthy fish populations and inspiring scenic settings.

Table 3 presents the distribution of the labour force by industry on the Island for 1996. The total labour force was about 326,510 in 1996, of which 254,000 were in the service sectors with the remainder in goods producing industries. While total labour force grew by 12% over the 1991-96 period, the labour force in the goods producing sectors grew by only 5% over this period. The labour force in agriculture, logging and forestry, non-primary manufacturing (including value-added wood processing) and construction grew over the 1991-96 period, but there were significant declines in primary wood processing, fishing and mining. The service sector labour force as a whole increased by 14% over the 1991-96 period, reflecting population growth and diversification of the economy.

As a result of these trends, the relative importance of the service sector grew over the 1991-96 period (from about 76% to 78%) while the importance of goods producing labour force declined (from 24% to 22%). This is a continuation of a similar trend over the 1981-91 period for the Island and the province as a whole.

Despite a history of economic cycles related to changing forest product market conditions, many areas and communities on the Island have become more diversified and have experienced economic and population growth.

1.3.3 Social Characteristics

The unemployment rate on the Island was approximately 9.5% in 1996, about the same as in 1991 and similar to the rate for BC as a whole. About 8.3% of the Island’s population received BC Benefits at year-end 1997. Unemployment and social assistance rates varied among Regional Districts, with the lowest rates in the Capital Regional District. Generally, unemployment and social assistance rates are significantly higher among First Nations people and, to a lesser extent, in areas of the Island that are more resource dependent. The First Nations unemployment rate is about three times that of the rest of the population. Crime rates also tend to be higher and education levels lower in more resource dependent areas of the Island.

The self-employed proportion of the labour force was about 15%, slightly higher than for BC. The labour force participation rate increased over the 1991-96 period, primarily due to a continued increase in women’s labour force participation. The proportion of full time workers declined over the 1991-96 period, while the self-employed proportion of the labour force has increased.

1.3.4 Anticipated Socio-Economic Trends

The Island’s population and economy are expected to continue to grow, with variations due to business cycles. Growth will likely be higher and more consistent in the southeastern portion due to in-migration, continued growth in service and light manufacturing, and the stabilizing influence of local, provincial and federal government employment. Growth will be lower in the central areas, and perhaps even negative in the northern portion of the Island, due to the greater dependence on resource industries.

These expected differences in sub-regional economic growth might partially reflect redistribution of population on the Island, and not just population flows on and off the Island.

While forestry will likely remain an important resource industry on Vancouver Island, it will likely decrease in absolute and relative terms due to harvest declines and continued rationalization and technological change in the industry. The value-added sector will continue to grow particularly with recently announced government initiatives such as the Jobs and Timber Accord and changes to the Small Business Forest Enterprise Program of the Ministry of Forests.

Table 3: Experienced Labour Force for Vancouver Island and BC by Industry

Sector	Vancouver Island 1991		Vancouver Island 1996		% Change VI 1991-1996	British Columbia 1996	
	Labour Force	Proportion of VI Total (%)	Labour Force	Proportion of VI Total (%)		Labour Force	Proportion of BC Total (%)
Agriculture	4,635	1.6	5,215	1.6	12.5	44,865	2.3
Fishing & Trapping	4,615	1.6	4,290	1.3	-7.0	8,850	0.5
Forestry & Logging	10,565	3.6	10,740	3.3	1.7	39,390	2.0
Wood, Pulp & Paper Veneer & Plywood Mills	12,920	4.4	11,775	3.6	-8.9	68,310	3.6
Mining	1,765	0.6	1,505	0.5	-14.7	15,935	0.8
Manufacturing (incl. value added wood processing)	12,105	4.2	14,195	4.3	17.3	159,905	8.3
Construction	22,260	7.6	24,745	7.5	11.2	129,925	6.8
Transportation & Storage	10,830	3.7	11,760	3.6	8.6	89,275	4.6
Communications & Other Utilities	6,625	2.3	6,590	2.0	-0.5	53,030	2.8
Trade (Wholesale and Retail)	47,890	16.4	52,745	16.1	10.1	330,335	17.2
Finance, Insurance and Real Estate	13,490	4.6	15,265	4.6	13.2	109,975	5.7
Business Services	13,880	4.8	17,610	5.4	26.9	129,110	6.7
Accommodation, Food & Beverage Services	25,370	8.7	29,250	8.9	15.3	160,830	8.4
Government Services	33,840	11.6	35,240	10.7	4.1	111,420	5.8
Educational Services	20,310	7.0	24,035	7.3	18.3	130,980	6.8
Health & Social Services	29,035	10.0	35,460	10.8	22.1	180,245	9.4
Other Services	21,515	7.4	26,090	7.9	21.3	159,880	8.3
TOTAL	291,650	100.0	326,510	100	12.0	1,922,260	100.0

Source: BC STATS: Includes very small labour force contributions from Central Coast portions of Mt. Waddington and Comox-Strathcona Regional Districts.

Due to the federal government buyback program, salmon fisher employment will likely continue to decrease, although incomes may be stabilized. Employment in other fishery sectors is expected to increase due to development and diversification. Aquaculture activity is likely to increase over time. Due to the hidden nature of mineral resources and international markets and prices, mineral exploration and development will likely continue its historical cyclical pattern. Activity in the oil and gas sector will depend on the future of the federal/ provincial moratorium on offshore exploration.

The historical increase in the relative importance of tourism and other components of the service sector (e.g. high tech and film industries), light manufacturing and pension and investment incomes will likely continue. These shifts in economic structure will be reinforced by the in-migration of retirees to the Island, the aging of the resident population, increasing demand for and scarcity of wilderness recreation opportunities, technological change and resource depletion.

Trends in tourism and demographics suggest Vancouver Island will continue as a world leader in ecotourism, adventure tourism and cultural tourism, all of which rely on a close relationship between the tourism operation and the land base. The best available data on resources shows the Island has the resource wealth to support continued sustainable development of tourism businesses.

The settlement of modern treaties with First Nations may be a source of economic growth on the Island as a result of First Nations investments and development initiatives, and resolution of uncertainties for, and partnerships with other investors.

2.0 THE PLANNING PROCESS

The Vancouver Island Land Use Plan process has been a complex undertaking. The various components of the process and their relationships are represented in **Figure 1**.

2.1 The CORE Process

The Vancouver Island regional planning process began with the work of the Commission on Resources and Environment (CORE). CORE was formed in January 1992 to provide Cabinet with independent advice on land use and related resource and environmental issues. CORE was specifically tasked with making land use recommendations for three regions of the province, including Vancouver Island, and decided to formulate these recommendations using regional planning tables.

The CORE planning process for Vancouver Island began in August 1992. CORE staff worked extensively with interest groups, industry, local and provincial governments, and First Nations to form 14 "sectors" of interest to be represented at its regional land use planning table. In addition to having a representative at the planning table, government assisted the process by providing staff from relevant provincial government agencies for policy, program, technical and analytical support.

The Plan Area boundary was established early in the process by CORE, in consultation with the Table, and excluded the Islands Trust area (at the request of the Islands Trust Council), and the Clayoquot Sound area (at government's request).

The CORE table held over 47 days of meetings during the next year. Despite achieving a number of contributing products, the table was unable to reach consensus on land and resource management recommendations and was disbanded in October 1993.

CORE staff used the deliberations and products of the table to develop a recommended Vancouver Island Land Use Plan. The three-volume report was presented to Cabinet and publicly released in February of 1994.

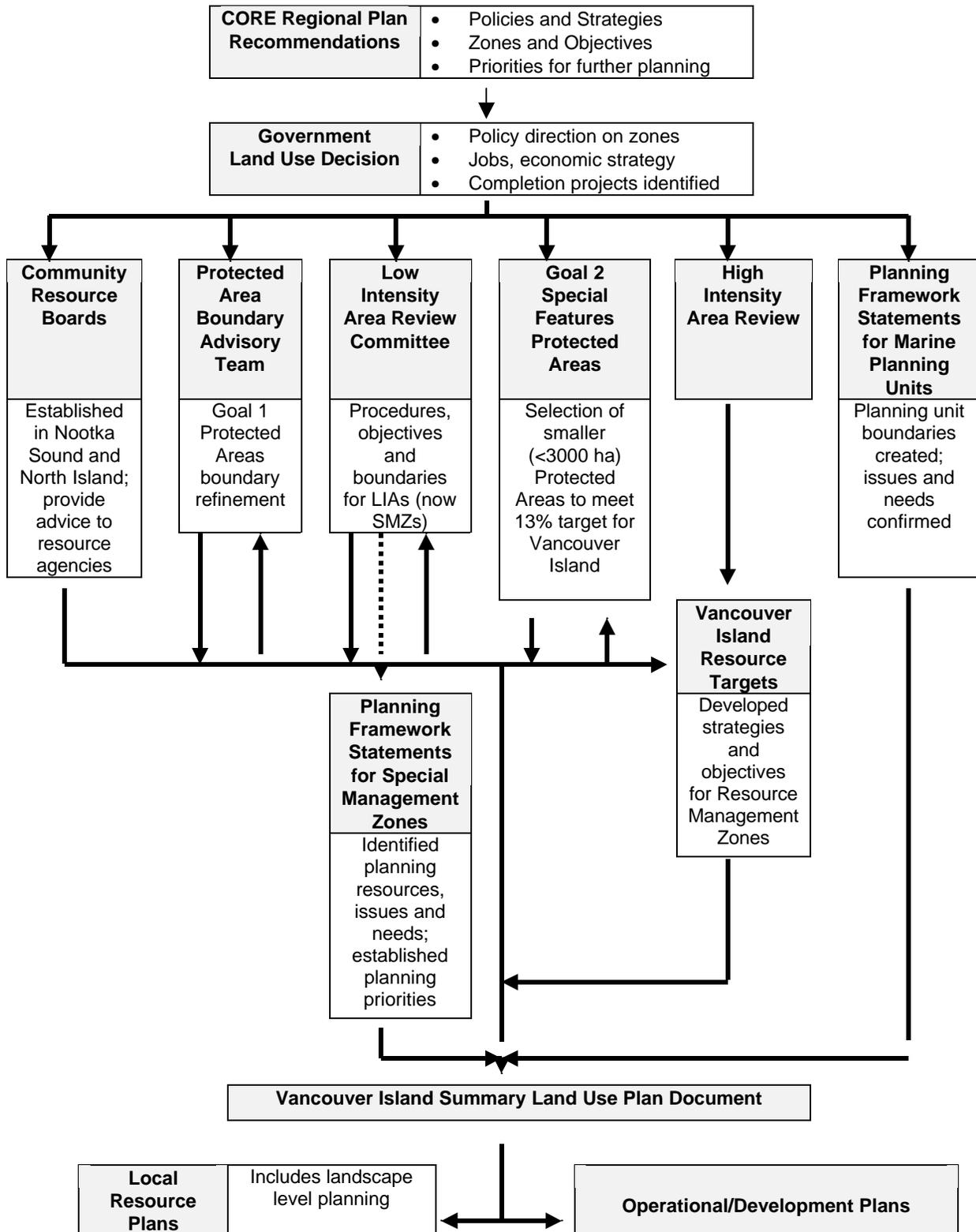
2.2 Government Land Use Decision

On June 22, 1994, the Province formally responded to CORE's recommendations with the "Vancouver Island Land Use Plan Decision". This broad policy-level document provided limits for the amount of protected area in the Plan and identified broad land use designations for Crown and private lands. These zones consisted of protected area (PA), low intensity area (LIA), general forestry area (GFA), high intensity area (HIA), settlement area and agricultural area. The decision also provided a Vancouver Island Jobs Strategy, committed to building a North Coast Trail, and lead to the creation of community resource boards for interested resource-based communities.

2.3 Completing the Plan

Cabinet's land use decision constituted a decision in principle, which established goals for land use on the Island. In order to achieve these commitments the initiatives listed in this section were implemented following Cabinet's decision.

Figure 1: Components of Strategic Plan Development for Vancouver Island



Community Resource Boards

During the next year, government undertook negotiations with affected local governments who had expressed an interest in developing community resource boards. This led to the establishment of the Mt. Waddington Community Resource Board (CRB) and the Nootka Resource Board as pilot projects, funded by government to provide recommendations and advice on various aspects of implementing the land use plan.

Protected Areas Boundary Advisory Team (PABAT) Report

A government inter-agency Protected Areas Boundary Advisory Team (PABAT) was established in 1994 to undertake a review of the boundaries of new protected areas established in the 1994 land use decision. These protected areas had been selected by CORE on the basis of planning table proposals and government technical team candidates which met PAS selection criteria.

Submissions were requested and received from stakeholders, First Nations, key advocacy groups and concerned local governments. Direct consultations were held in Victoria and eight other island communities. In addition, approximately 70 written submissions were received from participants.

The PABAT Report was presented to government in October of 1994. Following an additional review with key stakeholders, Cabinet endorsed a final set of boundaries on April 11, 1995, which set the size of the new protected areas at 78,342 hectares.

Low Intensity Areas Review Committee (LIARC) Report

A three-person government technical group was established in July of 1994 to address the issue of Low Intensity Areas (LIAs). The Committee prepared and distributed information to key stakeholders, interest groups and other parties previously involved in the CORE and PABAT planning processes. A consultant was retained to encourage submissions from First Nations. Approximately 45 written submissions were received from a variety of sources.

The Committee's report was delivered in January of 1995. Government acceptance of its recommendations was announced on April 11, 1995. The announcement confirmed the LIA boundaries and unveiled a number of initiatives designed to increase the availability of timber to communities and improve community economic stability.

Special Features Protected Areas

The 1994 land use decision stated that area reductions resulting from review of the new protected areas would be used in a process to establish "special feature" or "Goal 2" areas of the Protected Areas Strategy. The intent of Goal 2 was to set aside smaller areas (normally less than 1,000 hectares in size) to preserve natural, cultural, heritage or recreational features of regional, provincial, national or global significance. Approval of the PABAT recommendations on April 11, 1995 confirmed the availability of up to 11,770 hectares for this process.

Background material issued with the 1994 land use decision had indicated that a priority would be given to identifying special feature areas in the Quadra-Cortes-Read Islands area, as well as along the south eastern side of the Island (Nanaimo Lowlands) where much of the land was privately owned.

Technical work for this process was assigned to a government inter-agency Regional Protected Areas Team. The team initially requested nominations for "areas of interest" from First Nations, local governments, provincial and federal agencies, and stakeholder groups. The initial 300 nominations were screened against the official PAS criteria, and the resulting draft list distributed to interested parties for further comment. Following this public review, the list was refined to 78 areas, encompassing about 35,000 hectares. The technical team carried out further evaluation and study to reduce the overall area to approximately the size limit identified by government.

The special feature protected areas decision was announced in February of 1996. The selected areas represented a range of special values across the Island, in accordance with PAS Goal 2 criteria.

Resource Management Zones (Resource Targets) Report

The 1994 land use decision had directed that lands suitable for high intensity forestry would be identified from within General Forestry Areas. A decision was made to follow a technical exercise, focused on the identification of broad “targets” for levels of resource use in all of the Crown tenured forest land reserve zones. This process was initially termed the VIRT process (Vancouver Island Resource Targets).

A small “ VIRT technical team” was struck in May of 1995, with seven members representing government staff, the forest industry, and environmental forestry consultants. A working group, reporting to the Forest Sector Strategy Committee, was formed to provide feedback on the team’s work. It included representation from government, First Nations, community, industry and interest groups.

The targets approach was subsequently abandoned; the technical team’s role was redefined to identify High Intensity Area (HIA) boundaries, and to develop management objectives and strategies for all zones consistent with the Forest Practices Code and the LIARC Report. The team was also requested to incorporate new, regional-scale requirements on landscape biodiversity in the development of the zones and their objectives.

An interim report was released in April 1996 based on input received on a workbook distributed to stakeholders, interest groups, government agencies and First Nations. It also used written submissions and comments from the two community resource boards, forest companies, and other groups.

Over 50 submissions were received in response to the interim report. They led to further work and refinements to the report, and a public discussion forum was held in June of 1997. Further feedback resulted in additional changes and in December 1997, a report was released for public review. This report, *Resource Management Zones for Vancouver Island (RMZ)*, presented final recommendations of the technical team on management objectives and zone boundaries. Considerable feedback was received on this report and its map, and resulted in a number of changes to the work of the technical team. The final outcome has been incorporated into this Summary Plan.

Special Management Zone (SMZ) Planning Framework Statements Report

To provide general guidance to local and sub-regional planning, LIARC recommended that “planning frameworks statements” (PFS) be prepared for each LIA (now titled Special Management Zones, or SMZ, in keeping with provincial standards), to provide interim general direction and priorities for more detailed and sector-focused planning and management activities. It suggested any sub-regional or local resource management plans be consistent with the approved LIA Management Guidelines and pertinent Planning Framework Statement. The Vancouver Island Inter-Agency Management Committee (IAMC) was given the responsibility of developing these PFSs.

The report ‘Planning Framework Statements for Vancouver Island’s Special Management Zones’ (PFS-SMZ report) was prepared from August to October, 1996 through visits to local offices of government agencies, licensees and interest groups. Telephone interviews were also conducted with key contacts including community resource boards. Additional sources of data, such as the provincial Conservation Data Centre, were accessed to develop specific aspects of the report. The emphasis in this exercise was to consolidate readily available information and identify planning issues, rather than to organize a new round of SMZ planning.

A revised version of the report was released to the public for review in December 1997 along with the RMZ report. In response to this review, additional information was gathered from the general public, non-governmental organizations, industry and government agencies. As a consequence, revisions to the PFS-SMZ Report were made to capture the important elements of resource management issues, rather than detailing current information within each zone.

Marine Planning Units (MPU) Planning Framework Statements Report

The Plan Area includes a substantial area of foreshore and ocean within its boundaries. While coastal planning was not directly addressed in CORE table negotiations, CORE's report to government did incorporate coastal waters in its proposed land use designations.

The 1994 Decision was focused primarily upon forestry related issues and consequently provided little direction for further coastal planning. However, it reinforced the recommendations from CORE by confirming portions of the coastal waters in various zones, including a reference to 34,000 ha of foreshore and ocean, suitable for aquaculture, to be part of an "Agriculture" zone. The government's decision document did not include a plan designation map, and consequently the zoning status of coastal areas remained unclear.

To address this problem, the Vancouver Island IAMC developed a set of Planning Framework Statements for coastal areas within the Plan Area, similar to the statements developed for the Special Management Zones. The coastal area was divided into Marine Planning Units (MPUs) and work was initiated to develop brief, interim statements identifying known resources, issues, and future planning considerations as well as priorities.

The document *Planning Framework Statements for Vancouver Island's Marine Planning Units* was initially developed by government agency technical staff and distributed for public review in November of 1997, accompanied by a work book to capture additional values or issues in the identified planning units. Few comments were received from the public, local governments and government agencies, but those received primarily emphasized the need for future planning of the coastal zone, and expressed concern about the identification of a zone to accommodate aquaculture. A revised document was prepared for the IAMC by planning consultants in March of 1998, and approved by the IAMC as a component of this Summary Land Use Plan.

2.4 First Nations Participation

The involvement and participation of First Nations has been encouraged at all stages of the land use planning process. Actual involvement has varied with each specific project, but in general, has been minimal for a number of reasons that include time and capacity to participate and concerns about implications for treaty negotiations.

During the CORE process, seats were left open at the planning table for First Nations participants. A consensus agreement was reached between the Nuu-chah-nulth Tribal Council and the planning table in July 1993 regarding the interpretation of the term "without prejudice". However, this did not result in formal participation in the CORE process. Some groups attended on a regular basis in the capacity of observers. First Nations did not participate in the development of CORE's recommendations to government.

The government's 1994 Decision affirmed that the land use designations and objectives were without prejudice to aboriginal rights and treaty negotiations, and that government intended to respond to the concerns expressed by First Nations in government-to-government discussions. Government subsequently met with First Nations representatives to explain the land use decision and identify the opportunities that would be available in subsequent plan completion activities.

First Nations participation was encouraged and solicited in all subsequent plan completion initiatives. In the protected areas boundary review process, First Nations were sent copies of all boundary material and requested to provide comments and concerns. A consultant was specifically engaged to obtain First Nations perspectives. Much of the response was related to treaty concerns about protected areas, rather than specific boundary issues.

In the review of low intensity areas, information packages were also distributed to all First Nations. Submissions were received from a number of band offices, councils and commissions. Their comments were used in the boundary refinement process and in development of protocols associated with these zones.

In the special features protected areas process, First Nations were provided with a number of opportunities to identify, confirm or express concerns about candidate areas, and were provided with advance notification of government's final list of areas. However, most responding First Nations were as much concerned over the implications on treaty negotiations of establishing protected areas as the location of any specific protected area.

In the development of the Resource Management Zones document, First Nations were invited to provide specific information and to comment upon reports throughout the process. However, very few comments were received on the interim and final reports. A First Nations representative did, however, participate as a member of the technical team's advisory group.

First Nations response to the Planning Framework Statement documents for Special Management Zones and Marine Planning Units was also solicited, with minimal response.

Throughout these processes, government has consistently conveyed to First Nations the message that their participation in the planning process is without prejudice to subsequent treaty negotiations on land and resources. It has also confirmed that the land use zoning and management decisions of the planning process do not infringe upon legally confirmed aboriginal rights of First Nations or treaty rights, unless related to public safety or conservation issues.

2.5 Related Initiatives

Since the 1994 land use decision, a number of separate government initiatives have been undertaken which influence land use and management on Vancouver Island. They include special studies or reports, pilot projects, new legislation and programs, and program changes. Such initiatives have necessitated alterations in the plan completion work or provided new perspectives or approaches to be considered. Some of the more important initiatives are mentioned below.

Forest Practices Code

- Passed in the BC legislature in July 1994 to change and improve forest land use and forest management in BC.
- New provisions for biodiversity, watershed assessment, terrain stability, riparian management areas, cutblock size and green-up.
- Chief Forester of BC policy in December 1996 required all Forest Regions to develop draft boundaries for landscape units (LU) and associated draft biodiversity emphasis options (BEOs) by October 31, 1997.
- Based on the landscape units and BEOs, a "Regional Landscape Unit Planning Strategy" (RLUPS) was designed to establish the framework and general direction for implementation of biodiversity-oriented planning of forest use at a more detailed level.
- *Forest Statutes Amendment Act* (July 1997) and amendments to four key regulations under the Code (deposited in April 1998) resulted in changes intended to streamline the Code and reduce costs and red tape, while maintaining environmental standards.

Enhanced Forest Management Pilot Project

- Initiated from a report by the Forest Sector Strategy Committee identifying the need for pilot projects to address timber supply reductions.
- MacMillan Bloedel's TFL 39, Block 2 (Adam and Eve watersheds) selected as one of the pilot areas in April of 1996. A MacMillan Bloedel-led working group is coordinating the pilot project.
- An implementation progress report is to be delivered in January 2000.

Provincial Special Management Zone Initiative

- SMZ issues led to a "SMZ Action Plan" and formation of a province-wide SMZ working group to advise government.
- Action Plan is currently underway and includes a review of consistency in SMZ boundary delineation and criteria, review and approval processes for industrial activities, resource impact limits, implications of Forest Practices Code management provisions, and nature of more detailed planning in SMZs.
- Pilot areas may be used to clarify, deliver and implement SMZ objectives in approved land use plans.
- This work is to be completed during the year 2000.

Mineral Exploration and Development Initiatives

- *Mining Rights Amendment Act* passed in 1998, confirming the right to access mineral and coal tenures and carry out responsible mining activities in all land use zones outside of legally designated Protected Areas and other Crown lands reserved from subsurface tenure disposition.
- The Ministry of Forests must issue a special use permit to a mineral tenure holder for appropriate ground-based access to the tenure, subject to terms and conditions of the Chief Inspector of Mines. The Chief Inspector must consider resource management objectives and zones from a land use plan in making the decision on approval.
- *Mineral Exploration Code (MX Code)* passed in 1998 contains standards for mineral and coal exploration activities within an updated, permit review process.
- Specific standards are established for operations in areas such as community watersheds and riparian zones that are harmonized with the Forest Practices Code, but reflect the unique requirements of the mineral, coal and placer industries.

Local Government Initiatives

- *Growth Strategies Act*, enacted in June 1995, provides a framework for local governments to address and regulate growth within the regional districts of southeast Vancouver Island.
- Regional growth strategies have been initiated for the Capital, Nanaimo and Comox-Strathcona Regional Districts.
- Strategies will take into account provincial government objectives and programs, including the zoning and management of adjacent Crown lands in the Vancouver Island Land Use Plan.

Clayoquot Sound Initiatives

- Clayoquot Sound (approximately 350,000 ha) has a long history of debate over land use and resource management, due to increasing conflict over old growth forest values and issues of environmental and economic sustainability.
- A series of community based planning initiatives was sponsored by government in the late 1970s.
- Government assumed responsibility for completing a plan for the area after deadlock resulted in disbanding of the last of these initiatives in October 1992.
- Government released the Clayoquot Sound Land Use Decision in April 1993.
- Due to government commitment to resolve the Clayoquot Sound issues, the area was excluded from the Vancouver Island CORE plan area, and from the government's 1994 Land Use Decision.
- In June 1993, government established a Scientific Panel to review and make recommendations on forest management practices in Clayoquot Sound. This Panel delivered its final report to Cabinet one and a half years later.
- A 1994 Interim Measures Agreement between the province and the Central Region Chiefs of the Nuu-chah-nulth Tribal Council created a Central Region Board with authority to review any resource

management or land use planning decision in Clayoquot Sound. This agreement was renewed in 1996 and a further renewal is being discussed.

- Government announced in July 1995 it would fully implement the Panel's 120 recommendations.
- Implementation of the Scientific Panel recommendations has been undertaken by government, industry and a Central Region Board, made up of First Nations and other local communities.
- In early 1999, the Province, with the support of both local communities and First Nations, agreed to sponsor an application to UNESCO to designate Clayoquot Sound as an international biosphere reserve.

3.0 STRATEGIC DIRECTION

The strategic direction in this section is derived from government's 1994 Land Use Decision, CORE's 1994 Recommended Land Use Plan, government's 1996 Special Feature Protected Areas Decision, and its 1997 Resource Management Zones Report.

3.1 Establish a Protected Areas Network

- 3.1.a The provincial Protected Areas Strategy (July 1993) affirms government's intent to double the amount of provincial land in protection by the year 2000, for conservation, recreation and cultural heritage purposes. This strategy includes the need to protect key under-represented ecosystems (Goal 1), and to increase the protection of unique areas with special recreational, cultural and environmental features (Goal 2). The Vancouver Island Land Use Plan is the primary mechanism for contributing to the Protected Areas Strategy on Vancouver Island.
- 3.1.b Due to the Island's ecological diversity and exceptional natural values, and an ever-increasing demand for recreation and tourism opportunities, the amount of land designated as Protected Area is increased from 10.3% to 13% of the Plan Area to meet PAS Goal 1 and Goal 2 objectives.
- 3.1.c Where Protected Area designations are made on Crown land, these areas will be immediately secured through legislation, after appropriate review of boundaries. Private lands identified for possible protection as Goal 2 PAS sites will be pursued for acquisition through land exchange or purchase, subject to willingness of owners, and based on fair market value for the properties. If such areas are not obtained, government will pursue acquisition of other sites with similar features to achieve its 13% commitment, with priority given to underrepresented areas on southeastern Vancouver Island.
- 3.1.d Government will transfer four significant protected areas to regional districts for regional park purposes, reflecting historically strong local interest and to support the further development of regional park systems on Vancouver Island.
- 3.1.e To foster economic diversity in the north Island, and to promote additional recreational opportunities, a new North Coast trail will be developed in conjunction with the establishment of new protected areas and Special Management Zones between Cape Scott and Port Hardy.

3.2 Secure the Forest Land Base

- 3.2.a Vancouver Island forests are of continued importance to the economic and social well being of its communities as well as all of British Columbia. Forested lands must be carefully conserved and managed to maintain and foster a variety of forest-based uses in the Plan Area. In the Plan Area, 81% of the land base will be secured as the forest land base for commercial timber use, recreation and tourism, mining and other sustainable resource-based activities.
- 3.2.b A Forest Land Reserve will be established to ensure that Crown forest land and privately managed forest lands on Vancouver Island are protected from unnecessary urban encroachment or conversion for other purposes. The Special Management, General, and Enhanced Forestry zones identified in this Plan will be part of the Forest Land Reserve and will be managed under the Forest Practices Code.
- 3.2.c A number of non-protected forest lands display regionally significant combinations of recreational, environmental and cultural values. The Plan recognizes the sensitive nature of these lands to development activities by including them as Special Management Zones within the Forest Land Reserve. Commercial resource development will be subject to the Forest Practices Code and strategic and operational planning to minimize the impact on the identified special values. Up to 6.4% of the Plan Area will be established as Special Management Zone, and 8% on Vancouver Island when including comparable designations in Clayoquot Sound.
- 3.2.d The Plan will identify Enhanced Forestry Zones which have particular potential for increased commercial timber production and more labour-intensive forest management through intensive reforestation, spacing, pruning, thinning, and new harvest practices.

3.3 Provide Regional Biodiversity Direction

- 3.3.a The preservation of biodiversity is an important element of the Vancouver Island Land Use Plan. The protected areas network established under this Plan is the cornerstone for the preservation of biodiversity on Vancouver Island by protecting key old growth forest ecosystems and special ecological features. Special Management Zone areas will become vanguard areas for implementing the principles of sustainable forest ecosystem management. SMZ areas contain concentrations of special resource values, including old growth forests with high biodiversity values, and serve as regional scale linkages among protected areas in support of biodiversity objectives.
- 3.3.b The biodiversity provisions of the Forest Practices Code will be applied across all resource management zones - special, general and enhanced - to maintain representative areas of old growth forest, and other elements of biodiversity conservation. This will be implemented through landscape unit planning in accordance with provincial policy, and consistent with higher level plan objectives resulting from the Land Use Plan. Boundaries of resource management zones and landscape units will be aligned to the greatest extent possible, and biodiversity emphasis assignments to landscape units will be integrated with the management priorities of the resource management zones.

3.4 Support Food Production Activities

- 3.4.a Food production is vital to the Island's food security and important to its economy and lifestyle. Food production activities, including agriculture, commercial fisheries and aquaculture, contribute to economic diversity, employment and income levels. Food producing areas are finite and will become ever more important with the anticipated population growth on the Island. Commercial fisheries production relies on abundant and diverse fish stocks, the protection (and, where warranted) the restoration of marine fish habitat, and the maintenance of fishing opportunities in areas where seafood species can be sustainably and economically harvested. The Land Use Plan affirms the importance of maintaining good food producing areas to meet the future food needs of society, and the need for careful planning of new Crown land based production areas so they are designated and used in a manner that minimizes conflict and maintains environmental quality.
- 3.4.b Previous land use decisions, inherent capability and production records highlight the significance of specific areas of intensive shellfish farming. The Land Use Plan affirms the importance of maintaining high capability beaches and nearshore areas of Baynes Sound, Nanoose Bay, Cortes Island, south Read Island and southeast Quadra Island as shellfish growing areas, including the need to maintain water quality.
- 3.4.c The continuation of land-based agriculture depends in large part on maintenance of the Agricultural Land Reserve (ALR), created in 1973 to maintain agricultural opportunities on suitable undeveloped land and to minimize the conversion of existing farmland to urban uses. At present, approximately two-thirds of the ALR on Vancouver Island is currently not in agricultural production or is under-utilized. Expansion of agricultural production to meet the steadily increasing needs of local and non-local markets can readily be accommodated. The Land Use Plan affirms the role of the Agricultural Land Reserve by designating ALR lands as Agricultural Land in the Plan Area.

3.5 Recognize Settlement Lands

- 3.5.a Settlement patterns and activities have a significant influence on the use of Crown land and resources. Much of the southeastern portion of Vancouver Island is private land within municipal boundaries, or within First Nation reserves. The Land Use Plan's land allocation system recognizes existing settlement lands as "Settlement Area," and acknowledges that land use decisions in this category (approximately 3% of the Plan Area) are primarily the responsibility of local government under the *Municipal Act* and First Nations under the *Indian Act*. This zone does not allocate Crown lands for future settlement expansion.
- 3.5.b In situations where local governments have enacted foreshore and water zoning within their boundaries, the intent of the Vancouver Island Land Use Plan is to promote compatibility between these zones and regional land use designations.
- 3.5.c Significant public resource values exist within the Settlement Area category, including critical fish and wildlife habitat, water resources, and recreation. These values are sensitive to continued urban growth and increased settlement activity. The Land Use Plan confirms the importance of proper management of these resources and commits provincial agencies to working co-operatively with local and regional governments to ensure their appropriate recognition, management and planning.

3.6 Maintain Energy and Mining Opportunities

- 3.6.a Energy and minerals are to a large extent “hidden” resources that are not readily apparent or remain untapped until appropriate market conditions or societal needs warrant their use. The Land Use Plan reflects the extent of current knowledge and preferences respecting energy and mineral development on Vancouver Island.
- 3.6.b Government, through existing legislation and policy, encourages the responsible exploration and development of mines and energy resources on Vancouver Island, and recognizes the rights to access mineral, coal, oil and gas and geothermal tenures and conduct exploration and development activities.

3.7 Address Integrated Coastal Management

- 3.7.a The coastal resources of Vancouver Island are important contributors to the region’s environment, lifestyle, cultures, and economy. The province’s 1998 Coastal Zone Position Paper establishes a number of principles and goals for achieving sustainable coastal zone management, including the increased use of coastal zone planning at a variety of different levels. The Land Use Plan affirms the need to achieve integrated coastal management by establishing coastal planning units and priorities for more localized planning in those units, for a variety of potential uses.
- 3.7.b Planning and management of the Plan Area’s coastal zone is subject to a complex array of existing jurisdictions involving local, provincial and federal agencies. Consistent with the Coastal Zone Position Paper, this Land Use Plan will be implemented in collaboration with affected jurisdictions and interests in the design and development of localized planning in the Island’s coastal units.
- 3.7.c The Land Use Plan has identified up to 13% of the Island as land-based protected areas. However, the coastal zone contains many areas that may warrant various levels of protection for unique or special ecological, recreational, and cultural values. A joint federal/provincial Marine Protected Areas Strategy affirms the intent to establish a network of marine protected areas through planning processes at various levels. The Land Use Plan will reflect this strategy by promoting localized coastal planning in Vancouver Island’s coastal units to address potential Marine Protected Areas.

3.8 Promote Community Stability

- 3.8.a Many Island communities are extremely sensitive to changes in the use and allocation of land and natural resources, including those generated by land use planning. Such resource-dependent communities tend to be located outside of the larger settlement belt of southeast Vancouver Island, and feel vulnerable to decisions made by non-residents that affect their future. The Land Use Plan recognizes the need for local input and influence through such mechanisms as community resource boards in the Nootka Sound and Mt. Waddington Regional District areas, to provide advice on implementing and monitoring the Plan and related resource management policies.
- 3.8.b Changes in the availability and economics of major resource industries, including forestry, fishing and mining, have affected employment levels on Vancouver Island. Forest Renewal BC was created in 1994 to use stumpage revenues to renew BC’s forests and create jobs through investments in local forestry projects, such as watershed restoration, road rehabilitation and intensive silviculture. The Land Use Plan commits government to utilizing Forest Renewal BC programs and subsequent, related programs to offset job losses created by the implementation of the Plan, as well as those created by other changes in the forest industry that affect the livelihood of forest workers.

- 3.8.c Given the new global economy and competition, economic change is inevitable on Vancouver Island. The Land Use Plan recognized such change by promoting a range of programs that focus on skills training for displaced workers, and skills training partnerships on Vancouver Island. These programs have since been incorporated into the activities of FRBC and extended to apply to a variety of communities and workers affected by economic, as well as land use changes affecting the forest industry across BC.

4.0 LAND USE DESIGNATIONS

4.1 Introduction

The Vancouver Island Land Use Plan establishes different land use categories or regional zones, as shown on **Map 8**. The allocation of land to the different land use zones is shown in **Figure 2**.

FIGURE 2: DISTRIBUTION OF LAND BASE TO LAND USE DESIGNATIONS

LAND USE ZONE	AREA (HA)	PERCENT OF ISLAND
Protected	438,784	13
Special Management RMZ	268,138	8
Enhanced Forestry RMZ	808,222	24
General RMZ	1,027,994	31
Agriculture	96,527	3
Settlement	108,138	3
Private	601,208	18
TOTALS	3,349,011	100

RMZ: a resource management zone for purposes related to the Forest Practices Code.

Table 4 (Land Use Guide) provides an indication of the degree to which opportunities may exist for a given activity in a given zone. The Guide attempts to address future activities at a regional planning scale. It does not identify permitted or non-permitted uses at the site level. Use of the Guide, considered together with the strategic directions provided in section 3.0 and resource or activity specific management objectives and strategies, should provide direction for subsequent planning or decision-making with respect to any proposed activity. NOTE: The rating in Table 4 is a generalized rating for the entire zone, and may vary when considering the resource values and characteristics of any land and coastal unit within the zone. All uses are subject to government policy and legal requirements respecting consultation with First Nations on rights and title.

Table 4: Land Use Guide for VILUP Zones

LAND USE/ ACTIVITY	Upland PA	RMZ SMZ	RMZ GMZ	RMZ EFZ	Agricultural Land	Coastal Waters		
						PA	SMZ	GMZ
Food Production								
Agriculture	N	N	G/C	G/C	S	-	-	-
Aquaculture ¹	N	C	G	G	S	N	C	S/G
Timber Production								
	N	C	G	S	C	-	-	-
Outdoor Recreation								
Non Commercial	S/G	G	G	G	C	S	S	G
Tourism (refer to Key)								
Low Intensity	C	S/C	G	C	C	S	C	G
Medium Intensity	N	S/C	G	N	C	N	S/C	G
High Intensity	N	N	G	N	C	N	N	G
Fish and Wildlife								
Fishing	N	G	G	G	C	G/N	S/G	G
Hunting	N	G	G	G	C	G/N	G/C	G
Trapping	N	G	G	G	C	-	-	-
Viewing ²	S/C	C/G	G	G	G/C	S/C	S/G	G
Domestic Water Supply								
	N	G	G	G	C	-	-	-
Transportation/ Utility Corridor								
	N	C	G	G/C	C	N	C	G
Residential								
	N	N	G	N	N	N	N	G
Commercial/Industrial								
	N	N/C	G	C	N/C	N	C	G
Institutional Uses								
	N	N/C	G	N	N/C	N/C	C	G

Key to Land Use Guide

S. Specific Opportunity - There is a strong preference for this activity within the LUD. Activities with this rating reflect the essential purpose of the LUD. This activity is subject to normal resource management and land use requirements; however, special policies may be effected to promote the activity within the LUD.
G. General Opportunity - There is a general acceptance of this activity within the zone, due to general compatibility with the intent of the designation. The activity is subject to normal referral procedures, conditions and requirements in effect for standard resource management purposes (e.g. legislation, guidelines, codes of practice, standard operating procedures).
C. Conditional Opportunity - The activity is acceptable within the zone, however special operational conditions may be imposed to ensure practices are consistent with maintaining the intent of the zone. Special conditions or guidelines may be applied where technically necessary to address site-specific considerations, as a result of established higher level plan direction, or as conditions of project approval and permitting.
N. No Opportunity - The activity is incompatible and inconsistent with the basic intent of the zone, and either excluded by statute (e.g. no mining in parks), or occurs only by special circumstance such as grandparented use. There are limited opportunities for compatibility of the activity within the zone.

¹ Land or lake-based aquaculture in land units, and marine based aquaculture in coastal units.

² Viewing opportunities are restricted within some Ecological Reserves to protect easily impacted resources.

Key to Intensity of Tourism Activity

Low – Backcountry/wilderness activity areas where the service infrastructure is rustic or non-existent. Structures must not be readily apparent, or intrude on the natural setting. Typical tourism facilities would be campsites, trails, backcountry huts, cookshacks, outhouses and other structures required to reduce visitor's impact on the environment.
Medium – Intermediate development intensity, generally modest-scale structures built to complement the natural setting. Structures must not dominate the setting. Typical tourism facilities would be backcountry lodges, remote resorts and camps.
High – Frontcountry (settlement areas) and areas of well-developed service infrastructure. Structures may dominate the setting. Typical tourism facilities would be hotels, motels, museums, theatres, and other 'roofed' attractions.

This chapter presents a description of resource values, as well as management objectives and strategies for the individual Resource Management Zone Units. The prescriptions for the 22 Special Management Zone Units are presented first, followed by the 47 General Management and Enhanced Forestry Zone units.

The objectives in this Plan are intended to describe a desired future state with respect to a particular resource value or regime. The objectives are preceded by a more generalized goal or intent statement for each resource value or regime. Special Timber, Biodiversity and Visual objectives for SMZ, as well as timber harvesting objectives for EFZ units, are intended to be established as a "higher level plan" under the *Forest Practices Code of British Columbia Act*.

The strategies identified in this part of the Plan are defined as possible or desired actions or means for achieving resource objectives. They are offered as advice for consideration by decision-makers when making management determinations. Strategies are not legally binding, nor do they represent Ministry of Forests District Manager policy.

4.2 Protected Area Zone

4.2.1 Intent

The intent of the Protected Area Zone is to designate areas for the protection of viable representative examples of natural diversity on Vancouver Island, and to set aside unique and special natural, recreational and cultural heritage features of the Island in accordance with BC's Protected Area Strategy. Protected Areas established by Cabinet decisions related to the Vancouver Island Land Use Plan are listed in section 4.2.3.

4.2.2 Protected Areas Management Regime

Objectives	Strategies
<p>To designate, plan and manage protected areas to ensure the maintenance of conservation, recreation, and cultural values for which they are established.</p>	<p>Park management direction statements and/or master plans will be developed for all new provincial parks created pursuant to the Land Use Plan.</p> <p>The protected areas system in the Plan Area will be developed to ensure a variety of recreational experiences and opportunities are created for the benefit of the public.</p> <p>Protected areas proposed for regional park purposes will be transferred to the appropriate regional district.</p> <p>Uses and activities within protected areas will be governed by the 1995 Cabinet-approved document "Compatibility of Selected Activities, Services and Use in Protected Areas".</p> <p>Existing commodity extraction tenures in new protected areas will be discontinued, under terms negotiated with the tenure holders.</p> <p>Existing tenures within new parks will be assessed in accordance with existing management conditions of the tenures, <i>Park Act</i> provisions, and the approved park management direction statement or management plan.</p> <p>New protected areas will continue to be accessible to First Nations for the exercise of aboriginal rights, subject to conservation, public health and safety requirements.</p>

4.2.3 New Protected Areas

Goal I Areas: (All sizes approximate)

Lanz-Cox Islands: (5,514ha)
Nahwitti-Shushartie: (6,750ha) Addition to Cape Scott Provincial Park
Marble River: (1,512 ha)
God's Pocket: (2,025 ha)
Quatsino: (654 ha)
Lower Nimpkish River: (200 ha)
Nimpkish Lake: (3,950 ha)
Tashish-Kwois: (10,829 ha) Includes Tashish-Kwois Ecological Reserve
Brooks Nasparti: (22,851 ha) Addition to Brooks Peninsula Provincial Park
Lower Tsitika: (3,744 ha) Addition to Robson Bight Ecological Reserve
Claud Elliott Lake: (289 ha)

Davie River: (259 ha) Addition to Schoen Lake Provincial Park
Woss Lake: (6,634 ha)
Catala Island: (851 ha)
Bligh Island: (4,455 ha)
Rock Bay: (525 ha)
White Ridge: (1,343 ha)
McBride Creek: (3,751 ha)
Upper Qualicum: (48 ha) Addition to Horne Lake Caves Provincial Park
Nitinat Lake/Hitchie Creek: (226 ha)
Cowichan River: (750 ha)
Upper Carmanah: (3,343 ha) Addition to Carmanah Walbran Provincial Park
Walbran: (9,500 ha) Addition to Carmanah Walbran Provincial Park

Goal 2 Areas:

The following locations include those located on Crown land or on private land that have since been acquired by the Province.

Artlish Caves: (254 ha)	Ladysmith Bog: (141 ha)
Big Bunsby: (658 ha) adjacent to Checleset Bay Ecological Reserve	Main Lakes Chain: (3424 ha)
Bowser: (116 ha)	Misty Lake: (55 ha)
Bright Angel Addition (6 ha)	Nitinat River: (160 ha)
Chemainus River: (43 ha) Addition to Chemainus River Provincial Park	Nuchatlitz: (2,105 ha)
Comox Lake Bluffs: (47 ha)	Read Island: (637 ha)
Divers Lake: (1034 ha) Addition to Strathcona Provincial Park	San Juan River Estuary: (79 ha)
Dixie Cove: (156 ha)	Santa – Boca: (440 ha)
Gold-Muchalat: (645 ha)	Somenos Garry Oaks (17 ha)
Hudson Rocks: (49.5 ha).	Stamp River, Money’s Pool: (280 ha) Addition to Stamp River Provincial Park
Klanawa River: (90 ha)	Surge Narrows: (441 ha)
Lawn Point: (584 ha)	Weymer Creek: (316 ha)
	White River: (68 ha)
	Woodley Range: (166 ha)

Goal 2 Areas (Private Land Negotiations):

The following areas are located partially or entirely on private lands. If negotiations to acquire these areas are unsuccessful, other lands of equivalent area will be pursued. Niagara Creek has been transferred to the Capital Regional District.

Cowichan River Corridor Additions: (531 ha)	Octopus Islands: (251 ha) Addition to Octopus Island Provincial Park
Haley Lake: (762 ha) Addition to Haley Lake Ecological Reserve	Puntledge River Fossil Beds: (61 ha)
Mesachie Lake: (14 ha)	Somass River Estuary: (48 ha)
Notch: (7 ha)	Waiatt Bay-Small Inlet: (487 ha) Crown portion now park
Niagara Creek: (522 ha)	

Goal 2 Areas (Regional District Park Transfer):

The following areas have been identified for transfer to Regional Districts. They are not included in the Vancouver Island PAS 13% target, as PAS does not recognize local government park land.

Carrington Bay: (217 ha)	Morison Creek: (134 ha)
Little Mountain: (308 ha)	Seal Bay: (564 ha)

4.3 Resource Management Zones (RMZ)

The following sections present the management intent, regimes and individual zone units for each of the three resource management zones designated under the Plan:

- Special Management Zone (SMZ, 22 units),
- General Management Zone (GMZ, 25 units) and
- Enhanced Forestry Zone (EFZ, 22 units).

The 69 individual zone units in the three RMZ categories comprise the area under the Plan, which is subject to the provisions of the Forest Practices Code. The FPC also applies to Clayoquot Sound, but is largely superseded there by the Scientific Panel recommendations. The FPC provides the baseline of regulatory and forest stewardship requirements which apply across all three RMZ categories. The general provisions of the Code are broadly reflected in the general management regimes assigned to all RMZs.

In the case of the Special Management Zone units, special management regimes are defined for the key primary resource values found in the individual zone units, which may go beyond the general provisions of the Code. Some of these special management regimes, notably the special timber, special biodiversity and special visual management objectives, will be established as higher level plans under the Code to ensure forest operations on the ground are consistent with the zone intent.

Similarly, in the case of the Enhanced Forestry Zone units, enhanced management regimes have been defined which vary from the general provisions of the Code. The enhanced timber harvesting objective will be established in a higher level plan under the Code, to enable greater flexibility for harvest operations on the ground while maintaining the FPC’s environmental stewardship provisions.

The diagram below shows conceptually the application of the management regimes to resource values in the three different RMZ categories.

Resource Management Zone	Special Management		General Management	Enhanced Forestry	
Values Addressed	Identified Primary Values: wildlife, biodiversity, old growth forests, recreation, visual and tourism	Other Resources	All Resources	Non Timber Resources	Timber Resources
Management Regimes	Special Management Under VILUP and FPC Higher Level Plan designation	General Management under FPC and other legislation			Enhanced Management Under VILUP and FPC Higher Level Plan designation

Management regimes for aquaculture are included in the Plan. In all upland units, these are intended to apply to aquaculture applications and operations in freshwater bodies and to operations employing land-based aquaculture technologies, including commercial hatcheries. In marine areas, these apply to all coastal units. The “general” regime applies to potential aquaculture development in all upland unit areas zoned GMZ or EFZ, and in all coastal unit areas zoned GMZ. The “special” regime applies in both upland and coastal areas designated SMZ. Since these guidelines encompass all planning units, aquaculture is not included in Tables 5 - 7 and in Appendix 3.

4.3.1 Special Management Zone RMZ

4.3.1.1 Intent

The intent of the Special Management Zone (SMZ) is to identify Crown land and coastal areas with regionally significant values or combinations of values requiring more comprehensive management objectives and strategies to minimize development impacts. SMZ units are not intended as future protected areas, and are available for a variety of extractive and non-extractive activities.

In SMZ units, management is to be based on the primary environmental, cultural and recreational resource values identified, and extractive and non-extractive resource use and activities are to be conducted in a manner compatible with the identified primary resource values.

At a minimum, all legislated requirements of the Forest Practices Code apply. Where necessary to maintain the primary SMZ values, specific resource management objectives may be identified which exceed normal Code requirements.

The additional long term reduction in timber supply resulting from practices in SMZ areas is not to exceed, in aggregate across all SMZ units, 10% over the impact associated with the normal Code stewardship provisions.

Resource management within SMZ units will be accompanied by active monitoring and evaluation, consistent with the principles and concepts of adaptive management.

Forested SMZ units are intended to become vanguard areas for implementing the principles of sustainable forest ecosystem management³.

Non-forest development projects of a commercial or industrial nature which have potential to significantly impact SMZ values (not covered by the FPC) will be examined through an inter-agency referral process and sufficient opportunities for public input will be allowed.

Provincial agencies leading the review of a non-forest development proposal must be satisfied that neither the project nor the cumulative effect in association with existing nearby developments will result in a significant loss, decline or impact to the identified sensitive values of the affected SMZ unit. These agencies are responsible for ensuring that the proponent has taken reasonable measures to contact and inform the public, and to incorporate consideration of public views within their assessment. Agency disagreements in such circumstances will be brought to the Inter-Agency Management Committee for resolution.

The 22 SMZ units occupy 212,066 ha of land and coastal nearshore, representing 6.3% of the Plan Area. With the addition of SMZ units within Clayoquot Sound, 8% of Vancouver Island is included in this designation.

4.3.1.2 Special Management Regimes

Special management regimes are identified for key primary resource values found in individual SMZ units to ensure that those primary values are maintained. Some special management regimes require forest practices which are incremental to the general direction provided by the FPC. The objectives for those regimes are recommended for “higher level plan” declaration (Special Timber, Special Biodiversity and Special Visual objectives). Other special management regimes reinforce the application of certain provisions of the Code, without specifically adding to the legislation, or they prioritize certain management actions.

Management of resource values within SMZs, which are not specifically identified as primary values, will be in accordance with the general management regimes presented in section 4.3.2.

Based on the identified primary values, the management regimes in individual SMZ units have been sorted into primary and secondary objectives. This provides a better sense of overall management emphasis and intent, and assists resource managers in their decision making. Fish and watershed regimes, due to their particular importance on the coast, remain listed under primary objectives. Table 5 provides a summary of where these regimes apply.

³ The LIARC report states that, in British Columbia, sustainable forest ecosystem management means that yields of desired resources and uses must be commensurate with the larger goal of sustaining ecosystem conditions of diversity, long-term productivity and resilience

Table 5: Management Regimes for Individual SMZ Units
BOLD denotes primary regimes

	SMZ Unit	Tim	Wat	Fish	WL	Bio	Vis	Rec	Tou	C/K	Cul Her	Acc
1	Goletas Channel	S	G	G	S	S	S	S	S	G	G	G
2	West Coast Nahwitti Lowlands	S	G	G	S	G	S	S	S	G	G	G
3	Brooks Bay	S	G	G	S	S/B	S	S	S	G	G	G
4	Koprino	S	G	G	S	G	G	G	G	G	G	G
5	South Brooks-Bunsby	S	CW/G	G	S	B	S	S	S	G	G	G
6	Woss-Zeballos	S	G	G	G	B/G	S	S	G	G	G	G
7	Johnstone Strait	S	G	G	S	G	S	S	S	G	G	G
8	Tsitika River	S	G	G	S	S	G	G	G	G	G	G
9	Tsitika-Woss	S	G	G	S	G	G	S	G	G	G	G
10	Pinder-Atluck	S	G	G	S	B	S	S	G	G	G	G
11	Schoen-Strathcona	S	G	G	S	S/G	S	G	G	G	G	G
12	Western Nootka Island	S	G	G	S	G	S	S	S	G	G	G
13	Nahmint	S	G	G	S	S	S	S	G	G	G	G
14	Barkley Sound	S	CW/G	G	S	B/G	S	S	S	G	G	G
15	Tofino Mudflats	n/a	n/a	G	S (WMA)	n/a	n/a	S	S	n/a	G	G
16	Saanich Inlet	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
17	Strathcona-Taylor	S	G	G	S	G	G	G	G	G	G	G
18	Alberni Canal	S	CW/G	G	S	B/G	S	S	S	G	G	G
19	Quadra Island	S	G	G	S	G	S	S/G	S	G	G	G
20	Upper Qualicum	S	G	G	S	G	G	S	S	G	G	G
21	Walbran Periphery	S	G	G	S	G	G	S	G	G	G	G
22	San Juan Ridge	S	G	G	G	B/G	S	S	S	G	G	G

Tim Timber

Wat Water

Fish Fish

WL Wildlife

Bio Biodiversity

Vis Visual

Rec Recreation

Tou Tourism

C/K

Cult.Her

Acc

Cave Karst

Cultural Heritage

Access

Regimes: S – Special; G – General; B – Basic; H – Higher; CW – Community Water

Special Timber Resource Management⁴ Regime

Overall Goal/Intent: To manage forests in Special Management Zones in keeping with the primary resource values identified for each SMZ⁵.

Objectives	Strategies
<p>(1) To sustain forest ecosystem structure and function in SMZs, by:</p> <ul style="list-style-type: none"> a) concentrating, within SMZs, the retention or recruitment of old growth forests required to meet landscape level biodiversity objectives⁶ b) creating and/or maintaining stand structures and forest attributes associated with mature⁷ and old⁸ forests, subject to the following: <ul style="list-style-type: none"> i. the target for mature seral forest should range between one quarter to one third of the forested area of each SMZ⁹; and ii. in SMZs where the mature target is not presently achievable, the target amount of mature forest must be in place within 50 years; c) retaining, within cutblocks, structural forest attributes and elements with important biodiversity functions¹⁰; and d) applying a variety of silvicultural systems, patch sizes and patch shapes across the zone, subject to a maximum cutblock size of 5 ha if clearcut, clearcut with reserves or seed tree silvicultural systems are applied, and 40 ha if shelterwood, selection or retention silvicultural systems are applied. <p>(2) Despite subsection (d) above, cutblocks larger than 5 or 40 ha, as the case may be, may be approved if harvesting is being carried out to recover timber that was damaged by fire, insects, wind or other similar events and wherever possible, the cutblock incorporates structural characteristics of natural disturbances.</p> <p>(3) Pursuant to section 2(1) of the Operational Planning Regulation¹¹, the approval of both the</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> ▪ forest rotation periods should be applied to maintain the primary resource values of each SMZ, and are generally expected to exceed the age of culmination of mean annual increment (CMAI); ▪ apply silvicultural measures¹² suited to create structures and attributes of mature and old forests, as well as high value, large diameter logs; ▪ the amount of old growth management area allocated to an individual SMZ should correspond to: <ul style="list-style-type: none"> a) the primary values of the SMZ (e.g. higher amounts for those SMZs which have primary biodiversity, old growth and wildlife values, lesser for those which have primary visual/recreation values) and b) to the biodiversity and wildlife objectives of the general management or enhanced forestry zone, as the case may be, covering the remainder of the landscape unit. ▪ maintain mature and/or old seral forest connectivity; ▪ apply innovative silvicultural systems to maintain the primary resource values identified for the SMZ; ▪ when applying retention silvicultural systems, the amount of retention should generally range between 10 and 20 percent of the gross cutblock area; ▪ patch size should be in keeping with the specific primary resource values identified for the SMZ;

⁴ this objective applies in all Special Management Zones, and is augmented by the pertinent 'Special' non-timber objectives assigned in individual SMZs (e.g. 'Special Visual', 'Special Wildlife' etc.);

⁵ refer to chapter 4.3.1.3 for list of primary resource values in each individual SMZ unit;

⁶ The intent is for SMZs, which comprise a portion of a (draft) landscape unit, to become focal areas for the placement of old growth management areas (OGMA) required at the landscape unit level.

⁷ The mature seral stage is defined as: generally, trees 80 to 120 years old or older, depending on species and site conditions. The structure of mature seral forests generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another.

⁸ The old seral forest is defined as: generally greater than 250 years old, containing live and dead (downed and standing) trees of various sizes, including large diameter trees, and of various tree species, including broad-leaved trees; the structure of old seral forest varies significantly by forest type and from one biogeoclimatic zone to another.

⁹ Mature seral targets will be established through landscape unit planning.

¹⁰ This includes, but is not limited to: snags, wildlife trees, downed logs; refer also to Special Biodiversity Conservation Management.

Planning Regulation¹¹, the approval of both the district manager, Ministry of Forests and the designated environment official, Ministry of Environment, Lands and Parks is required for all forest development plans or parts of forest development plans within SMZs.

Refer also to the additional strategies offered for individual SMZ units (chapter 4.3.1.3 of the Summary Plan).

¹¹ B.C. Reg. 107/98

O.C. 426/98-

Effective: June 15,1998

¹² suitable silvicultural measures include, but are not limited to: pruning, early and periodic stand density control, partial cutting silvicultural systems;

Special Biodiversity Conservation Management¹³ Regime

Overall Goal/Intent: To maintain natural elements and attributes of biodiversity with emphasis on rare and underrepresented ecosystems.

Objectives	Strategies
<p>(1) Maintain late-successional habitat elements and attributes of biodiversity¹⁴ in forested ecosystems with emphasis on regionally rare and underrepresented ecosystems, by retaining old seral forest at the site series/surrogate level of representation¹⁵.</p> <p>(2) Late-successional habitat elements and attributes of biodiversity should be retained in patches of variable size.</p>	<p>The following strategies are offered for consideration in those Special Management Zones or portions thereof where special biodiversity conservation objectives apply:</p> <ul style="list-style-type: none"> • emphasis for retention of old seral forest should be on rare site series, as well as wildlife habitat (see pertinent wildlife objectives and strategies); <p>It is recognized that site series information is not available in many SMZs; where site series information is lacking, a combination of forest cover and site productivity or site index information should be used to determine representativeness.</p> <p>Refer also to the strategies offered in the individual zone descriptions.</p>

Special Wildlife Management Regime

Overall Goal/Intent: To identify and conserve as a priority the habitat for wildlife species where identified as a primary value in SMZ areas.

Objectives	Strategies
<p>To provide suitable habitat for wildlife species identified as primary values in SMZ.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • identify, establish and make known ungulate winter ranges (UWR) and establish management objectives for UWR in SMZ, in accordance with pertinent legislation and policy; • manage and conserve species at risk in accordance with the Forest Practices Code and Cabinet-approved strategies; • apply stand and landscape level measures in accordance with the Code, Cabinet-approved wildlife strategies and applicable biodiversity objectives, focusing on habitat elements and interior conditions associated with old-growth forests, as well as habitat connectivity; • develop habitat management and conservation strategies

¹³ This regime applies to those SMZs that are part of a landscape unit with higher biodiversity emphasis (i.e. SMZ 1, 3, 8, 9, 11 and 13). In addition to the guidance provided under the Special Timber Management regime (see above), this regime places an emphasis on the protection of old growth forests associated with rare and underrepresented site series. While this will be achieved primarily through landscape unit planning, it is important for operational planning to maintain the options to achieve this objective.

¹⁴ this includes, but is not limited to: large diameter (>60 cm) live, decaying and dead standing trees (providing nest and cavity sites); downed wood, including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas. These elements should be retained in patches of variable size (e.g. wildlife tree patches, variable retention patches, old growth management areas), and in accordance with the retention levels required by legislation and policy.

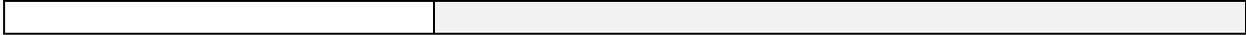
¹⁵ The level of representation of old seral forest will be applied through landscape unit planning.

	<p>for species identified as primary SMZ values;</p> <ul style="list-style-type: none">• prioritize the collection of wildlife inventory information in SMZ where wildlife values are identified as primary. <p>Refer also to the strategies offered in the individual zone descriptions.</p>
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Special Visual Resource Management Regime

Overall Goal/Intent: To ensure that the quality and integrity of visual resources are maintained or restored where identified as primary value in SMZ.

Objectives	Strategies
<p>(1) Maintain the visual quality of known scenic areas in accordance with the visual landscape inventory recommendations, until visual quality objectives for the areas have been established by the district manager.</p> <p>(2) Objective (1) applies to scenic areas within those SMZs where visual resources have been identified as primary resource values, as shown on Map 10.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <p>The district manager should identify and/or amend scenic areas in consultation with the Ministry of Small Business, Tourism and Culture, and make scenic areas known in accordance with the FPC;</p> <p>The district manager should establish under the Code and in consultation with the MSBTC, visual quality objectives for known scenic areas in SMZs, generally ranging from partial retention to preservation, based on landscape sensitivity and visual landscape inventory recommendations;</p> <p>The district manager should instruct licensees to contact tenured tourism facility operators when preparing forest development plans in the vicinity of established tourism facilities;</p> <p>Licensees should apply integrated visual landscape design principles and techniques when planning and implementing development activities;</p> <p>Licensees shall conduct visual impact assessments (VIA) prior to development in areas with established visual quality objectives; when conducting a VIA in vicinity of established tourism facilities, the facility operator should be consulted;</p> <p>Where visual and/or recreation resources are identified as primary SMZ values, and for a transitional period of 2 years following the approval of this plan, the district manager should refer forest development plans to the MSBTC prior to making a determination; at the end of the transition period, the district manager and MSBTC should evaluate if referrals to MSBTC continue to be required;</p> <p>Licensees should consider the use of alternative silvicultural systems to achieve visual quality objectives (VQOs) where site, stand, ecological and economic conditions are appropriate (refer to Special Timber Resource Management objectives and strategies);</p> <p>Licensees should consider forest practices which will minimize time to achieve visually effective green-up;</p> <p>Licensees should consider restoring and/or enhancing the scenic values of areas through alteration of existing cutblock boundaries;</p> <p>Refer also to the strategies offered in the individual zone descriptions.</p>



Special Recreation Resource Management Regime

Overall Goal/Intent: To maintain the integrity of the significant recreation resources identified as primary values in SMZ.

Objectives	Strategies
<p>To maintain, as a priority, a wide spectrum of recreation resource features and opportunities occurring in the zone, including scenic landscapes, semi-primitive recreation opportunity settings, cultural and heritage landmarks and developed recreation facilities, with particular emphasis on the areas included in the recreation resource description for the zone.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • maintain and/or enhance a complete and updated inventory of recreation features, opportunities (recreation opportunity spectrum) and activities; • identify recreation features and make them known in accordance with the FPC; • manage known recreation features and opportunities in accordance with the significance and sensitivity of the recreation values in the zone.

Special Tourism Resource Management Regime

Overall Goal/Intent: To maintain the quality of areas within SMZ which are of high importance to tourism, including associated employment and economic benefits.

Objectives	Strategies
<p>To maintain, as a priority, the quality of resource values of high importance to tourism where identified as primary values in SMZ.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • in consultation with the Ministry of Small Business, Tourism and Culture, identify resource values of high importance to tourism in those SMZ where those values are listed as primary; these values include: existing and potential facility and use settings, shorelines, scenic areas, recreation features, and travel corridors/access routes; • manage access in a manner that maintains the tourism and amenity resources where identified as primary values in the zone; • manage recreation and visual resources in accordance with the special recreation and visual resource management objectives of the zone.

Special Aquaculture Resource Management Regime

Overall Goal/Intent: To accommodate sustainable aquaculture development while maintaining the designated primary resource values of the SMZ area.

Objectives	Strategies
To maintain resource values of importance to aquaculture, especially where complementary to the primary resource values.	The following strategies are offered for consideration, where suitable: <ul style="list-style-type: none">• as per General Aquaculture Management;
To conduct aquaculture development activities in a manner which is designed to maintain the primary resource values where they occur in this zone.	Additional siting criteria and/or operational codes of practice will be developed and implemented to address noise and visual quality where visual, outdoor recreation or tourism values are primary.

4.3.1.3 Individual Special Management Zone Units

This section presents a description of resource values, as well as management objectives and strategies for the 22 individual Special Management Zone units.

The objectives and strategies assigned to each resource value in each SMZ unit are presented in abbreviated form, i.e. as the pertinent regime titles (e.g. special recreation management), without repeating the detailed wording of each objective and strategy presented in the previous section. For complete wording of the general management regimes, refer to section 4.3.2. Where applicable, and based on available regional scale information, additional management strategies are provided for particular resource values, to clarify management advice in a given unit.

Total area figures given for the units are based on regional scale data, and may include parcels of private land. The objectives and strategies presented in this report, however, apply only to Crown land and private forest land within Tree Farm Licence areas.

SMZ-1: Goletas Channel

Location: zone extending along coastline north-west of Port Hardy; includes Balaklava Island; adjacent to RMZ 2 (Shushartie)

Total Area: approximately 11,000 ha

Primary Values (see LIARC report)

1. Coastal visual and recreational opportunities
2. Fish habitats (lower Shushartie, Songhees rivers)
3. Wildlife habitats (deer/elk WR: lower Shushartie R.; waterfowl: coastal)
4. Shushartie River recreational access route

Overall Management Guidance: Coastline and Shushartie River exhibit multiple recreational and biological values and should be primary targets for special recreation/visual/tourism, as well as fish and wildlife management; this zone should become a focal area for old seral forest retention in accordance with the higher level of biodiversity conservation

Primary Objectives

Visual Resources:

Description: visually sensitive along coastline

Objective: ***Special Visual Resource Management***

Recreation Resources:

Description: coastal opportunities, proposed North Coast Trail; Shushartie access route from coast to Georgie Lake, recreation values at Shushartie Lake; diving (Browning Passage)

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: coastal, high lodge/resort potential throughout

Objectives: ***Special Tourism Management***

Wildlife:

Description: deer/elk winter range, waterfowl habitat, eagle nests; underwater flora and fauna

Objective: ***Special Wildlife Management***

Fish:

Description: high anadromous fisheries in Shushartie and Songhees systems

Objective: ***General Fish Management***

Biodiversity:

Description: this zone is part of the Shushartie draft landscape unit, which also comprises the RMZ-2 (Shushartie), as well as portions of protected area; the main ecosystem type is CWHvh1, some CWHvm1 (eastern portion of zone); high old growth values

Objective: ***Special Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions¹⁶ of the landscape unit, such retention should be concentrated¹⁷ within the SMZ-portion of the landscape unit, with emphasis in vm1, and in (expanded) riparian habitats, particularly Shushartie riparian system

¹⁶ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

¹⁷ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Water:

Description: high watershed integrity

Objective: ***General Watershed Management***

Secondary Objectives

Timber:

Description: generally lower productivity, all mature

Objective: ***Special Timber Resource Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate potential for finfish culture and existing operations, shellfish culture potential unknown.

SMZ-2: West Coast Nahwitti Lowlands

Location: zone extending along coastline south-east of Cape Scott Park; encompassing Raft Cove protected area; zone is adjacent to RMZ 4 (San Josef - Koprino)

Total Area: approximately 15,100 ha

Primary Values (see LIARC report)

1. Scenic values visible from marine zone and access routes
2. Cultural/ heritage values
3. Coastal fish and wildlife habitats and populations (entire coast, plus riparian in Macjack R. and Ronning Cr., Topknot and Leeson Lakes)
4. Coastal recreation values and opportunities

Overall Management Guidance: main focus should be on special management for significant scenic and recreational values which are concentrated along narrow coastal strip; additional consideration should be on maintenance of the high riparian fish and coastal wildlife values

Primary Objectives

Visual Resources:

Description: highly visually sensitive viewsheds, confined to strip along coast; areas further upland within the SMZ are less visually sensitive

Objective: **Special Visual Resource Management** in areas visible from coast and along access routes

Strategies: manage viewsheds visible from park areas as scenic areas

Recreation Resources:

Description: coastal recreation: beaches, trails, kayaking, whale watching in strip along coast; areas further upland within the SMZ are less significant for recreation

Objective: **Special Recreation Resource Management** with emphasis along coast

Tourism Resources:

Description: high potential in coastal influence area; less significant values in lower Ronning and Macjack Creek areas

Objective: **Special Tourism Management** with emphasis on coastal influence area

Wildlife:

Description: coastal habitats: bald eagle, sea otters, amphibians; lower values for upland species

Objective: **Special Wildlife Management**

Strategies: need for developing habitat conservation measures for coastal species

Fish:

Description: known anadromous values in Macjack, Kwatleo systems and lower reaches of other creeks

Objective: **General Fish Management**

Water:

Description: high watershed integrity

Objective: **General Watershed Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Secondary Objectives

Biodiversity:

Description: this zone is encompassed by the San Josef and Koprino draft landscape units, which also encompass RMZ-4, as well as Cape Scott and Raft Cove parks; CWHvh1 is the dominant ecosystem type, with some CWHvm1 (eastern portion of zone)

Objective: **General Biodiversity Conservation Management**

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions¹⁸ of the landscape units, such retention should be concentrated¹⁹ within the SMZ-portion of the landscape units, with focus on (expanded) riparian habitats, as well as potential marbled murrelet habitat

Timber:

Description: moderate productivity, high proportion of mature timber

Objective: **Special Timber Resource Management**

Strategies: due to high winds and forest health considerations, preference should be given to retention silvicultural systems, rather than selection and shelterwood systems; reserve trees/groups should be selected for windfirmness, amongst other criteria

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate potential for finfish culture and shellfish culture.

¹⁸ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

¹⁹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-3: Brooks Bay

Location: extending along the south side of Quatsino Channel to Klaskino Inlet

Total Area: approximately 10,200 ha

Primary Values (see LIARC report)

1. Coastal visual quality and associated recreation opportunities
2. Anadromous fish values and estuary fish rearing habitat
3. Marine endangered /threatened species and habitat

Overall Management Guidance: main focus should be to maintain and/or restore the high scenic/tourism/recreational values, as well as coastal, riparian and upland habitat values

Primary Objectives

Visual Resources:

Description: almost entire zone is highly visually sensitive

Objective: ***Special Visual Resource Management***

Strategies: maintain viewsheds visible from park and water; restore visual quality where it has been impacted (e.g. Red Stripe Mountain, Side Bay, Klaskino Inlet)

Recreation Resources:

Description: features and opportunities associated with coastline; prime kayaking area; upland recreation potential in lower Klaskish and East Creek areas

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: coastal hiking, kayaking and lodge/resort potential

Objective: ***Special Tourism Management*** with emphasis on above areas

Wildlife:

Description: sea otter habitat between Restless Bight and Cliffe Point; high value estuary habitats in Harvey Cove and Side Bay; ungulate winter ranges; marbled murrelet detections in Klaskish/East Creek;

Objective: ***Special Wildlife Management*** for upland habitats

Strategies: develop habitat management strategies for coastal species

Fish:

Description: known anadromous fisheries in LeMare, Klaskish and East Creek systems (esp. estuaries), as well as lower reaches of smaller coastal streams; particularly high salmon values in East Creek and Klaskish

Objective: ***General Fish Management***

Water:

Description: some extensively harvested areas

Objective: ***General Watershed Management***

Strategies: deactivation of roads; rehabilitation of disturbed areas

Secondary Objectives

Biodiversity:

Description: this zone is part of the Mahatta and Klaskish draft landscape units, which also encompass portions of RMZ 8 and 9; high values associated with marine and riparian habitats; dispersed ungulate values

Objective: ***Special Biodiversity Conservation Management*** in parts of the zone situated within the Klaskish draft LU; ***Basic Biodiversity Conservation Management*** in remaining portions of the zone (part of Mahatta draft LU)

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions²⁰ of the landscape units, such retention should be concentrated²¹ within the SMZ-portion of the landscape units and where necessary to conserve marbled murrelet habitat

Timber:

Description: moderate to high productivity, mix of mature and second growth timber

Objective: ***Special Timber Resource Management***

Strategies: due to high winds and forest health considerations, preference should be given to retention silvicultural systems, rather than selection and shelterwood systems; reserve trees/groups should be selected for windfirmness, amongst other criteria

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate potential for finfish culture, shellfish culture potential unknown

²⁰ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

²¹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-4: Koprino

Location: situated between Jules Bay and Koprino Harbour, connecting to SMZ 2 in the south-east

Total Area: approximately 6,100 ha

Primary Values (see LIARC report)

1. Old growth biodiversity and connectivity functions
2. Upland wildlife habitat

Overall Management Guidance: this SMZ should become a focal area (within the landscape unit) for the retention of old forest and associated wildlife habitat, as well as for mature and old forest connectivity

Primary Objectives

Wildlife:

Description: deer and elk winter range; good year-round capability for deer, elk, wolves, bears, cougars, grouse, goshawk and amphibians; waterfowl wintering areas in Koprino Harbour

Objective: *Special Wildlife Management*

Fish:

Description: known anadromous fisheries in Hathaway Creek and Koprino River

Objective: *General Fish Management*

Biodiversity:

Description: this zone is part of the San Josef draft landscape unit which also comprises portions of RMZ-4; mostly CWHvm1; high proportion of old forests

Objective: *General Biodiversity Conservation Management*

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions²² of the landscape unit, such retention should be highly concentrated²³ within the SMZ-portion of the landscape unit; maintain old forest connectivity within the SMZ

Water:

Description: some sensitive terrain, low equivalent clearcut area

Objective: *General Watershed Management*

Secondary Objectives

Timber:

Description: high productivity, mostly mature timber

Objective: *Special Timber Resource Management*

Visual Resources:

Description: mostly not visually sensitive, except in Jules Bay area

Objective: *General Visual Resource Management* with emphasis in Jules Bay area

Recreation Resources:

Description: secondary, except in Koprino Harbour area

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: associated with Jules Bay and Koprino Harbour

Objectives: *General Tourism Management* with emphasis in above areas

²² contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

²³ 'highly concentrated': the intent is to retain old seral forest required for the LU to a much greater degree within the SMZ, and to a much lesser degree within the RMZ portion of the LU

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst :

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate potential for finfish culture and good shellfish culture potential in Koprino Harbour

SMZ-5: South Brooks-Bunsby

Location: extending from Brooks-Naspart protected area southeast along coast to Kyoquot

Total Area: approximately 6,200 ha

Primary Values (see LIARC report)

- 1 Coastal recreation values and opportunities
- 2 Marine species populations and habitat (sea otter, eagles)
- 3 Archaeological values

Overall Management Guidance: main focus should be on maintenance/recovery of scenic, recreation and tourism values, as well as cultural heritage values; maintenance of sea otter and bald eagle habitat

Primary Objectives

Visual Resources:

Description: highly significant scenic values along coastline

Objective: ***Special Visual Resource Management***

Strategies: emphasis should be on visual restoration of impacted areas (Mt. Paxton, St. Paul's Dome)

Recreation Resources:

Description: significant values associated with land/water interface: marine fishing, kayaking, scuba-diving and beachcombing, particularly Spring Islands

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: high values and capability associated with coastline

Objective: ***Special Tourism Management***

Fish:

Description: known anadromous fisheries in Clanninick Creek, high values in Malksope and Ououkinsh River

Objective: ***General Fish Management***

Wildlife:

Description: sea otter habitat, bald eagles, and waterfowl wintering areas in estuaries of Clanninick Creek, Malksope and Ououkinsh River; lower upland wildlife values

Objective: ***Special Wildlife Management*** with emphasis on coastal species

Strategies: develop habitat management strategies for coastal species

Water:

Description: some unstable terrain, esp. along Malksope Inlet; some drainages with high equivalent clearcut area

Objective: ***General Watershed Management***

Community Water

Description: Andrews Creek area is designated community watershed

Objective: ***Community Watershed Management***

Cultural Heritage Resources:

Description: known archaeological values

Objective: ***General Cultural Heritage Resource Management***

Secondary Objectives

Timber:

Description: lower to moderate productivity, high proportion of mature timber, except between Mt. Paxton and St. Paul's Dome

Objective: ***Special Timber Resource Management***

Biodiversity:

Description: this zone is part of the Kashutl draft landscape unit, which also encompasses RMZ 14 and portions of Brooks-Nasparti protected area; mostly CWHvh1; marbled murrelet capability

Objective: ***Basic Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions²⁴ of the landscape units, such retention should be concentrated²⁵ within the SMZ-portion of the landscape units and where necessary to conserve marbled murrelet habitat

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for finfish culture, shellfish culture potential unknown

²⁴ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

²⁵ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-6: Woss-Zeballos

Location: encompasses Clint Creek, Zeballos and Kaipit Lakes

Total Area: approximately 8,700 ha

Primary Values (see LIARC report)

- 1 Old growth biodiversity
- 2 Visual qualities associated with access corridors and recreation sites
- 3 Recreation values/opportunities associated with lakes

Overall Management Guidance: this SMZ should become a focal area for old growth biodiversity conservation; focus should also be on maintenance of recreation opportunities associated with lakes and alpine/subalpine, and maintenance of scenic values associated with recreation sites and access corridors

Primary Objectives

Visual Resources:

Description: not inventoried as visually sensitive

Objective: **Special Visual Resource Management** with emphasis around lakes and recreation sites, and along access corridors

Recreation Resources:

Description: associated with lakes, hiking/climbing in subalpine and alpine environments

Objective: **Special Recreation Resource Management** with emphasis on above areas

Fish:

Description: values associated with lakes; high steelhead values in the Zeballos

Objective: **General Fish Management**

Biodiversity:

Description: this zone is part of the Zeballos and Upper Nimpkish draft landscape units, which also comprise all or portions of RMZ 13 and 16, as well as protected area portions; mostly CWHvm1 and vm2, as well as MH; almost entirely mature/old seral forest; regional connectivity function

Objective: **Basic Biodiversity Conservation Management** in parts of the zone situated in the Zeballos draft LU, **General Biodiversity Conservation Management** in parts of the zone situated in the Upper Nimpkish draft LU

Strategy: to the extent that old seral forest retention will be required within the contributing land base portions²⁶ of the landscape units, such retention should be highly concentrated²⁷ within the SMZ-portion of the landscape units

Water:

Description: some unstable terrain, low equivalent clearcut area

Objective: **General Watershed Management**

²⁶ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

²⁷ 'concentrated': the intent is to retain old seral forest required for the LU to a much greater degree within the SMZ, and to a much lesser degree within the RMZ portion of the LU

Secondary Objectives

Timber:

Description: high productivity in lower elevations, mostly mature timber

Objective: ***Special Timber Resource Management***

Wildlife:

Description: moderate values

Objective: ***General Wildlife Management***

Tourism Resources:

Description: backcountry and lodge/resort potential

Objectives: ***General Tourism Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

SMZ-7: Johnstone Strait

Location: extending along the mountain slopes facing Johnstone Strait south-east of Port McNeill, up to Lower Tsitika protected area

Total Area: approximately 3,100 ha

Primary Values (see LIARC report)

- 1 Scenic values visible from marine zone
- 2 Old growth biodiversity values
- 3 Shoreline recreation opportunities
- 4 Coastal wildlife habitats

Overall Management Guidance: main focus should be on maintenance of recreational opportunities along coast, including coastal viewsheds, as well as maintenance of marine habitats, and old growth biodiversity values

Primary Objectives

Visual Resources:

Description: highly sensitive viewshed along coast, inside passage

Objective: ***Special Visual Resource Management***

Recreation Resources:

Description: coastal: whale watching, kayaking, boating, fishing

Objective: ***Special Recreation Resource Management*** with emphasis along coastline

Tourism Resources:

Description: coastal, lodge/resort potential

Objective: ***Special Tourism Management***

Fish:

Description: moderate fish values associated with lower reaches of streams

Objective: ***General Fish Management***

Wildlife:

Description: coastal habitat values; moderate upland values

Objective: ***Special Wildlife Management*** with emphasis on coastal species

Strategies: develop habitat management strategies for coastal species

Biodiversity:

Description: this zone is part of the Bonanza draft landscape unit, which also comprises RMZ-11; high proportion of old seral forest, mostly CWHvm1

Objective: ***General Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions²⁸ of the landscape unit, such retention should be concentrated²⁹ within the SMZ-portion of the landscape unit

Water:

Description: generally lower terrain hazard, low equivalent clearcut area

Objective: ***General Watershed Management***

²⁸ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

²⁹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Secondary Objectives

Timber:

Description: moderate to high productivity, mostly mature timber

Objective: ***Special Timber Resource Management*** ;

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for finfish culture, shellfish culture potential unknown.

SMZ-8: Tsitika River

Location: extending along middle reaches of Tsitika River

Total Area: approximately 5,200 ha

Primary Values (see LIARC report)

- 1 Old growth and connectivity functions
- 2 Fish and wildlife habitats and populations, associated with riparian zone

Overall Management Guidance: primary focus should be on maintenance of high biodiversity values associated with old growth forests and riparian habitats, while maintaining opportunities for special timber management

Primary Objectives

Wildlife:

Description: very high values, particularly associated with the riparian corridor; pockets of deer and elk winter range throughout

Objective: ***Special Wildlife Management***

Fish:

Description: high anadromous values; small steelhead run into Fickle Lake

Objective: ***General Fish Management***

Biodiversity:

Description: this zone is part of the Tsitika draft landscape unit, which also comprises RMZ 26, as well as protected areas; mostly CWHvm1; high proportion of old seral forests; regional connectivity function

Objective: ***Special Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions³⁰ of the landscape unit, such retention should be concentrated³¹ within the SMZ-portion of the landscape unit

Water:

Description: some unstable terrain, low equivalent clearcut area

Objective: ***General Watershed Management***

Secondary Objectives

Timber:

Description: very high productivity, almost entirely mature timber

Objective: ***Special Timber Resource Management***

Visual Resources:

Description: not inventoried as visually sensitive

Objective: ***General Visual Resource Management***

Strategies: maintain viewsheds visible from protected areas

Recreation Resources:

Description: associated with river; recreational fishing corridor along Tsitika riparian system

Objective: ***General Recreation Resource Management***

³⁰ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

³¹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Tourism Resources:

Description: lower potential

Objective: **General Tourism Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

SMZ-9: Tsitika-Woss

Location: extending from the Tsitika River to the north, to the Nimpkish River valley, and from there to Woss Lake to the south, and Davie River valley to the east.

Total Area: approximately 15,300 ha

Primary Values (see LIARC report)

- 1 Biodiversity (restoration) and connectivity functions
- 2 Recreation values and opportunities
- 3 Fish and wildlife habitats and populations

Overall Management Guidance: primary focus should be on maintenance and/or restoration of biodiversity attributes associated with old growth forests and riparian habitats, with particular attention to CWHxm2; this should be accomplished through incorporation of wildlife habitat and riparian zones into old growth management area design at landscape level of planning

Primary Objectives

Wildlife:

Description: very high deer/elk winter range values

Objective: ***Special Wildlife Management***

Fish:

Description: high anadromous values in Nimpkish and Davie systems; high anadromous and non-anadromous values in Claude Elliot Creek and Lake

Objective: ***General Fish Management***

Strategies: active recovery plan for riparian attributes (refer to biodiversity strategies)

Biodiversity:

Description: this zone is mainly part of the Upper Nimpkish draft landscape unit, which also comprises RMZ 13, as well as protected areas; CWHxm2 is the dominant ecosystem type, which is significantly underrepresented in protected areas; potential for regional connectivity function

Objective: ***General Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions³² of the landscape units, such retention should be concentrated³³ within the SMZ-portion of the landscape units; in CWHxm2: retain/restore old seral forest attributes in accordance with old seral targets through active silvicultural measures

Water:

Description: generally stable terrain, but high equivalent clearcut area

Objective: ***General Watershed Management***

Recreation Resources:

Description: associated with Woss and Hoomak Lakes, Nimpkish and Davie Rivers

Objective: ***Special Recreation Resource Management***

³² contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

³³ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Secondary Objectives

Timber:

Description: highly productive, mostly in second growth timber

Objective: ***Special Timber Resource Management***

Tourism Resources:

Description: lake-based

Objective: ***General Tourism Management***

Visual Resources:

Description: associated with highway and access (Woss Lake) corridors

Objective: ***General Visual Resource Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

SMZ-10: Pinder-Atluck

Location: encompassing the headwaters of the Zeballos River, as well as the Pinder Creek drainage and Atluck and associated lakes

Total Area: approximately 8,000 ha

Primary Values (see LIARC report)

- 1 Visual qualities associated with the lakes and road corridor
- 2 Fish and wildlife habitat and populations
- 3 Recreation opportunities at the lakes

Overall Management Guidance: focus should be on maintenance of recreational opportunities and viewsheds associated with lakes, as well as maintenance of wildlife and fish habitats

Primary Objectives

Visual Resources:

Description: viewsheds around lakes, Pinder Peak and along road corridors are visually sensitive

Objective: **Special Visual Resource Management** with emphasis in above areas

Recreation Resources:

Description: lake-based recreational values; also karst values

Objective: **Special Recreation Resource Management**

Wildlife:

Description: deer/elk winter range

Objective: **Special Wildlife Management**

Fish:

Description: moderate, lake-based

Objective: **General Fish Management**

Water:

Description: some terrain hazards indicated, generally low equivalent clearcut area

Objective: **General Watershed Management**

Secondary Objectives

Timber:

Description: moderate to high productivity, high proportion of mature timber in Pinder drainage

Objective: **Special Timber Resource Management**

Biodiversity:

Description: this zone is part of the Lower Nimpkish draft LU, which also encompasses RMZ 10, as well as protected area; mostly CWHvm1, but some xm2; high portion of old seral forest in Pinder drainage

Objective: **Basic Biodiversity Conservation Management**

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions³⁴ of the landscape unit, such retention should be concentrated³⁵ within the SMZ-portion of the landscape unit; retain old seral forest in CWHxm2, in accordance with full old seral targets

³⁴ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

³⁵ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Tourism Resources:

Description: lake-based

Objectives: **General Tourism Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

SMZ-11: Schoen-Strathcona

Location: extending along the height of land between Schoen Lake and Strathcona Parks

Total Area: approximately 23,400 ha

Primary Values (see LIARC report)

- 1 Old growth biodiversity and connectivity functions (particularly in Schoen Creek drainage)
- 2 Wildlife and fish habitats and populations (upper White River, Consort Creek, Gold River)
- 3 Visual qualities associated with Victoria and Warden Peaks

Overall Management Guidance: focus should be on maintenance of old growth biodiversity and habitat values, as well as backcountry recreation potential and maintenance of viewsheds around Victoria and Warden Peaks; this SMZ should become a focal area for old growth retention at the landscape level

Primary Objectives

Wildlife:

Description: dispersed pockets of ungulate winter range; wetland habitats

Objective: ***Special Wildlife Management***

Fish:

Description: high anadromous values in White River and Schoen Creek system

Objective: ***General Fish Management***

Biodiversity:

Description: this zone is mainly situated in the Gold and White draft LUs, which also encompass RMZ 22 and 29, as well as protected areas; smaller portions of the zone are in the Upper Nimpkish draft LU; mostly CWHvm1, vm2 and MH variants; high proportion of old seral forests; regional connectivity function

Objective: ***Special Biodiversity Conservation Management*** in parts of the zone situated in the Gold and White LU, ***General Biodiversity Conservation Management*** in parts of the zone situated in the Upper Nimpkish LU

Strategy: to the extent that old seral forest retention will be required within the contributing land base portions³⁶ of the landscape units, such retention should be concentrated³⁷ within the SMZ-portion of the landscape units

Water:

Description: very sensitive terrain, low equivalent clearcut area; lower section of Salmon River is area of settlement with known risk of flooding

Objective: ***General Watershed Management***

Visual Resources:

Description: viewsheds associated with Victoria, Warden and Queen Peaks

Objective: ***Special Visual Resource Management*** in above-noted areas

Strategy: maintain viewsheds visible from Schoen Lake and Strathcona Parks

³⁶ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

³⁷ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU

Secondary Objectives

Recreation Resources:

Description: backcountry potential associated with alpine setting in Sutton Range and Victoria Peak, as well as Stewart Lake

Objective: ***General Recreation Resource Management***

Timber:

Description: moderate to high productivity in lower elevations; high proportion of mature timber

Objective: ***Special Timber Resource Management***

Tourism Resources:

Description: high backcountry potential in Schoen Creek and Sutton Range areas

Objective: ***General Tourism Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

SMZ-12: Western Nootka Island

Location: extending along western and north-western outer coast of Nootka Island

Total Area: approximately 17,100 ha

Primary Values (see LIARC report)

- 1 Coastal and upland recreation values
- 2 Scenic values visible from marine zone
- 3 Coastal wildlife and fish habitats
- 4 Endangered/threatened marine species and habitat (sea otters, sea lions)
- 5 Archaeological resources

Overall Management Guidance: management emphasis should be on integrity of scenic/ tourism/ recreation values associated with coastline, as well as maintenance of marine mammal and waterfowl habitat integrity; archaeological values to be maintained where they occur; maintain special timber management opportunities

Primary Objectives

Visual Resources:

Description: high visual sensitivity along entire coastline

Objective: ***Special Visual Resource Management***

Recreation Resources:

Description: associated with outer coastline: anchorages, beaches, wildlife viewing; particular values in Ferrer Point area: kayaking, boating, fishing, camping

Objective: ***Special Recreation Resource Management***

Strategies: consider recreation site and/or sensitive area designation under FPC for Ferrer Point; consider joint management with First Nations; consider establishment of wilderness trail corridor

Tourism Resources:

Description: high coastal opportunities, high lodge/resort potential (e.g. Nuchatlitz Inlet)

Objective: ***Special Tourism Management***

Wildlife:

Description: high coastal wildlife values: sea otters, fish, waterfowl; average upland values for large carnivores and ungulates

Objective: ***Special Wildlife Management*** with emphasis on coastal species and habitats

Strategies: develop habitat management strategies for coastal species

Fish:

Description: anadromous values in lower reaches of streams

Objective: ***General Fish Management***

Cultural Heritage:

Description: known archaeological values

Objective: ***General Cultural Heritage Resource Management***

Water:

Description: sensitive terrain, low equivalent clearcut area

Objective: ***General Watershed Management***

Secondary Objectives

Biodiversity:

Description: this zone is part of the Nootka draft landscape unit, which also encompasses RMZ-20 (Nootka); high marine biodiversity values; moderate upland forest biodiversity values

Objective: **General Biodiversity Conservation Management**

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions³⁸ of the landscape unit, such retention should be concentrated³⁹ within the SMZ-portion of the landscape unit; special attention to coastal biodiversity values

Timber:

Description: moderate to high productivity (except shore pine), mostly mature timber

Objective: **Special Timber Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: considerable moderate to good potential for finfish culture and shellfish culture (in addition: provincially significant kelp resources)

³⁸ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

³⁹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-13: Nahmint

Location: encompasses Nahmint River watershed

Total Area: approximately 24,900 ha

Primary Values (see LIARC report)

- 1 Old growth biodiversity and connectivity functions
- 2 Fish and wildlife habitats and populations
- 3 Visual quality for recreationists in Nahmint Valley
- 4 Linkage to possible high elevation Wilderness Area (Mt. Gibson, Klitsa Mountain)

Overall Management Guidance: emphasis should be on high biodiversity values, with high levels of old seral forest retention; maintenance of recreational values associated with Nahmint River and Lake

Primary Objectives

Wildlife:

Description: dispersed pockets of winter range, overall high value and capability for ungulates, carnivores, marbled murrelet and northern goshawk; waterfowl wintering area and estuary habitat in Nahmint Bay, lower Nahmint

Objective: *Special Wildlife Management*

Fish:

Description: high anadromous values in Nahmint system

Objective: *General Fish Management*

Biodiversity:

Description: this zone is identical with the Nahmint draft landscape unit; mostly CWHvm1; high proportion of old seral forests; very large Douglas Fir in Nahmint Old Growth area (identified through Nahmint Watershed Review, 1991)

Objective: *Special Biodiversity Conservation Management*

Strategies: maintain high proportion of old forest, including large Douglas Fir in the Nahmint Old Growth Area

Visual Resources:

Description: high visual sensitivity all along lower Nahmint and surrounding Nahmint Lake

Objective: *Special Visual Resource Management*

Recreation Resources:

Description: associated with Nahmint River and Lake

Objective: *Special Recreation Resource Management*

Water:

Description: low equivalent clearcut area

Objective: *General Watershed Management*

Secondary Objectives

Timber:

Description: moderate to high productivity, high proportion of mature timber

Objective: *Special Timber Resource Management*

Tourism Resources:

Description: associated with Nahmint Bay, Lake and backcountry in upper Nahmint River

Objective: *General Tourism Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Cave/Karst:

Objective: *General Cave/Karst Management*

Access:

Objective: **General Access Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for finfish culture and shellfish culture

SMZ-14: Barkley Sound

Location: includes provincial Crown land on islands and along the ocean facing slopes surrounding Barkley Sound

Total Area: approximately 17,500 ha

Primary Values (see LIARC report)

1. Visual resources associated with marine zone and islands
2. Recreation values, opportunities
3. Rare/threatened marine species populations and habitats
4. Archaeological values

Overall Management Guidance: particular emphasis should be on maintenance of marine/coastal recreation opportunities, as well as marine/coastal habitats; resource management should be guided by the Barkley Sound Planning Strategy (1994), the objectives below, and the Code requirements

Primary Objectives

Visual Resources:

Description: most of the upland area, particularly as seen from the Broken Islands, is highly visually sensitive

Objective: ***Special Visual Resource Management***

Recreation Resources:

Description: high marine and coastal values: kayaking, canoeing, boating, fishing

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: very high values in marine area, land/water interface; high lodge/resort potential in Cataract peninsula

Objective: ***Special Tourism Management***

Wildlife:

Description: high habitat values for marine/coastal species: river otter, bald eagle, marbled murrelet, waterfowl, sea lions; moderate upland values

Objective: ***Special Wildlife Management*** with emphasis on coastal species

Strategies: develop habitat management strategies for coastal species

Fish:

Description: high anadromous values in lower stream reaches

Objective: ***General Fish Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Community Water:

Description: the area draining to Haggard Lake is designated as community watershed

Objective: ***Community Watershed Management***

Water:

Description: low equivalent clearcut area in upland portions

Objective: ***General Watershed Management***

Secondary Objectives

Timber:

Description: moderate to high productivity, high proportion of mature timber

Objective: ***Special Timber Resource Management***

Biodiversity:

Description: this zone is part of the Toquart, Effingham, Henderson and Barkley Sound Islands draft landscape units; high marine biodiversity values, basic upland values

Objective: ***Basic Biodiversity Conservation Management*** for part of the zone situated in Henderson LU; ***General Biodiversity Conservation Management*** for part of the zone situated in Toquart and Effingham LUs

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁴⁰ of the landscape units, such retention should be concentrated⁴¹ within the SMZ-portion of the landscape units; special marine biodiversity habitat conservation management indicated

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: considerable good and moderate potential for finfish culture and shellfish culture and many existing operations

⁴⁰ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁴¹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-15: Tofino Mudflats

Location: Tofino mudflats, Browning Passage

Primary Values (see LIARC report)

- 1 Estuary/mudflat habitat for fish and waterfowl
- 2 Sheltered waters habitat for waterfowl;

Overall Management Guidance: primary focus is on maintenance of high marine/intertidal habitat values and species diversity; recreational activities should be subject to compatibility with these primary habitat values

Primary Objectives

Wildlife:

Description: Estuary/mudflat habitat for fish and waterfowl; this zone is designated as wildlife management area (WMA)

Objective: manage in accordance with WMA designation

Strategies: need to develop special marine wildlife strategies

Fish:

Description: Estuary/mudflat habitat for fish and waterfowl

Objective: ***General Fish Management***

Biodiversity:

Description: high marine species and habitat biodiversity

Objective: Special Marine Biodiversity Management objectives and strategies need to be developed

Secondary Objectives

Recreation Resources:

Description: associated with land/water interface, islands, kayaking

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: kayaking, existing facilities

Objectives and strategies: ***Special Tourism Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Visual Resources: refer to Scientific Panel recommendations for Clayoquot Sound

Access:

Objective: ***General Access Management***

Non-Forest Resource Descriptions

Aquaculture:

Description: some good potential for shellfish culture and existing culture and harvest operations

SMZ-16: Saanich Inlet

Primary Values and Location (see LIARC report)

- 1 Marine water quality
- 2 Waterfowl habitat areas
- 3 Estuarine habitat
- 4 Recreation values and opportunities

Applicable Management Objectives and Strategies:

This SMZ is entirely comprised of the marine environment (including the foreshore along some portions of the periphery). The general values identified by CORE and reiterated in the LIARC Report pertain to the marine environment, however they are largely affected by the management, development and regulation of land use activities in the adjacent upland areas. The establishment of this SMZ has been intended to signal the significance of the values within the inlet and the need for upland authorities (particularly local governments and in co-operation with provincial and federal agencies) to work together to implement appropriate policy and action to promote the long term conservation and restoration of the quality of the adjacent marine environment.

The Saanich Inlet Study, a major initiative by the Ministry of Environment, Lands and Parks, has reviewed the resource and environmental values and qualities of the inlet in considerable technical detail. Consequently, the values, conclusions and recommendations identified by this study should be considered in the formulation of locally-developed management objectives.

It is most appropriate that local authorities whose jurisdictions surround Saanich Inlet, with participation from provincial and federal agencies and from the local public, develop a co-ordinated program of management objectives, strategies and action plans.

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SMZ-17: Strathcona-Taylor

Location: extending from Strathcona Park (McBride Creek) to west end of Sproat Lake; connecting with Nahmint SMZ

Total Area: approximately 12,100 ha

Primary Values (see LIARC report)

- 1 Old growth biodiversity (Maber Creek)
- 2 Wildlife and fish habitats and populations
- 3 Connectivity (Taylor River to Strathcona Park)

Overall Management Guidance: emphasis should be on maintaining fish, wildlife and old growth biodiversity values, while maintaining special timber resource management opportunities

Primary Objectives

Wildlife:

Description: dispersed ungulate winter range

Objective: **Special Wildlife Management**

Fish:

Description: high anadromous values and special non anadromous cutthroat stock in Taylor River system; high non-anadromous values associated with Sproat Lake

Objective: **General Fish Management**

Biodiversity:

Description: this zone is part of the Sproat and Great Central draft landscape units, which also comprise portions of RMZ 35, as well as protected areas; mostly CWHmm1, some CWHxm2; high proportion of old forests

Objective: **General Biodiversity Conservation Management**

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁴² of the landscape units, such retention should be highly concentrated⁴³ within the SMZ-portion of the landscape units; long-term recovery of mature/old seral forest linkage across Taylor River drainage; focus on old seral forests in CWHxm2, as well as Maber Creek drainage

Water:

Description: some unstable terrain, low equivalent clearcut area

Objective: **General Watershed Management**

Secondary Objectives

Timber:

Description: moderate to high productivity in lower elevations, second growth in Dorothy Creek and Taylor River drainages, elsewhere mostly mature timber

Objective: **Special Timber Resource Management**

Visual Resources:

Description: sensitive viewsheds mainly along Taylor River, south shore of Great Central Lake

Objective: **General Visual Resource Management**

⁴² contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁴³ 'concentrated': the intent is to retain old seral forest required for the LU to a much greater degree within the SMZ, and to a much lesser degree within the RMZ portion of the LU

Recreation Resources:

Description: associated with Taylor River, Doran Lakes and Great Central shoreline

Objective: **General Recreation Resource Management**

Tourism Resources:

Description: backcountry values along Great Central, and Maber Creek

Objective: **General Tourism Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

SMZ-18: Alberni Canal

Location: extending along outer reaches of Alberni Canal

Total Area: approximately 5,200 ha

Primary Values (see LIARC report)

- 1 Visual qualities as seen from waterway
- 2 Coastal wildlife habitats

Overall Management Guidance: emphasis should be on maintenance of visual quality as seen from marine traffic area, as well as recreation and tourism opportunities associated with marine environment; maintenance of coastal habitats

Primary Objectives

Visual Resources:

Description: visually sensitive areas along canal, defined by viewshed of marine traffic

Objective: ***Special Visual Resource Management***

Recreation Resources:

Description: marine-based/coastal

Objective: ***Special Recreation Resource Management***

Tourism Resources:

Description: marine-based

Objective: ***Special Tourism Management***

Wildlife:

Description: bald eagle, basic ungulate and other mammal values

Objective: ***Special Wildlife Management*** with emphasis on coastal species and habitats

Strategies: develop habitat management strategies for coastal species

Fish:

Description: anadromous in lower Parsons Creek

Objective: ***General Fish Management***

Community Water:

Description: Cousteau Creek is a designated community watershed

Objective: ***Community Watershed Management***

Water:

Description: low equivalent clearcut area

Objective: ***General Watershed Management***

Secondary Objectives

Timber:

Description: moderate to high productivity, mostly in second growth timber

Objective: ***Special Timber Resource Management***

Biodiversity:

Description: this zone is part of the Henderson, Corrigan and Sarita draft landscape units; basic values in upland areas

Objectives: **Basic Biodiversity Conservation Management** for parts of the zone situated in Henderson and Sarita draft LUs, **General Biodiversity Conservation Management** for parts of the zone situated in Corrigan draft LU

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁴⁴ of the landscape units, such retention should be concentrated⁴⁵ within the SMZ-portion of the landscape units; maintain marine species and habitats

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

⁴⁴ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁴⁵ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

SMZ-19: Quadra Island

Location: comprises all provincial Crown forest on Quadra Island outside of protected areas, excluding the northern portion (north of Small Inlet), as well as the southern, mostly private portion.

Total Area: approximately 15,800 ha

Primary Values (see LIARC report)

1. Ecoregion biodiversity/ representation
2. Coastal and shorelands wildlife values
3. Visual qualities, esp. in association with marine recreation and major road corridors

Overall Management Guidance: focus should be on biodiversity conservation at the intermediate level of significance with active replacement of old seral forest attributes and ages in CWH xm forests; maintenance of scenery/recreation and tourism values associated with shoreline, major road corridors and high recreation use areas, as well as maintenance of coastal wildlife habitats

Primary Objectives

Biodiversity:

Description: this zone comprises the majority of the Quadra draft landscape unit, which also comprises portions of the Quadra-Cortes RMZ (#32), as well as protected areas; the zone is dominated by the CWHxm2 variant; while old forests are rare in this variant, a significant amount of mid-seral/mature second growth forests are protected in the Main Lakes Chain protected area

Objective: *General Biodiversity Conservation Management*

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁴⁶ of the landscape unit, such retention should be concentrated⁴⁷ within the SMZ-portion of the landscape unit; maintain existing old forest in the zone, as well as second growth with high portion of veteran trees; manage to replace old forest in the long term (>150 years) in accordance with old seral targets for intermediate BEO; focus old seral replacement in CWHxm2, concentrated along riparian areas and, where possible, adjacent to existing old seral forest; recruit old seral habitat blocks with higher priority on forest interior conditions than on old seral connectors; maintain harvest opportunity in second growth by identifying some old growth recruitment areas in early seral forest; recruit mature forest in the mid (>50 years) term, building gradually towards a mature seral target of 25%; actively create mature and old seral forest attributes through suitable management strategies, such as variable density thinning or partial cutting silvicultural systems

Visual Resources:

Description: primary visually sensitive areas along coastline and major road corridors, secondary values surrounding lakes and along hiking routes

Objective: *Special Visual Resource Management*

Recreation Resources:

Description: recreational use and values in Wyatt Bay/Small Inlet (heritage trail, portage), trails in Mount Seymour and Chinese Mts., as well as Morte and Nugedzi Lake areas; shoreline

Objective: *Special Recreation Resource Management* in above areas; *General Recreation Resource Management* in other less frequented/significant areas

⁴⁶ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁴⁷ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Tourism Resources:

Description: kayaking and boating along shoreline, scenic values and hiking opportunities

Objective: **Special Tourism Management** with focus on above mentioned values and activities

Wildlife:

Description: high values for marine/coastal species (eagles, waterfowl); moderate upland/interior forest habitat values (capability for marbled murrelet, northern goshawk)

Objective: **Special Wildlife Management** with emphasis on coastal species and habitats;

Strategies: develop habitat management strategies for coastal species

Fish:

Description: high values, particularly associated with lakes

Objective: **General Fish Management**

Water:

Description: generally stable terrain, low equivalent clearcut area

Objective: **General Watershed Management**

Secondary Objectives**Timber:**

Description: overall moderate productivity, almost entirely in second growth forests

Objective: **Special Timber Resource Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Cave/Karst:

Objective: **General Cave/Karst Management**

Access:

Objective: **General Access Management**

Non-Forest Resource Descriptions**Aquaculture:**

Description: some moderate to good potential for finfish culture and shellfish culture and some existing operations

SMZ-20: Upper Qualicum

Location: Crown forests along Upper Qualicum River, upstream from Horne Lake Caves park

Total Area: approximately 1,500 ha

Primary Values (see LIARC report)

- 1 Ecosession biodiversity representation
- 2 Recreation opportunities associated with the river
- 3 Wildlife and fish habitats and populations

Overall Management Guidance: this small zone should be managed with focus on retention/replacement of old seral forest attributes, as well as demonstration of alternative silvicultural practices throughout

Primary Objectives

Biodiversity:

Description: this zone is part of the Rosewall draft landscape unit; almost entirely CWHxm2;

Objective: **General Biodiversity Conservation Management**

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁴⁸ of the landscape unit, such retention should be highly concentrated⁴⁹ within the SMZ-portion of the landscape unit; maintain existing old forest in the zone, as well as second growth with high portion of veteran trees; manage to replace old forest in the long term (>150 years) in accordance with old seral targets for intermediate BEO; focus of old seral recruitment should be along riparian areas and, where possible, adjacent to existing old seral forest; recruit old seral habitat blocks with higher priority on forest interior conditions than on old seral connectivity; maintain harvest opportunity in second growth by identifying some old growth recruitment areas in early seral forest; recruit mature forest in the mid (>50 years) term, building gradually towards a mature target of 25%; actively create mature and old seral forest attributes through suitable management strategies, such as variable density thinning and/or partial cut silvicultural systems

Recreation Resources:

Description: high day-use associated with river

Objective: **Special Recreation Resource Management**

Tourism Resources:

Description: high day-use associated with river

Objective: **Special Tourism Management**

Wildlife:

Description: high riparian habitat values

Objective: **Special Wildlife Management**

Fish:

Description: high fisheries values

Objective: **General Fish Management**

Water:

Description: low equivalent clearcut area

Objective: **General Watershed Management**

⁴⁸ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁴⁹ 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

Secondary Objectives

Timber:

Description: high productivity, second growth timber

Objective: ***Special Timber Resource Management*** throughout

Strategies: special focus should be on non-clearcut silvicultural systems, and creation of old seral forest elements and attributes

Visual Resources:

Description: not inventoried as visually sensitive

Objective: ***General Visual Resource Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

SMZ-21: Walbran Periphery

Location: extending along east side of Walbran protected area

Total Area: approximately 2,600 ha

Primary Values (see LIARC report)

- 1 Fish habitat
- 2 Old growth biodiversity
- 3 Recreation opportunities

Overall Management Guidance: this zone should be managed as a focal area for old seral forest retention, with emphasis on riparian areas; recreational access management

Primary Objectives

Biodiversity:

Description: this zone is part of the Walbran draft landscape unit, which also comprises part of RMZ 46, as well as Walbran protected area; CWHvm1 and vm2, almost entirely in old growth

Objective: *General Biodiversity Conservation Management*

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions⁵⁰ of the landscape unit, such retention should be highly concentrated⁵¹ within the SMZ-portion of the landscape unit

Wildlife:

Description: high summer capability for ungulates, as well as high capability for marbled murrelet and northern goshawk

Objective: *Special Wildlife Management*

Fish:

Description: known anadromous values in Walbran Creek

Objective: *General Fish Management*

Recreation Resources:

Description: low current use, anticipated increase in future; values associated with Walbran Creek, as well as access to Carmanah Walbran Protected Area

Objective: *Special Recreation Resource Management*

Water:

Description: some sensitive terrain, low equivalent clearcut area

Objective: *General Watershed Management*

Secondary Objectives

Visual Resources:

Description: sensitive viewsheds as seen from Walbran Creek, particularly House Cone Mt.

Objective: *General Visual Resource Management*

Strategies: maintain viewsheds visible from protected area

Tourism Resources:

Description: potential for backcountry tourism use

Objective: *General Tourism Management*

⁵⁰ contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

⁵¹ 'concentrated': the intent is to retain old seral forest required for the LU to a much greater degree within the SMZ, and to a much lesser degree within the RMZ portion of the LU

Timber:

Description: high productivity and high proportion of mature timber

Objective: ***Special Timber Resource Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:

Objective: ***General Access Management***

SMZ-22: San Juan Ridge

Location: extending along San Juan Ridge

Total Area: approximately 2,900 ha

Primary Values (see LIARC report)

- 1 Upland recreational opportunities and values
- 2 Visual qualities associated with trail corridor

Overall Management Guidance: primary focus is on maintenance of recreational and scenic values and opportunities associated with the trail

Primary Objectives

Visual Resources:

Description: scenic values associated with viewsheds from the trail

Objective: ***Special Visual Resource Management***

Strategies: as the area encompassed within this zone is small and linear, there is limited opportunity to manage visual values within this zone; harvesting should be designed and placed to facilitate open viewsheds along the trail

Recreation Resources:

Description: associated with the trail

Objective: ***Special Recreation Resource Management***

Strategies: maintain and/or enhance recreational values associated with the trail

Tourism Resources:

Description: trail

Objective: ***Special Tourism Management***

Fish:

Description: headwaters of tributaries to San Juan River and Loss Creek

Objective: ***General Fish Management***

Water:

Description: low equivalent clearcut area, some terrain sensitivities

Objective: ***General Water Management***

Secondary Objectives

Biodiversity:

Description: this zone is part of the San Juan and Loss draft LU, with minor portions in the Tugwell draft LU; blue listed flora

Objectives: ***General Biodiversity Conservation Management*** for parts of the zone situated in San Juan draft LU; ***Basic Biodiversity Conservation Management*** for parts of the zone situated in Loss and Tugwell draft LUs

Strategies: old forest retention within this SMZ should only occur to the extent that it does not detract from the recreation and visual primary objectives

Wildlife:

Description: limited ungulate values, due to size and shape of the zone; rare and endangered plants

Objective: ***General Wildlife Management***

Timber:

Description: lower to moderate productivity, mix of immature and mature timber

Objective: ***Special Timber Resource Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Cave/Karst:

Objective: ***General Cave/Karst Management***

Access:
Objective: *General Access Management*

4.3.2 General Management Zones RMZ

4.3.2.1 Intent

The intent of the General Management Zone (GMZ) is to identify Crown land, coastal nearshore areas and private land within TFLs where a wide range of resource values are found, including fish, wildlife, recreation, water, tourism, aquaculture cultural and scenic values. They are to be managed in accordance with all general legislated requirements and the principles of integrated resource management, based on an ecosystem approach. The 25 upland GMZ units occupy 1,027,994 ha (31% of the Island).

All coastal areas not included within boundaries of PA, SMZ or EFZ areas are allocated to the General Management Zone category.

4.3.2.2 General Management Regimes

The general management regimes, which apply in the 25 upland GMZs and the coastal area are based on the requirements for integrated resource management, reflected in the pertinent resource legislation and policy.

Table 6 presents a summary of the application of the various regimes in the individual GMZ units. Note that the regimes for biodiversity are labeled basic, general and higher, reflecting the Code requirements regarding biodiversity emphasis assignment (lower, intermediate and higher emphasis) to landscape units. Some GMZ units have been assigned the Enhanced Silviculture regime based on their particular suitability and to encourage enhanced silviculture practices (while pursuit of these practices is encouraged, it is not mandatory). For areas within GMZ units where community watersheds are established under the Code, the community watershed regime is assigned.

Table 6: Management Regimes for Individual GMZ Units

RMZ	Tim	Wat	Fish	WL	Bio	Vis	Rec	Tou	C/K	Cult	Acc
1 Nigei	G	G	G	G	B	G	G	G		G	G
2 Shushartie	G	G	G	G	H	G	G	G		G	G
3 Nahwitti-Tsulquate	G	CW/G	G	G	G	G	G	G	G	G	G
7 Marble	G/ES	G	G	G	G	G	G	G	G	G	G
9 Klaskish	G	G	G	G	H	G	G	G	G	G	G
12 Malcolm	G	G	G	G	B	G	G	G		G	G
13 Woss-Vernon	G/ES	G	G	G	G	G	G	G	G	G	G
14 Kashutl	G	G	G	G	B	G	G	G	G	G	G
16 Zeballos	G	G	G	G	B	G	G	G	G	G	G
17 Artlish-Kaouk	G	G	G	G	G	G	G	G	G	G	G
20 Nootka	G	G	G	G	G	G	G	G	G	G	G
22 Gold	G	G	G	G	H	G	G	G	G	G	G
25 Escalante	G	G	G	G	B	G	G	G	G	G	G
26 Tsitika	G	G	G	G	H	G	G	G		G	G
29 White	G	G	G	G	H	G	G	G	G	G	G
31 Sawward	G	G	G	G	G	G	G	G	G	G	G
32 Quadra-Cortes	G(S)		G	G	G	G	G	G		G	G
33 E&N-North	G/ES	G	G	G	B	G	G	G	G	G	G
34 E&N-South	G/ES	CW/G	G	G	B/G	G	G	G	G	G	G
35 Ash-Great Central-Sproat	G/ES	CW/G	G	G	G	G	G	G	G	G	G
37 Henderson	G	G	G	G	B	G	G	G	G	G	G
39 Toquart	G	CW/G	G	G	G	G	G	G	G	G	G
41 Cameron-China	G	CW	G	G	G	G	G	G	G	G	G
45 Nitinat	G/ES	G	G	G	G	G	G	G	G	G	G
46 Gordon-Cavcuse-San	G/ES	CW/G	G	G	G	G	G	G	G	G	G

Note: Cave/Karst management is limited to those RMZs with known features or high probability of such occurrence

Tim Timber

Bio Biodiversity

C/K

Cave Karst

Community Watershed Management Regime

Overall Goal/Intent: To maintain integrity of designated community watersheds.

Objectives	Strategies
<p>To maintain water quality, quantity, and timing of flow in designated community watersheds in accordance with the Forest Practices Code and other pertinent legislation.</p>	<p>Apply the provisions under the <i>Forest Practices Code of BC Act</i> and other pertinent legislation to designated community watersheds.</p>

General Fish Management Regime

Overall Goal/Intent: To maintain the integrity of all aquatic systems supporting fish, including the biodiversity function of riparian systems.

Objectives	Strategies
<p>In accordance with the Forest Practices Code and other pertinent legislation, apply practices designed to:</p> <ul style="list-style-type: none"> • minimize impacts from development activities on stream channel dynamics, aquatic ecosystems, and water quality of fish streams, lakes, and wetlands; • minimize impacts from development activities on the diversity, productivity, and sustainability of riparian reserve zones adjacent to streams, lakes and wetlands. 	<p>Apply all legislated requirements under the Code and other pertinent legislation which include, but are not limited to:</p> <p>In accordance with the provisions of the Operational Planning Regulation, ensure that a forest development plan includes:</p> <ul style="list-style-type: none"> • identification of known fish streams and known riparian class of streams, lakes and wetlands; • the general objectives for riparian management zones, including the range of basal area retention by stream class. <p>Where a riparian management area has only a management zone, ensure, in accordance with the provisions of the Timber Harvesting Practices Regulation, that:</p> <ul style="list-style-type: none"> • sufficient streamside trees are retained to prevent increases in stream temperature of known temperature sensitive streams; • windfirm streamside trees are not felled or removed that are rooted in the stream bank and whose root system contributes to the maintenance of stream bank stability. <p>In addition, use the recommendations provided in the ‘Riparian Management Area Guidebook’, as a guide for forest practices within riparian areas; these include, but are not limited to:</p> <ul style="list-style-type: none"> • where a riparian management area has both a management zone and a reserve zone, retain important wildlife habitat attributes, including wildlife trees, large trees, hiding and resting cover, nesting sites, structural diversity, coarse woody debris, and food sources characteristic of natural riparian ecosystems; • apply the “Best Management Practices” for riparian management zones, consistent with the maximum overall levels of basal area retention. <p>Refer also to the strategies offered in the individual zone descriptions.</p>

General Wildlife Management Regime

Overall Goal/Intent: To maintain the diversity and abundance of native species and their habitats.

Objectives	Strategies
<p>To manage and conserve known wildlife habitat in accordance with the Forest Practices Code and other pertinent legislation.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none">• identify, establish and make known ungulate winter ranges (UWR) and establish management objectives for UWR in SMZ in accordance with pertinent legislation and policy;• where appropriate, apply suitable silvicultural techniques to manage and conserve known ungulate winter range;• manage species at risk in accordance with the Forest Practices Code and Cabinet-approved strategies;• provide for wildlife tree patches in accordance with FPC requirements;• where stand density management measures are planned for areas adjacent to known ungulate winter ranges, wildlife habitat areas or in large contiguous areas of even-aged second growth forests, consider variable-density spacing/thinning to provide for wildlife habitat attributes and forage. <p>Refer also to the strategies offered in the individual zone descriptions.</p>

Basic Biodiversity Conservation Management Regime

Overall Goal/Intent: To maintain natural elements and attributes of biodiversity at the basic stewardship level of biodiversity conservation.

Objective	Strategies
<p>(1) To manage forested ecosystems to maintain key elements of biodiversity⁵³ at a lower emphasis level.</p> <p>(2) Specific to Enhanced Forestry Zones, to achieve objective (1) above while minimizing timber supply impacts.</p>	<p>Manage the forested ecosystems in the zone consistent with the Forest Practices Code requirements⁵⁴ for the lower biodiversity emphasis option.⁵⁵ In Enhanced Forestry Zones, the following strategies are offered for consideration:</p> <p><u>Seral stage distribution:</u></p> <ul style="list-style-type: none"> do not apply early seral targets; do not apply 'mature plus old' seral targets; consider partial cutting in old forests required to meet seral targets, provided important attributes of old-aged stands are retained; <p><u>Old seral retention and representativeness</u></p> <ul style="list-style-type: none"> retention targets apply at the biogeoclimatic variant level; to the greatest extent possible, the old seral forest contribution will be from lands withdrawn from the timber harvesting land base (THLB) or managed for non-timber resource objectives (riparian reserves, sensitive soils, wildlife habitat areas, gully management areas, inoperable areas, visually sensitive areas, etc.); where the old seral forest contribution from such lands is not sufficient to attain the retention targets, the shortfall will be met from forests within the timber harvesting land base; where old growth management areas (OGMAs) are required within the timber harvesting land base, consider wildlife habitat requirements and objectives identified for the zone, in addition to ecosystem representativeness as criteria for delineating OGMAs harvesting of old seral forests may proceed down to one third of the old seral target, provided suitable old growth recruitment areas are identified; where indicated in individual zone strategies, consider retaining more than one third of the old seral target, unless this would cause severe short-term timber supply impacts; provision of forest interior conditions will normally be a lower priority; <p><u>Landscape connectivity</u></p> <ul style="list-style-type: none"> connectivity will be achieved primarily through the distribution of patch sizes, through areas excluded from the timber harvesting land base, and through stand level management, as well as, where possible, the design of forest linkages; management for connectivity objectives must not result in the area of old seral forest exceeding the retention targets for lower biodiversity emphasis; <p>Refer also to the strategies offered in the individual zone descriptions.</p>

⁵³ Key elements include, but are not limited to: old seral forests, wildlife tree patches;

⁵⁴ as defined in pertinent legislation and policy;

⁵⁵ Seral stage and other landscape level biodiversity requirements of the Code apply to landscape units (LU). While the zone boundaries for general and enhanced zones generally follow the draft LU boundaries identified, boundaries for special zones and protected areas are not aligned with LU boundaries in every case. For this reason, more than one zone may occur within a given draft LU. The strategies presented are intended for application in the particular zone type referenced in the text, as it occurs within a given LU. Depending on the characteristics of the landscape, additional specific strategies may be outlined in the individual zone descriptions to provide more direction or emphasis, where appropriate.

General Biodiversity Conservation Management Regime

Overall Goal/Intent: To maintain natural elements and attributes of biodiversity at an intermediate level of biodiversity conservation.

Objective	Strategies
<p>(1) To manage forested ecosystems to maintain key elements of biodiversity⁵⁶ at an intermediate emphasis level.</p> <p>(2) Specific to Enhanced Forestry Zones, to achieve objective (1) above while minimizing timber supply impacts.</p>	<p>Manage the forested ecosystems in the zone consistent with the Forest Practices Code requirements for the intermediate biodiversity emphasis option⁵⁷.</p> <p>In Enhanced Forestry Zones, the following strategies are offered for consideration:</p> <p><u>Seral stage distribution:</u></p> <ul style="list-style-type: none"> • do not apply early seral targets; • do not apply ‘mature plus old’ seral targets; • consider partial cutting in old forests required to meet seral targets, provided important attributes of old-aged stands are retained. <p><u>Old seral retention and representativeness</u></p> <ul style="list-style-type: none"> • retention targets apply at the biogeoclimatic variant level; • to the greatest extent possible, the old seral forest contribution will be from lands withdrawn from the THLB or managed for non-timber resource objectives (riparian reserves, sensitive soils, wildlife habitat areas, gully management areas, inoperable areas, visually sensitive areas, etc.); • where the old seral forest contribution from such lands is not sufficient to attain the retention targets, the shortfall will be met from forests within the timber harvesting land base; • old forests should generally be retained in accordance with the targets (for exceptions and/or additional strategies, refer to individual zone descriptions). <p><u>Landscape connectivity</u></p> <ul style="list-style-type: none"> • connectivity will be achieved primarily through the distribution of patch sizes, through areas excluded from the timber harvesting land base, and through stand level management, supplemented secondarily by the design of forest linkages; • management for connectivity objectives should not result in the area of old seral forest exceeding the retention targets for intermediate biodiversity emphasis. <p>Refer also to the strategies offered in the individual zone descriptions.</p>

⁵⁶ Key elements include, but are not limited to: old seral forests, patch size distribution, wildlife tree patches;

⁵⁷ Seral stage and other landscape level biodiversity requirements of the Code apply to landscape units (LU). While the zone boundaries for general and enhanced zones generally follow the draft LU boundaries identified, boundaries for special zones and protected areas are not aligned with LU boundaries in every case. For this reason, more than one zone may occur within a given draft LU. The strategies presented are intended for application in the particular zone type referenced in the text, as it occurs within a given LU. Depending on the characteristics of the landscape, additional specific strategies may be outlined in the individual zone descriptions to provide more direction or emphasis, where appropriate.

Higher Biodiversity Conservation Management⁵⁸ Regime

Overall Goal/Intent: To maintain natural elements and attributes of biodiversity at a high level of biodiversity conservation.

Objective	Strategies
<p>To manage forested ecosystems to maintain natural elements and attributes of biodiversity with emphasis on rare and underrepresented ecosystems, consistent with the higher biodiversity conservation priority of the zone.</p>	<p>Manage the forested ecosystems in the zone consistent with the Forest Practices Code requirements for the higher biodiversity emphasis option⁵⁹.</p> <p>If required to meet specific known wildlife objectives in the zones, provide old seral forest in forest interior conditions;</p> <p>Refer also to the strategies offered in the individual zone descriptions.</p>

General Visual Resource Management Regime

Overall Goal/Intent: To ensure development activities are managed in a manner which respects known scenic resource values, in accordance with the Forest Practices Code and other pertinent legislation.

Objectives	Strategies
<p>To design forest and other development activities in a manner which maintains the visual quality of known scenic areas identified in the zone, based on the sensitivity and significance of the area, and consistent with order and intent of the resource objectives for each zone.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • identify scenic areas in the zone and make them known, in consultation with the Ministry of Small Business, Tourism and Culture; • in known scenic areas, apply visual landscape design principles and techniques to development activities; • consider establishment of VQOs under the Code in areas of special significance; • where VQOs are established, conduct visual impact assessments prior to development; • consider the use of alternative silvicultural systems to achieve VQOs where site, stand, and ecological conditions are appropriate; • consider restoring and/or enhancing the scenic values of areas through alterations of existing cutblock boundaries; • consider forest practices which will minimize time to achieve visually effective green-up. <p>Refer also to the strategies offered in the individual zone descriptions.</p>

⁵⁸ Note: the special biodiversity conservation objective and strategies are recommended for application in certain Special and General zones only, not for Enhanced zones;

⁵⁹ Seral stage and other landscape level biodiversity requirements of the Code apply to landscape units (LU). While the zone boundaries for general and enhanced zones generally follow the draft LU boundaries identified, boundaries for special zones and protected areas are not aligned with LU boundaries in every case. For this reason, more than one zone may occur within a given draft LU. The strategies presented are intended for application in the particular zone type referenced in the text, as it occurs within a given LU. Depending on the characteristics of the landscape, additional specific strategies may be outlined in the individual zone descriptions to provide more direction or emphasis, where appropriate.

General Recreation Resource Management Regime

Overall Goal/Intent: to manage development activities in a manner respecting known recreation resource values.

Objectives	Strategies
<p>To manage known recreation features, opportunities, facilities and activities in accordance with the Forest Practices Code and other pertinent legislation, and consistent with order and intent of the resource objectives for each zone.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • maintain an updated recreation inventory; • identify and make known recreation features in the zone; • integrate the management of known recreation features, settings and facilities with the requirements of other uses within the zone.

General Tourism Resource Management Regime

Overall Goal/Intent: To respect tourism values in integrated resource management planning, along with other values.

Objectives	Strategies
<p>To ensure that known recreation and visual resources are managed in recognition of their value to tourism and consistent with the order and intent of the resource objectives for each zone.</p>	<p>Refer to general recreation and visual resource management.</p>

General Cave/Karst Management Regime

Overall Goal/Intent: To manage impacts of forestry-related activities on sensitive cave/karst features and terrain.

Objectives	Strategies
<p>To manage impacts of activities on sensitive cave/karst features and terrain, in accordance with the Forest Practices Code and other pertinent legislation.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • prior to forestry-related development within areas of high cave/karst occurrence or potential, particular attention should be paid to issues of forestry and cave/karst interaction, including karst geology, hydrology, soils; karst and cave biology; and cultural and recreational cave and karst features; • design development activities in a manner which minimizes and/or mitigates impacts on sensitive cave/karst features and terrain; • once approved and available, manage cave/karst features and terrain in accordance with the cave/karst guidelines currently being developed by the Ministry of Forests.

General Cultural Heritage Management Regime

Overall Goal/Intent: To manage the cultural heritage resources and values found in forests.

Objectives	Strategies
To manage for cultural heritage values in accordance with the requirements of the <i>Heritage Conservation Act</i>, <i>Forest Practices Code</i>, and government policy on the <i>Protection of Aboriginal Rights</i>.	The following strategies are offered for consideration, where suitable: <ul style="list-style-type: none">• develop and implement procedures for consultation and information sharing with First Nations regarding the identification and management of cultural heritage resources and inventory databases;• maintain a current inventory of traditional use areas and archaeological sites;• where required by legislation, conduct archaeological impact assessments prior to resource development⁶⁰ and commercial tourism activities in areas with known occurrence or high potential for occurrence of cultural heritage resources.

⁶⁰ Resource development in this instance refers to those activities which have the likelihood of removing forest cover, or result in ground disturbance or high levels of public use.

General Access Management Regime

Overall Goal/Intent: To plan and manage access to Crown land.

Objectives	Strategies
<p>Plan and manage access to Crown land subject to the resource values and/or features identified for each resource management zone through landscape unit and operational planning.</p> <p>Manage existing established recreation trails to maintain their recreation values in consultation with appropriate agencies, recreation groups, and tourism operators.</p> <p>Identify new trails as part of landscape unit planning and operational planning and manage according to the resource values and/or features identified for each resource management zone.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • In consultation with MoF staff, tourism operators, MSBTC, BC Parks, recreational and commercial users, manage use and development activities on and adjacent to established recreation trails and incorporate this information into landscape unit and operational planning; • Using landscape unit and operational planning processes, plan the development, maintenance and deactivation of permanent and temporary roads, and use best practices in accordance with current legislation and regulations; • Identify sensitive resource values or features through landscape unit and operational planning processes, and mitigate negative impacts through access management planning, or in special circumstances, site specific access restriction⁶¹; • Develop and implement a consultative process involving affected agencies, First Nations, and public and tenured interests to address the non-routine deactivation of access routes and ensure that only unnecessary routes or routes posing a significant public safety hazard are deactivated⁶²; • Recognize that the exploration and development of subsurface resources and the changing patterns of recreation/tourism use may require seasonal and temporary access to these resources.

⁶¹ Intent: to limit access where that access would significantly impact another resource value i.e., a known rare and endangered plant community conflicting with a proposed road location - the implied scale is operational not watershed or landscape level.

⁶² Intent: to address concerns of non-tenured recreational users, tourism operators and the general public regarding access road management.

General Aquaculture Management Regime

Overall Goal/Intent: To maintain and allocate capable aquaculture production areas to meet the food security, economic and social needs of society.

Objectives	Strategies
<p>To maintain resource values of importance to aquaculture.</p> <p>To provide opportunities for sustainable aquaculture development in capable marine, freshwater and terrestrial areas, consistent with pertinent legislation and government policy.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • Assess the biophysical capability of marine and freshwater areas to support species currently and potentially farmed. Capability assessments will be carried out at both the regional scale and specific sites and will reflect the full range of culture methods; • Planning for aquaculture development and the criteria that inform site allocation decisions will accommodate the variety of farmed species and culture methods and reflect the market demand for sites; • Suitability criteria approved by government to protect important fish and wildlife habitat and specific social values will be applied to planning and site allocation processes.

4.3.2.3 Individual General Management Zone Units

This section presents a description of resource values, as well as management objectives and strategies for the 25 individual upland General Management Zone units (for a description of the coastal areas allocated to the GMZ category, please refer to Appendix 4).

The applicable objectives and strategies in each GMZ unit are presented in alphabetical order, without implying primary or secondary importance in the order listed.

The management regimes assigned to each resource value in each unit are presented in abbreviated form, i.e. as the pertinent regime titles (e.g. general wildlife management) without presenting the detailed wording of each objective and strategy. For complete wording of the general management regimes, please refer to the previous section. Where applicable, and based on available regional scale information, additional management strategies are provided for particular resource values, to clarify management advice in a given unit.

Total area figures given for the units are based on regional scale data, and may include parcels of private land. The objectives and strategies presented in this report, however, apply only to Crown land and private forest land within tree farm licence areas.

RMZ-1: Nigei

Location: Nigei Island

Total Area: approximately 6,300 ha

Zone Category and Overall Management Direction: *General Management Zone*, with primary focus on maintaining the significant recreational, scenic and tourism values associated with coastline; basic level of biodiversity conservation.

Forest Objectives and Strategies:

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is part of the Nigei draft landscape unit; CWHvh1 is the main variant and well represented in protected areas in the adjacent Nahwitti Lowlands ecosystem

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: lower values

Objective: *General Fish Management*

Recreation Resources:

Description: fishing, diving, boating (small crafts, kayaks), anchorages

Objective: *General Recreation Resource Management*

Timber:

Description: only small portion of the island is operable timber, mostly immature

Objective: *General Timber Resource Management*

Tourism Resources:

Description: coastal and facility-based tourism opportunities

Objective: *General Tourism Management*

Visual Resources:

Description: entire coastline is visually sensitive

Objective: *General Visual Resource Management*

Water:

Description: generally high hydrological integrity

Objective: *General Watershed Management*

Wildlife:

Description: lower values; potential peregrine falcon habitat

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: limited moderate potential for coastal finfish culture, shellfish culture potential unknown.

RMZ-2: Shushartie

Location: comprises the portions of the Shushartie watershed (middle and upper reaches of Shushartie River) not covered by Goletas Channel SMZ (SMZ-1) and protected area

Total Area: approximately 5,900 ha

Zone Category and Overall Management Direction: *General Management Zone*, with high emphasis on biodiversity conservation, and maintenance of fish and wildlife values; integration of recreational and tourism values with general timber production objectives.

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity

Description: this zone is part of the Shushartie draft landscape unit, which also contains part of the Goletas Channel SMZ and part protected area; the forested ecosystems are all part of the CWHvh1 variant; high proportion of old forests; high fish, elk, marbled murrelet values

Objective: *Higher Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish

Description: high fish values (steelhead, salmon)

Objective: *General Fish Management*

Recreation Resources:

Description: significant recreational values along Shushartie River; proposed North Coast Trail

Objective: *General Recreation Resource Management*

Timber:

Description: lowlands of generally poor productivity; only a small fraction of the forested area is classified as operable, mainly along Shushartie River

Objective: *General Timber Resource Management*

Tourism Resources:

Description: areas in vicinity of river exhibit high capability for tourism (backcountry, as well as facility oriented)

Objectives: *General Tourism Management*

Visual Resources

Description: visually sensitive areas mainly associated with SMZ portion of the watershed

Objective: *General Visual Resource Management*

Water:

Description: due to mostly gentle terrain and limited development history, there is generally high hydrological integrity

Objective: *General Watershed Management*

Wildlife:

Description: intermediate to high wildlife values (particularly ungulate winter range, marbled murrelets) associated with river and lake systems

Objective: *General Wildlife Management*

Strategies: maintain elk, marbled murrelet habitat areas in association with riparian management areas along rivers and lakes

Non-Forest Resource Descriptions

Mineral Resources:

Description: moderate to high metallic mineral potential, low industrial mineral potential, many mineral tenures.

RMZ-3: Nahwitti-Tsulquate

Location: Lowland area, often poorly drained; comprising Stranby, Nahwitti, Tsulquate and lower Quatse watersheds with tributaries

Total Area: approximately 52,300 ha

Zone Category and Overall Management Direction: *General Management Zone*, with an emphasis on maintaining the fish/wildlife and recreational/tourism values associated with the major riparian systems; maintenance of community watershed integrity

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity

Description: this zone is comprised by two draft landscape units: Nahwitti LU and Tsulquate LU; CWH vh1 is the main variant; the eastern portion of the area is part of the CWHvm1 variant within the Nahwitti Lowlands ecosection which is underrepresented in protected areas; high fish, elk, marbled murrelet values

Objective: *General Biodiversity Conservation Management*

Community Water:

Description: large area extending from Kains Lake along Tsulquate river is designated as (Port Hardy) community watershed

Objectives: *Community Watershed Management*

Cultural Heritage Resources:

Description: known archaeological sites in Fort Rupert area

Objective: *General Cultural Heritage Resource Management*

Cave/Karst:

Description: karst features south of Kains Lake

Objective: *General Cave/Karst Management*

Fish

Description: high fish values, particularly associated with Nahwitti and lower Stranby riparian systems (steelhead, salmon)

Objective: *General Fish Management*

Recreation Resources:

Description: significant recreational values associated with Stranby, Nahwitti and Quatse Rivers, as well as Lake of the Mountains, Nahwitti, Georgie and Kains Lakes; proposed North Coast Trail; extensive unroaded area between Nahwitti and Stranby Rivers

Objective: *General Recreation Resource Management*

Timber:

Description: lowlands of generally poor productivity; only a small fraction of the forested area is classified as operable, mainly along Stranby, Nahwitti Rivers and around lakes

Objective: *General Timber Resource Management*

Tourism Resources:

Description: areas in vicinity of lakes and rivers exhibit high capability for tourism (backcountry, as well as facility oriented)

Objective: *General Tourism Management*

Visual Resources

Description: visually sensitive areas mainly associated with lakes (Nahwitti, Georgie, Kains Lake)

Objective: *General Visual Resource Management*

Water:

Description: due to mostly gentle terrain and limited development history, there is generally high hydrological integrity; large area extending from Kains Lake along Tsulquate River is designated as (Port Hardy) community watershed; known risk of flooding in lower Quatse (vicinity of Port Hardy).

Objectives: **General Watershed Management**

Wildlife:

Description: intermediate to high wildlife values (particularly ungulate winter range, marbled murrelets) associated with river and lake systems; complex wetland ecosystems and old red cedar in Fort Rupert area; (unselected Protected Area Strategy Goal 2 Area)

Objective: **General Wildlife Management**

Strategies: maintain elk, winter ranges and marbled murrelet wildlife habitat areas in association with riparian management areas along rivers and lakes

Non-Forest Resource Descriptions

Aquaculture:

Description: significant values for freshwater finfish culture

Mineral Resources:

Description: moderate to high metallic mineral potential, low industrial mineral potential, many mineral tenures.

RMZ-7: Marble

Location: zone extending south from Rupert Inlet, comprising Alice and Victoria Lakes and area of upper Benson, Raging and Three Lakes Creek drainages

Total Area: approximately 61,200 ha

Zone Category and Overall Management Direction: *General Management Zone*, particularly suited for enhanced silviculture in second growth stands; high fisheries values, wildlife values/capability, as well as ecosystem representation and connectivity functions result in intermediate biodiversity significance; integration of recreational values associated with lakes

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Marble draft landscape unit; CWHvm1 and vm2 are main variants and underrepresented in protected areas; potential for regional connectivity function; areas of older forest are concentrated in vm2 south of Victoria Lake (Teihsum) and along Three Lakes Creek

Objective: *General Biodiversity Conservation Management*

Strategies: if necessary to avoid severe social and economic consequences, consider harvesting in CWHvm1 old forests below seral target (draw-down to no less than two thirds of target), subject to identification of ecologically suitable second growth in vm1 for long-term recovery of old forest attributes; maintain old seral forest in accordance with full target in CWHvm2, particularly in upper Teihsum, as well as upper reaches of Benson, incl. tributaries, for ungulate connectivity between Brooks-Nasparti and Tahsish-Kwois protected areas

Cave/Karst:

Description: cave/karst terrain and features along Benson and Raging systems and various known cave locations

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish

Description: high anadromous values associated with Marble-Alice-Benson systems, intermediate values in Maynard Lake chain; high non-anadromous values in Victoria Lake

Objective: *General Fish Management*

Recreation Resources:

Description: recreational values associated with lakes and along Rupert Inlet

Objective: *General Recreation Resource Management* with emphasis on above areas

Timber:

Description: highly productive ground; over 2/3 of the forest cover is in second growth

Objective: *General Timber Resource Management*, with *Enhanced Silviculture* in suitable second growth forests;

Strategies: *Enhanced Timber Harvesting* opportunities may be identified at landscape level planning

Tourism Resources:

Description: high capability for coastal, lakes, rivers and facility-oriented tourism; caving potential

Objective: *General Tourism Management*

Visual Resources

Description: few areas of sensitivity identified: north end of Alice Lake, west shore of Victoria Lake, Rupert Inlet

Objective: *General Visual Resource Management*

Water:

Description: lakes; extensive development in lower elevations

Objective: **General Watershed Management**

Wildlife:

Description: intermediate to high (upper Benson) wildlife values, high ungulate capability

Objective: **General Wildlife Management**

Strategies: maintain ungulate winter ranges and manage identified deer habitat in second growth forests

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited moderate potential for coastal finfish culture, some good shellfish culture potential

Mineral Resources:

Description: moderate to high metallic and industrial mineral potential; many mineral tenures.

RMZ-9: Klaskish

Location: Small zone comprising largely undeveloped Klaskish and East Creek drainages

Total Area: approximately 11,000 ha

Zone Category and Overall Management Direction: *General Management Zone* with high biodiversity and timber values; old seral forest should be retained in areas of high significance for fish and wildlife (e.g. marbled murrelet); maintain opportunities for timber resource management

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity

Description: this zone is comprised by the Klaskish draft landscape unit, which also encompasses parts of SMZ 3 and Brooks protected area; high old growth biodiversity values

Objective: *Higher Biodiversity Conservation Management*

Cave/Karst :

Description: occurrence of cave/karst terrain in lower watershed and peninsula

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish

Description: high fish values

Objective: *General Fish Management*

Recreation Resources:

Description: mainly associated with coast (SMZ 3)

Objective: *General Recreation Resource Management*

Timber:

Description: moderate to high productivity in lower elevations; high existing timber values (almost all mature forest)

Objective: *General Timber Resource Management*

Tourism Resources:

Description: high capability for backcountry and coastal tourism

Objective: *General Tourism Management*

Visual Resources

Description: associated with coast, almost entirely within SMZ 3

Objective: *General Visual Resource Management*

Water:

Description: pockets of sensitive terrain; undeveloped watersheds

Objective: *General Watershed Management*

Wildlife:

Description: moderate to high wildlife values (elk, marbled murrelet and other old growth associated/dependent species)

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish culture, shellfish culture potential unknown (values are entirely in SMZ 3)

Mineral Resources:

Description: Moderate to moderately high metallic mineral potential; high industrial mineral potential; some mineral tenures.

RMZ-12: Malcolm

Location: Malcolm Island

Total Area: approximately 8,300 ha

Zone Category and Overall Management Direction: *General Management Zone*, with general timber resource management and general integration of non-timber resource values

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Malcolm draft landscape unit, which exhibits generally lower biodiversity values

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: generally lower fish values

Objective: *General Fish Management*

Recreation Resources:

Description: associated with coastline

Objective: *General Recreation Resource Management*

Timber:

Description: generally lower to moderate productivity, approximately 30% of forest cover mature (estimated at 10% of operable); clay layers and deer browse present management challenges; local community forest initiative potential for rehabilitation/melioration of forest soils/sites

Objective: *General Timber Resource Management*

Tourism Resources:

Description: some established facilities; high potential for marine and heritage tourism

Objective: *General Tourism Management*

Visual Resources:

Description: visually sensitive coastline

Objective: *General Visual Resource Management*

Water:

Description: generally stable terrain, lower equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: lower values

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: moderate for coastal finfish and limited for shellfish culture on southern coastline.

RMZ-13: Woss-Vernon

Location: zone bounded by Schoen-Strathcona SMZ (SMZ 11), Schoen Lake Park, Tsitika Woss SMZ (SMZ 9), Woss protected area, and forest district/TFL boundary; includes Woss and Vernon Lakes, and upper Nimpkish River watershed, including upper reaches of Oktwanch

Total Area: approximately 75,800 ha

Zone Category and Overall Management Direction: *General Management Zone*, significant timber resource values to be developed with due and active consideration and integration of significant wildlife, fish, biodiversity and recreation values; adaptive engineering/ deactivation efforts in areas of unstable terrain are indicated; specific opportunities for enhanced timber harvesting exist, and are to be identified at the local/landscape planning level

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Upper Nimpkish draft landscape unit, which also encompasses all or portions of Woss and Schoen Lake protected areas, as well as Tsitika Woss and Schoen-Strathcona SMZs; approximately 30% of the zone is in CWHxm2, along lower elevations in Nimpkish-Vernon and Davie-Klakkakama riparian systems

Objective: *General Biodiversity Conservation Management*

Strategies: focus of old seral forest retention should be in CWHxm2 associated with riparian reserves and management zones (see fish); refer also to SMZ 9

Cave/Karst :

Description occurrence of cave/karst terrain and features between Vernon Lake and upper Nimpkish River

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high anadromous values associated with Nimpkish, Vernon, Davie and Klakkakama systems; also steelhead in Mclvor and Sebalhall.

Objective: *General Fish Management*

Strategies: develop, at landscape level of planning, a long-term recovery plan for riparian management area, with provisions for maintenance/recovery of old growth attributes along Nimpkish-Vernon and Davie-Klakkakama riparian systems (this will capture additional CWHxm2 representation- see biodiversity)

Recreation Resources:

Description: significant values associated with Nimpkish River, Vernon and Klakkakama Lakes

Objective: *General Recreation Resource Management* with emphasis in above areas

Timber:

Description: highly productive, except for higher elevations (e.g. Sutton Range); approximately 50% in old forests, concentrated in higher elevations; remainder in second growth up to approximately 50 years old

Objective: *General Timber Resource Management*, with opportunity for *Enhanced Silviculture*

Strategies: specific opportunities for *Enhanced Timber Harvesting* are to be identified through landscape level planning

Tourism Resources:

Description: backcountry and facility-oriented tourism opportunities west of Vernon Lake

Objective: *General Tourism Management*

Visual Resources:

Description: few areas associated with Vernon and Klaklakama Lakes

Objective: **General Visual Resource Management** with emphasis in above areas

Water:

Description: sensitive terrain south and west of Vernon Lake; equivalent clearcut area monitoring indicated

Objective: **General Watershed Management**

Wildlife:

Description: high wildlife values: ungulate winter ranges, northern goshawk and marbled murrelets

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Agriculture:

Description: zone contains pockets of high capability non-ALR lands

Mineral Resources:

Description: Moderate metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-14: Kashutl

Location: coastal zone along Kyuquot Sound, between South Brooks-Bunsby SMZ and Tahsish-Kwois protected area; includes Union and other islands in Kyuquot Sound

Total Area: approximately 39,100 ha

Zone Category and Overall Management Direction: *General Management Zone* for integrated resource management, with emphasis on integration of timber values with scenic values along coast, as well as cultural heritage values

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is part of the Kashutl draft landscape unit; CWH vh1, vm1 and vm2 are the main variants and well represented in protected areas; approximately 40% old forest

Objective: *Basic Biodiversity Conservation Management*

Strategies: consider retaining more than one third of the old seral target if necessary to accommodate critical marbled murrelet habitat requirements, as well as ungulate connectivity between Brooks-Nasparti and Tahsish-Kwois protected areas

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Description: high known values

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: intermediate; anadromous in lower Kauwinch, Kashutl

Objective: *General Fish Management*

Recreation Resources:

Description: values associated with shoreline

Objective: *General Recreation Resource Management*

Timber:

Description: generally lower to moderate productivity, with pockets of higher productivity; over 50% of forest cover in mature, with second growth concentrated along rivers in lower elevations

Objective: *General Timber Resource Management*

Strategies: limited opportunities for *Enhanced Timber Harvesting* and *Enhanced Silviculture* exist and should be identified at landscape level of planning

Tourism Resources:

Description: high capability for backcountry, coastal and facility-oriented tourism

Objective: *General Tourism Management*

Visual Resources:

Description: extensive visually sensitive areas along coastline

Objective: *General Visual Resource Management* with emphasis on areas visible from coastal waters

Water:

Description: indication of unstable terrain segments; some drainages with high equivalent clearcut area (Kashutl, Kauwinch, Malksope)

Objective: *General Watershed Management*

Strategies: monitoring of hydrological indicators

Wildlife:

Description: intermediate values; ungulate winter ranges, marbled murrelets

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of good potential for coastal finfish and shellfish culture; some existing operations

Mineral Resources:

Description: Moderate metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-16: Zeballos

Location: comprises Zeballos River and Heh Creek community watersheds, as well as Nomash River drainage

Total Area: approximately 14,400 ha

Zone Category and Overall Management Direction: *General Management Zone*, with lower biodiversity conservation objectives; sensitive development of timber values on unstable terrain

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is part of the Zeballos draft landscape unit, which also encompasses part of the Woss-Zeballos SMZ; lower representation and wildlife values

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst along Zeballos and Nomash Rivers

Objective and Strategies: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: moderate, anadromous values in Zeballos system

Objective: *General Fish Management*

Recreation Resources:

Description: river based recreation

Objective: *General Recreation Resource Management*

Timber:

Description: generally high productivity along river valleys; over 2/3 of forest cover is mature

Objective: *General Timber Resource Management*

Strategies: limited opportunities for *Enhanced Timber Harvesting* may be identified at landscape level planning

Tourism Resources:

Description: localized tourism opportunities and services (Village of Zeballos)

Objective: *General Tourism Management*

Visual Resources:

Description: scenic values in vicinity of Village of Zeballos and along travel corridors

Objective: *General Visual Resource Management*

Water:

Description: known risk of flooding in lower reaches of Zeballos River; sensitive slopes and unstable terrain throughout; generally low equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: lower values, but marbled murrelet detections high in the Nomash, and small elk herd

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: High metallic mineral potential; moderate industrial mineral potential and many mineral tenures.

RMZ-17: Artlish-Kaouk

Location: Artlish and Kaouk River watershed

Total Area: approximately 39,400 ha

Zone Category and Overall Management Direction: *General Management Zone*, with significant fish, wildlife, biodiversity values, as well as high amounts of mature timber; integration of visual and recreation values

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Artlish and Kaouk draft landscape units; significant old growth and wildlife habitat values

Objective: *General Biodiversity Conservation Management*

Cave/Karst :

Description: karst in upper Artlish watershed

Objectives and strategies: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: High anadromous values in Artlish, Kaouk and Narrowgut systems

Objective: *General Fish Management*

Recreation Resources:

Description: values associated with coastline and lower Artlish and Kaouk Rivers (Artlish River Spruce Flats); access to Tahsish Inlet

Objective: *General Recreation Resource Management*

Strategies: maintain values associated with Artlish riparian system; consider establishment of recreation trail/site under FPC (mouth of Artlish and along riparian corridor)

Timber:

Description: moderate productivity, higher along rivers; over 2/3 in mature forests

Objective: *General Timber Resource Management*

Tourism Resources:

Description: high capability for coastal tourism; kayaking from bases in Fair Harbour

Objective: *General Tourism Management*

Visual Resources:

Description: sensitive coastline

Objective: *General Visual Resource Management*

Water:

Description: sensitive terrain; generally low equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: moderate to high values, ungulate winter ranges, marbled murrelets

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of good potential for coastal finfish and shellfish culture; some existing operations

Mineral Resources:

Description: Moderate metallic mineral potential; high industrial mineral potential; some mineral tenures.

RMZ-20: Nootka

Location: Nootka Island outside SMZ (SMZ 12) boundaries, as well as Bligh Island

Total Area: approximately 36,100 ha

Zone Category and Overall Management Direction: *General Management Zone*, with high priority for maintaining the significant visual, recreation and tourism resource values; integrated timber harvesting and second growth management practices; general biodiversity conservation; adaptive road engineering/deactivation efforts are indicated to maintain terrain and watershed integrity

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Nootka draft landscape unit, which also contains Special Management Zone 12

Objective: *General Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: anadromous values in Laurie Creek/Ewart Lake system, as well as other smaller creeks

Objective: *General Fish Management*

Recreation Resources:

Description: associated with coast, as well as Ewart and Crawfish Lakes

Objective: *General Recreation Resource Management* with emphasis on above areas

Timber:

Description: generally lower to moderate productivity, with higher productivity in lower elevations of Beano Creek area; over 2/3 of forest cover is mature

Objective: *General Timber Resource Management*

Tourism Resources:

Description: significant coastal tourism opportunities; nearby facilities at Yuquot, Nootka Cannery and Bligh Island

Objective: *General Recreation Resource Management*

Visual Resources:

Description: visually sensitive areas all along coastline

Objective: *General Visual Resource Management*

Water:

Description: unstable terrain throughout

Objective: *General Watershed Management*

Wildlife:

Description: overall moderate values, potential marbled murrelet habitat (higher values in SMZ12)

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of moderate potential for coastal finfish and limited areas of good to moderate potential for shellfish culture; some existing operations

Mineral Resources:

Description: Moderately high metallic and industrial mineral potential; some mineral tenures.

RMZ-22: Gold

Location: zone including Gold, Muchalat, lower Oktwanch and Heber drainages

Total Area: approximately 67,100 ha

Zone Category and Overall Management Direction: *General Management Zone*, with high fish, wildlife and biodiversity values, as well as significant timber values; landscape level development of riparian recovery plan for the Gold-Muchalat-Oktwanch-Nimpkish riparian corridor recommended

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Gold draft landscape unit, which also contains Gold-Muchalat protected area, and portions of Strathcona Park, as well as part of the Schoen-Strathcona SMZ; high diversity of ecosystems, including regionally significant portions of CWH xm2 in lower Gold and Oktwanch drainages; high old growth values

Objective: *Higher Biodiversity Conservation Management*

Strategies: use protected areas to meet old seral stage targets to the extent possible; focus of old seral retention outside of protected areas should be in SMZ portion, ungulate and marbled murrelet habitat, as well as CWHxm2 associated with riparian reserves (see fish objective)

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective and strategies: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high fish values in Gold and Muchalat systems

Objective: *General Fish Management*

Strategies: prepare long-term recovery plan of riparian reserve and management zone with old growth attributes in lower Gold/Muchalat Lake/Oktwanch system at landscape level planning process

Recreation Resources:

Description: significant values in Muchalat Lake and lower Gold River area, as well as alpine setting between upper Muchalat and upper Conuma drainages

Objective: *General Recreation Resource Management* with emphasis on above areas

Timber:

Description: areas of very high productivity distinctly confined to lower elevations along rivers; second growth forests in lower elevations, over 60% of mature timber remaining, most in higher elevations

Objective: *General Timber Resource Management* with opportunities for *Enhanced Silviculture*

Strategies: opportunities for *Enhanced Timber Harvesting* may be identified at landscape level planning

Tourism Resources:

Description: site specific opportunities in areas described under visual and recreation resources

Objective: **General Tourism Management**

Visual Resources:

Description: visually sensitive areas concentrated around Muchalat Lake and Village of Gold River, as well as along travel corridors

Objective: **General Visual Resource Management**

Water:

Description: sensitive terrain on steeper slopes; generally low equivalent clearcut area

Objective: **General Watershed Management**

Wildlife:

Description: high wildlife values, including ungulate-large carnivore populations; marbled murrelet detections in upper Gold River

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Mineral Resources:

Description: Moderately high metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-25: Escalante

Location: extending from Escalante Point and River along Zuciarte Channel to Mooyah River and Mount Rufus

Total Area: approximately 15,400 ha

Zone Category and Overall Management Direction: *General Management Zone*, with high coastal visual/recreation/tourism values; integration of wildlife values; objectives for biodiversity are to be integrated at the basic stewardship level in accordance with FPC requirements; limited opportunities for enhanced timber harvesting may be identified at landscape level planning

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Escalante draft landscape unit; CWH vm1 and vm2 are the dominant ecosystems

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective and strategies: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: anadromous values in lower reaches of streams

Objective: *General Fish Management*

Recreation Resources:

Description: coastal setting along Zuciarte Channel and King Passage

Objective: *General Recreation Resource Management*

Timber:

Description: moderate productivity; approximately 2/3 in mature forests

Objective: *General Timber Resource Management*

Strategies: limited opportunities for *Enhanced Timber Harvesting* exist and should be identified at landscape level of planning

Tourism Resources:

Description: site specific coastal opportunities

Objective: *General Tourism Management*

Visual Resources:

Description: sensitive viewsheds along coastline

Objective: *General Visual Resource Management* with emphasis along coast

Water:

Description: unstable terrain

Objective: *General Watershed Management* with emphasis on restoration of watershed integrity

Wildlife:

Description: intermediate wildlife values, marbled murrelets

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: some areas of moderate potential for coastal finfish and limited area of good potential for shellfish culture

Mineral Resources:

Description: Moderate to moderately-high metallic mineral potential; moderate industrial mineral potential; no mineral tenures.

RMZ-26: Tsitika

Location: Tsitika River watershed outside protected areas and SMZ 8 and 9

Total Area: approximately 27,200 ha

Zone Category and Overall Management Direction: *General Management Zone*, with maintenance of high wildlife, fish and biodiversity values, and integrated management for timber and other resources

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is part of the Tsitika draft landscape unit, which also encompasses the Tsitika protected area, as well as SMZ 8 and portions of SMZ 9; high biodiversity values associated with Tsitika riparian system and old forests; CWHvm1 and vm2 are underrepresented variants in this ecosection

Objective: *Higher Biodiversity Conservation Management*

Strategies: concentrate old seral forest in SMZ portions of the draft LU (see biodiversity objectives for SMZ 8 and 9), as well as where required within the zone for conservation of marbled murrelet and other wildlife habitat

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high anadromous values in the Tsitika system

Objective: *General Fish Management*

Recreation Resources:

Description: associated with Tsitika River

Objective: *General Recreation Resource Management*

Timber:

Description: highly productive along lower elevations; very high proportion of mature forests

Objective: *General Timber Resource Management*

Tourism Resources:

Description: backcountry opportunities concentrated in lower Tsitika and SMZ 8

Objective: *General Tourism Management*

Visual Resources:

Description: along highway corridor

Objective: *General Visual Resource Management* with emphasis along highway corridor

Water:

Description: sensitive terrain throughout; generally low equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: high values, ungulate winter range along Tsitika river; marbled murrelet and northern goshawk detections

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: Moderate metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-29: White

Location: comprises most of White River watershed; bounded by Schoen-Strathcona SMZ in upper watershed.

Total Area: approximately 27,700 ha

Zone Category and Overall Management Direction: *General Management Zone*, integration of high fish, wildlife and biodiversity values with significant timber values

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is part of the White draft landscape unit, which also encompasses portions of the Schoen-Strathcona SMZ; mainly CWHvm1 and vm2, which are moderately underrepresented; high wildlife values; high proportion of old forests

Objective: *Higher Biodiversity Conservation Management*

Strategies: concentrate old seral forest in SMZ portion, as well as where required for ungulate and other wildlife habitat

Cave/Karst:

Description: known karst occurrence

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high anadromous fish values in White system

Objective: *General Fish Management*

Recreation Resources:

Description: salmon viewing, and old growth values in upper White; karst

Objective: *General Recreation Resource Management*

Timber:

Description: moderate to high productivity in lower elevations; approximately two thirds in mature forest cover

Objective: *General Timber Resource Management*

Tourism Resources:

Description: backcountry activity values

Objectives and strategies: *General Tourism Management*

Visual Resources:

Description: generally not sensitive or significant

Objective: *General Visual Resource Management*

Water:

Description: some sensitive terrain, generally low equivalent clearcut area concern; lower reaches of Salmon River in an area of existing settlement (Sayward) where there is a known risk of flooding

Objective: *General Watershed Management*

Wildlife:

Description: high values, ungulate winter range

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: Moderate metallic and industrial mineral potential; some mineral tenures.

RMZ-31: Sayward

Location: area bounded by Johnstone Strait, Discovery Passage, E&N private land and Salmon watershed; includes Paterson Lake

Total Area: approximately 90,300 ha

Zone Category and Overall Management Direction: *General Management Zone*, with focus on integration of high second growth timber values with significant fish and wildlife values, as well as visual/recreation and tourism values; biodiversity management with focus on long term replacement of old seral forest attributes in CWHxm1 and xm2 through active silvicultural measures; specific opportunities for enhanced harvesting and second growth management with enhanced silviculture practices, including commercial thinning treatments which exist and should be identified at landscape level of planning

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Sayward draft landscape unit; CWHxm1/2 are dominant variants and regionally underrepresented, but less than 5% is in old seral forest condition

Objective: *General Biodiversity Conservation Management*

Strategies: retain existing old seral forest in xm1 and xm2, and replace old seral forest attributes in the long term (>150 years) through active application of silvicultural practices, incl. alternative silvicultural systems; old forest recruitment growth management areas should be well distributed in second growth, including early seral forest; mature forest attributes should be recovered in the mid-term (>50 years)

Cave/Karst:

Description: cave/karst in Paterson and Campbell Lake areas

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high fish values associated with lakes, as well as anadromous values in lower reaches of streams

Objective: *General Fish Management*

Recreation Resources:

Description: high values associated with lakes, particularly Sayward Canoe Route, as well as coastal shoreline along Johnstone Strait; subalpine setting in Prince of Wales Range

Objective: **General Recreation Resource Management**

Timber:

Description: generally high productivity, with pockets of lower productivity; almost entirely in second growth timber

Objective: **General Timber Resource Management**

Strategies: specific opportunities for **Enhanced Timber Harvesting** and second growth management with **Enhanced Silviculture** practices, incl. commercial thinning treatments which exist and should be identified at landscape level of planning; focus should be on application of partial cutting silviculture systems where practical and where indicated to integrate non-timber values

Tourism Resources:

Description: outdoor activity areas associated with highway corridor, lakes, shoreline, high levels of dispersed-type use

Objective: **General Tourism Management**

Visual Resources:

Description: extensive visually sensitive areas associated with lakeshores, highway, and marine corridors along Johnstone Strait and Discovery Passage

Objective: **General Visual Resource Management**

Strategies: fully explore and apply opportunities for partial cutting alternative harvesting/silvicultural systems

Water:

Description: many lakes; generally stable terrain and low equivalent clearcut area

Objective: **General Watershed Management**

Wildlife:

Description: high wildlife values, particularly ungulate winter range

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions**Aquaculture:**

Description: some areas of moderate potential for coastal shellfish culture

Mineral Resources:

Description: Moderate metallic mineral potential; moderately high industrial mineral potential; no mineral tenures.

RMZ-32: Quadra-Cortes

Location: Northern tip of Quadra Island (outside of SMZ 19), Cortes, Read and Maurelle islands

Total Area: approximately 19,200 ha

Zone Category and Overall Management Direction: *General Management Zone*, with significant recreation/scenery and tourism values and intermediate significance for biodiversity conservation; forest management practices should be adapted in design and scale to fit the nature, scale and sensitivities of the northern Gulf Island/ southern Johnstone Strait environment

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Quadra draft landscape unit, which also encompasses the Quadra SMZ, as well as the Cortes draft landscape unit; almost entirely CWHxm1 and xm2 which are regionally underrepresented; few remaining in old forests

Objective: *General Biodiversity Conservation Management*

Strategies: retain existing old seral forest in xm1 and xm2, and replace old seral forest attributes in the long term (>150 years) through active application of silvicultural practices, incl. alternative silvicultural systems; old growth management areas should be well distributed in second growth, including early seral forest; mature forest attributes should be recovered in the mid-term (>50 years)

Cave/Karst:

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: anadromous values

Objective: *General Fish Management*

Recreation Resources:

Description: values associated with land/marine interface

Objective: *General Recreation Resource Management*

Timber:

Description: lower to moderate productivity; almost entirely second growth timber

Objective: *General Timber Resource Management*

Strategies: forest management practices should be adapted to fit the nature, scale and sensitivities of the northern gulf island/ southern Johnstone Strait small island environment; application of the silvicultural system strategies listed under *Special Timber Resource Management* should be duly considered

Tourism Resources:

Description: high values, levels of use and opportunities associated with coast/marine

Objective: *General Tourism Management*

Visual Resources:

Description: highly visually sensitive coastline

Objective: *General Visual Resource Management* with high emphasis on coastline

Water:

Description: generally stable terrain, low equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: lower to intermediate values associated with wetlands and coast/marine (marbled murrelet, bald eagle, etc.)

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of good potential for coastal finfish and shellfish culture; many existing operations

Mineral Resources:

Description: High metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-33: E&N-North

Location: Northern portion of E&N belt within Campbell River Forest District (south to Fanny Bay); contains few, dispersed pockets of Crown provincial forest; the objectives/strategies apply to those Crown lands only

Total Area: approximately 1,500 ha

Zone Category and Overall Management Direction: *General Management Zone*, with second growth timber values and particular suitability for enhanced silviculture and growth and yield management; recreation/scenery and tourism opportunities associated with intensively managed, roaded resource lands; high fish and wildlife values; biodiversity conservation/restoration is recommended with an emphasis on retention, and where required, active restoration of mature and old seral forest attributes and age classes.

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is encompassed by the Quinsam, Simms, Oyster, Tsolum, Puntledge and Trent draft landscape units; CWH xm1 and xm2 ecosystems are underrepresented in protected areas, and old forests in these variants are rare

Objective: *Basic Biodiversity Conservation Management*

Strategies: generally maintain existing old seral forests; assess opportunities for practicality of landscape level biodiversity conservation (i.e. old growth management areas); if landscape level biodiversity conservation is found to be not practical, recruit old seral forest elements mostly through stand level practices which promote old seral forest attributes, including retention of scattered veteran trees, wildlife tree patches, diversity of tree species and ages, and partial cutting silvicultural systems.

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high anadromous fisheries values

Objective: *General Fish Management*

Recreation Resources:

Description: generally high use and opportunities

Objective: *General Recreation Resource Management*

Timber:

Description: moderate to high productivity; almost entirely in second growth timber

Objective: *General Timber Resource Management* and opportunity for *Enhanced Silviculture*

Tourism Resources:

Description: facilities along coast

Objective: *General Tourism Management*

Visual Resources:

Description: generally lower sensitivity

Objective: *General Visual Resource Management*

Water:

Description: varying terrain stability, varying equivalent clearcut area; existing settlement areas with known risks of flooding

Objective: *General Watershed Management*

Wildlife:

Description: generally intermediate values

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Agriculture:

Description: contains pockets of high capability non-ALR lands, and significant for agricultural water needs

Mineral Resources:

Description: moderate to moderately high metallic mineral potential; moderate industrial mineral potential; high coal potential. Mineral and coal tenures.

RMZ-34: E&N South

Location: Southern portion of E&N belt from Fanny Bay south; contains dispersed pockets of Crown provincial forest; the objectives/strategies apply to those Crown lands only

Total Area: approximately 48,600 ha

Zone Category and Overall Management Direction: *General Management Zone*, with significant timber values and particular suitability for enhanced silviculture and growth and yield management on larger blocks of Crown provincial forest land; due to its proximity to population centres, the area offers significant recreation/scenery and tourism opportunities associated with intensively managed, roaded resource lands; fish and wildlife values are significant, and biodiversity conservation/restoration is recommended with an emphasis on retention, and where required, active restoration of mature and old seral forest attributes and age classes.

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Cave/Karst:

Description: dispersed pockets of cave/karst potential, most notably in vicinity of Horne Lake

Objective: *General Cave/Karst Management*

Biodiversity:

Description: this zone is encompassed by the Rosewall, Little Qualicum, Somass, French Creek, Englishman, Nanoose, Millstone, Nanaimo, Chemainus, Cowichan, Koksilah, Sooke, Shawnigan, Victoria/Saanich and Metchosin draft landscape units; CDF mm in the Nanaimo Lowlands, as well as CWH xm1 and xm2 ecosystems are underrepresented in protected areas, and old forests in these variants are rare

Objective: *General Biodiversity Conservation Management* in the portions of the zone which are part of the Rosewall, Little Qualicum, Englishman, Nanaimo and Chemainus draft landscape units; *Basic Biodiversity Conservation Management* in the remainder of the zone

Strategies:

The following customized strategies are offered for consideration in the large blocks (generally >1000 ha) of Crown provincial forest:

- maintain existing old seral forest, as well as second growth with high portion of veteran trees; recruit old seral forest in the long term (>150 years) in accordance with old seral targets for intermediate BEO; focus of old seral recruitment should be in CDFmm, CWHxm1 and xm2, concentrated along riparian areas and, where possible, adjacent to existing old seral forest; recruit old seral habitat blocks with higher priority on forest interior conditions than on old seral connectivity; maintain harvest opportunity in second growth by identifying some old growth recruitment areas in early seral forest; recruit mature forest in the mid (>50 years) term, building gradually towards a mature target ranging from 8% in those portions of the zone with Basic Biodiversity Conservation, and 25% in portions with General Biodiversity Conservation; actively create mature and old seral forest attributes through suitable management strategies, such as variable density thinning and/or partial cut silvicultural systems

Strategies in the smaller blocks of provincial forest:

- generally maintain existing old seral forests and stand elements; assess opportunities for practicality of landscape level biodiversity conservation (i.e. old growth management areas) if landscape level biodiversity conservation is found to be not practical, recruit old seral forest elements mostly through stand level practices which promote old seral forest attributes, including retention of scattered veteran trees, wildlife tree patches, diversity of tree species and ages, and partial cutting silvicultural systems.

Community Water:

Description: several Community Watersheds

Objective: **Community Watershed Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Fish:

Description: intermediate to high fish values, particularly in Qualicum, Cameron, Englishman, Nanaimo and Cowichan systems

Objective: **General Fish Management**

Recreation Resources:

Description: significant values in Nanaimo River, Arrowsmith-Cameron, Horne Lake-Qualicum River areas, and in much of the southern portion of the zone due to proximity to urban centres

Objective: **General Recreation Resource Management**

Timber:

Description: high productivity, almost entirely in second growth timber, except for higher elevations;

Objective: **General Timber Resource Management** with opportunities for **Enhanced Silviculture**

Tourism Resources:

Description: numerous facilities along coast, and high potential in Cameron/Horne Lake-Alberni area, as well as in Cowichan Lake, Nanaimo Lakes and Ladysmith Harbour, and Sooke hinterland

Objective: **General Tourism Management** with emphasis in above areas

Visual Resources:

Description: associated with Mt. Benson, Mt. Arrowsmith, Cameron Lake and Mt. Schofield, as well as dispersed pockets associated with Cowichan and Shawnigan Lakes, and portions of Cowichan and Koksilah Rivers

Objective: **General Visual Resource Management**

Water:

Description: varying terrain stability, varying equivalent clearcut area; existing settlement areas with known risk of flooding

Objective: **General Watershed Management**

Wildlife:

Description: varying significance, generally moderate to high values in Cowichan, Koksilah; high values in Chemainus estuary, as well as in Qualicum, Cameron, China, Nanaimo systems

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Agriculture:

Description: contains pockets of high capability non-ALR lands; significant for agricultural water needs

Mineral Resources:

Description: low to moderately high potential for metallic minerals and coal; moderate industrial mineral potential; some mineral and coal tenures.

RMZ-35: Ash-Great Central-Sproat

Location: Upper Ash watershed, including Elsie, Ash and Dickson Lakes, as well as Great Central and Sproat Lake watersheds

Total Area: approximately 78,500 ha

Zone Category and Overall Management Direction: *General Management Zone*, with significant timber values and particular suitability for enhanced silviculture and growth and yield management; due to its proximity to population centres, the area offers significant recreation opportunities associated with intensively managed, roaded resource lands; wildlife, and particularly fish values are significant, and biodiversity conservation/restoration is recommended consistent with the intermediate level of significance with an emphasis on active restoration of mature and old seral attributes.

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Ash, Great Central and Sproat draft landscape units, which also encompass portions of Strathcona Park and Strathcona Taylor SMZ; CWH xm1 and xm2 extend over a large portion of the area, but are almost entirely in early and mid-seral forest

Objective: *General Biodiversity Conservation Management*

Strategies: actively recover mature and old seral forest attributes in the mid- to long term (50 to 150 years), with focus on areas in the CWHxm1/2 (capture areas of high fish, wildlife and recreation/scenery values as mature and old recruitment areas)

Cave/Karst:

Description: dispersed pockets of cave/karst south of Sproat Lake

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high fish values

Objective: *General Fish Management*

Recreation Resources:

Description: high recreation use and values throughout the area

Objective: *General Recreation Resource Management*

Timber:

Description: generally moderate to high productivity, most of the area in second growth timber, except in higher elevations south of Ash River, Mt. Bueby, Beaufort Range, and south shore portions of Great Central and Sproat Lakes

Objective: *General Timber Resource Management*, with particular opportunities for *Enhanced Silviculture*

Strategies: limited opportunities for *Enhanced Timber Harvesting* may be identified at the landscape planning level

Tourism Resources:

Description: high backcountry (roaded lands) and lake-based tourism capability throughout the area

Objectives and Strategies: *General Tourism Management*

Visual Resources:

Description: shorelines of Great Central and Sproat Lakes

Objective: *General Visual Resource Management* with emphasis along Great Central and Sproat Lakes

Community Water:

Description: the drainage area above Sproat River is designated community watershed

Objective: ***Community Watershed Management***

Water:

Description: generally low equivalent clearcut area; Sproat Lake is a large non-designated community watershed; the Somass River is an area of existing settlement (Port Alberni) where there is a known risk of flooding

Objective: ***General Watershed Management***

Wildlife:

Description: intermediate values, particularly ungulate winter range dispersed throughout; high habitat capability; high detections of marbled murrelets on south shore of Great Central Lake

Objective: ***General Wildlife Management***

Non-Forest Resource Descriptions

Agriculture:

Description: contains pockets of high capability non-ALR lands, and significant for agricultural water needs

Aquaculture:

Description: good potential for freshwater finfish and shellfish culture; one existing operation

Mineral Resources:

Description: moderate metallic and industrial mineral potential; some mineral tenures.

RMZ-37: Henderson

Location: Henderson Lake watershed

Total Area: approximately 23,100 ha

Zone Category and Overall Management Direction: *General Management Zone*, with high proportion of mature timber, to be developed with due concern for fish, hydrological and watershed integrity

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Henderson draft landscape unit, which also encompasses portions of the Barkley Sound SMZ; CWH vm1 is the dominant ecosystem type; basic representation values

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Description: known cultural heritage/ spiritual values

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: intermediate fish values, anadromous in lower stream reaches; significant sockeye run

Objective: *General Fish Management*

Recreation Resources:

Description: basic values associated with roaded access to managed forest land

Objective: *General Recreation Resource Management*

Timber:

Description: lower to moderate productivity, high proportion of mature timber

Objective: *General Timber Resource Management*

Strategies: consider identifying opportunities for aggregating cutblocks or enlarged openings (larger than 40 ha) to reduce road density and road-related hydrological hazards

Tourism Resources:

Description: capability for backcountry and coastal tourism

Objective: *General Tourism Management*

Visual Resources:

Description: along inlet

Objective: *General Visual Resource Management* with emphasis along inlet

Water:

Description: higher equivalent clearcut area in Cass Creek, Handy Creek drainages

Objective: *General Watershed Management*

Wildlife:

Description: intermediate values, dispersed pockets of ungulate winter range

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish or shellfish culture

Mineral Resources:

Description: moderate to moderately high potential for metallic and industrial minerals; some mineral tenures.

RMZ-39: Toquart

Location: Toquart River and Lakes drainage

Total Area: approximately 14,800 ha

Zone Category and Overall Management Direction: *General Management Zone*, with significant timber, as well as recreational and visual values; biodiversity conservation to the intermediate level of significance (retention targets: maximize overlap with areas of recreational and fish/wildlife values)

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Toquart draft landscape unit, which also encompasses portions of the Barkley Sound SMZ; high proportion of old forests; potential for connectivity function

Objective: *General Biodiversity Conservation Management*

Strategies: capture old seral forest in non-contributing areas, as well as areas of recreational and fish/wildlife values

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Community Water:

Description: Mack Creek is a designated community watershed (Toquaht Indian Band)

Objective: *Community Watershed Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high anadromous/resident values in Toquart system

Objective: *General Fish Management*

Recreation Resources:

Description: significant values and use associated with lakes, river, backcountry

Objective: *General Recreation Resource Management*

Timber:

Description: lower to moderate productivity, high proportion of mature timber

Objective: *General Timber Resource Management*

Strategies: limited opportunities for *Enhanced Timber Harvesting* may be identified at the landscape level of planning

Tourism Resources:

Description: key access to coastal areas; coastal capability along inlet, and backcountry values in upper Toquart drainage

Objective: *General Tourism Management*

Visual Resources:

Description: associated with lakes and Mackenzie Range

Objective: *General Visual Resource Management*

Water:

Description: low equivalent clearcut area

Objective: *General Watershed Management*

Wildlife:

Description: intermediate values, ungulate winter range, coastal/marine

Objective: *General Wildlife Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish or good potential for shellfish culture

Mineral Resources:

Description: moderately high potential for metallic and industrial minerals; many mineral tenures.

RMZ-41: Cameron-China

Location: Cameron and China Creek; both are community watersheds

Total Area: approximately 20,400 ha

Zone Category and Overall Management Direction: *General Management Zone*, with particular emphasis on maintaining watershed integrity, as well fish, wildlife and recreational values

Forest Objectives and Strategies

Access:

Objective: **General Access Management**

Biodiversity:

Description: this zone is part of the Cameron and China draft landscape units; CWHxm2 is the largest ecosystem type

Objective: **General Biodiversity Conservation Management**

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Fish:

Description: anadromous values

Objective: **General Fish Management**

Recreation Resources:

Description: lake-based values, vicinity to Port Alberni

Objective: **General Recreation Resource Management**

Timber:

Description: highly productive, with majority in second growth timber, and blocks of mature remaining in higher elevations and at back end of drainages

Objective: **General Timber Resource Management**

Tourism Resources:

Description: backcountry (roaded lands) capability and use

Objectives: **General Tourism Management**

Visual Resources:

Description: associated with Cameron Lake

Objective: **General Visual Resource Management** with emphasis around Cameron Lake

Community Water:

Description: entire zone is designated as community watershed

Objective: **Community Watershed Management**

Wildlife:

Description: intermediate values - dispersed pockets of ungulate winter range; Vancouver Island Marmot habitat; northern goshawk

Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Agriculture:

Description: contains pockets of high capability non-ALR lands

Aquaculture:

Description: very limited potential for coastal finfish or shellfish culture

Mineral Resources:

Description: low to moderately high metallic mineral potential; moderately high industrial mineral potential; some tenures in the northeastern part of the area.

RMZ-45: Nitinat

Location: Nitinat watershed including Nitinat Lake, bounded by E&N and TFL 44 boundaries

Total Area: approximately 43,700 ha

Zone Category and Overall Management Direction: *General Management Zone*, with particular opportunity and suitability for enhanced silviculture and increased growth and yield; wildlife values require heightened management attention; significant recreation, tourism and scenic values, as well as known cultural heritage values.

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Nitinat draft landscape unit; high ecosystem diversity

Objective: *General Biodiversity Conservation Management*

Strategies: old seral retention areas, if required within the contributing portion of the zone, should try and capture old seral forest with important wildlife habitat attributes (see under wildlife)

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Description: known spiritual values in Mount Rosander area

Objective: *General Cultural Heritage Management*

Fish:

Description: high values associated with Nitinat system; resident/lake values

Objective: *General Fish Management*

Recreation Resources:

Description: associated with Francis Lake, Nitinat and Doobah/Sprise Lakes, and Nitinat-Cowichan corridor

Objective: *General Recreation Resource Management* with emphasis on above areas

Timber:

Description: highly productive, almost entirely in second growth timber, except for high elevations

Objective: *General Timber Resource Management*, with significant opportunity for *Enhanced Silviculture* in upper watershed

Strategies: opportunities for *Enhanced Timber Harvesting* in second growth should be identified through landscape level planning

Tourism Resources:

Description: significant existing use, capability for backcountry and facility-based tourism

Objective: *General Tourism Management*

Visual Resources:

Description: associated with Francis Lake and Flora Lake, along Nitinat Lake, Mt. Rosander and Carmanah Mountain

Objective: *General Visual Resource Management* with emphasis on above areas

Water:

Description: generally low equivalent clearcut area

Objective: **General Watershed Management**

Wildlife:

Description: intermediate; ungulate winter range, northern goshawk detections; high wildlife capability

Objective: **General Wildlife Management**

Strategies: manage second growth to create old growth attributes, where practical.

Non-Forest Resource Descriptions

Mineral Resources:

Description: moderate to moderately high metallic mineral potential; moderately high industrial mineral potential; some mineral tenures.

RMZ-46: Gordon-Caycuse-San Juan

Location: Gordon, Caycuse and San Juan River watersheds, including portions of Walbran outside of park and SMZ

Total Area: approximately 78,400 ha

Zone Category and Overall Management Direction: *General Management Zone*, significant timber values combined with high fish, wildlife and biodiversity values, as well as recreation values

Forest Objectives and Strategies

Access:

Objective: *General Access Management*

Biodiversity:

Description: this zone is comprised by the Caycuse, Walbran, Gordon and San Juan draft landscape units; moderate representation values, but high ecosystem complexity and capability

Objective: *General Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Community Water:

Description: Malachan Creek (Dididaht Indian Band) is a designated community watershed

Objective: *Community Watershed Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Fish:

Description: high fish values, anadromous in Gordon, lower Caycuse, San Juan and Harris systems

Objective: *General Fish Management*

Strategies: restoration of upslope areas (gullies, roads, slides, and streams), as well as riparian management areas is indicated

Recreation Resources:

Description: associated with Gordon and lower Caycuse River, as well as San Juan River and trail; high use in proximity to urban areas

Objective: *General Recreation Resource Management*

Timber:

Description: highly productive, with majority of forest cover in second growth timber

Objective: *General Timber Resource Management*, with particular opportunity for *Enhanced Silviculture*

Strategies: opportunities for *Enhanced Timber Harvesting* in second growth should be identified through landscape level planning

Tourism Resources:

Description: important access to West Coast, coastal, river and backcountry values

Objective: *General Tourism Management*

Visual Resources:

Description: around McClure Lake, Fairy Lake; otherwise no regionally significant values

Objective: *General Visual Resource Management*

Water:

Description: some drainages exhibit higher equivalent clearcut area; lower reaches of San Juan River is an area of existing settlement (Port Renfrew) where there is a known risk of flooding

Objective: *General Watershed Management*

Wildlife:

Description: intermediate (Gordon) to high values, ungulate winter range throughout; northern goshawk and marbled murrelet detections; high habitat capability
Objective: **General Wildlife Management**

Non-Forest Resource Descriptions

Mineral Resources:

Description: moderate to high metallic mineral potential; moderate industrial mineral potential; many mineral tenures.

4.3.3 Enhanced Forestry Zone RMZ

4.3.3.1 Intent

The intent of the Enhanced Forestry Zone (EFZ) is to identify forested lands which are suitable for increased timber production. This will be achieved through both enhanced timber harvesting, as well as the promotion of enhanced silviculture practices, such as intensive reforestation, spacing, pruning, thinning and innovative harvest practices. The enhanced forest management objectives in the EFZ are intended to result in timber supply benefits which - at a minimum, and across entire TSAs and TFLs - would offset the additional timber supply impacts associated with management in the Special Management Zone.

EFZ units have been identified based on an assessment of the inter-relationship and significance of timber and non-timber resource values, and based on regional scale resource information. They are located in areas with particular suitability and capability for enhanced timber production, which also avoid areas of particularly high non-timber values, such as community watersheds or high biodiversity emphasis areas.

All legislated environmental stewardship provisions under the FPC and other legislation apply in EFZ units. Enhancement of the timber resource is not intended to be at the expense of significant non-timber resource values.

The 22 EFZ areas identified on **Map 8** cover 808,222 ha (24% of the Island). However the amount of land that will actually be suitable for enhanced timber harvesting after the completion of more detailed operational plans under the FPC will be less, depending on operability and non-timber resource constraints.

4.3.3.2 Enhanced Forestry Regimes

Enhanced Timber Harvesting objectives vary from the general direction which is provided by the Forest Practices Code and will be established as higher level plan objectives to enable more flexibility for timing and layout of harvest operations. In contrast, the Enhanced Silviculture objective is provided to encourage enhanced silvicultural practices, but it will not be legally binding, recognizing that many factors which are external to land use planning influence the practicality of enhanced silviculture investments.

All legislated environmental stewardship provisions under the FPC and other legislation as reflected in the general regimes apply in EFZ areas (for general management regimes, refer to chapter 4.3.2.2).

Refer to **Table 7** for an indication of where the specific regimes apply. For additional management considerations related to a specific EFZ unit, refer to the strategies identified in the individual area descriptions.

Table 7: Management Regimes for Individual EFZ Units
Bold type denotes primary objectives

RMZ	Tim	Wat	Fish	WL	Bio	Vis	Rec	Tou	C/K	Cult.He	Acc
4	San Josef-Koprino	E	G	G	G	G	G	G	G	G	G
5	Holberg	E	CW/G	G	G	B	G	G	G	G	G
6	Keoch-Cluxewe	ES (ETH)		G	G	G	B	G	G	G	G
8	Mahatta-Neuroutsos	E	G	G	G	B	G	G	G	G	G
10	Nimpkish	E	G	G	G	B	G	G	G	G	G
11	Bonanza	ES (ETH)	G	G	G	G	G	G	G	G	G
15	Tahsish	E	G	G	G	G	G	G	G	G	G
18	Eliza	E	CW/G	G	G	B	G	G		G	G
19	Tahsis	E	CW/G	G	G	B	G	G	G	G	G
21	Tlupana	E	G	G	G	G	G	G	G	G	G
23	Kleptee	E	G	G	G	B	G	G		G	G
24	Burman	ES (ETH)	G	G	G	B	G	G	G	G	G
27	Naka	ES (ETH)	G	G	G	B	G	G		G	G
28	Adam and Eve	E	G	G	G	B	G	G	G	G	G
30	Salmon	E	CW/G	G	G	B	G	G	G	G	G
36	Cous	ES (ETH)	G	G	G	B	G	G	G	G	G
38	Effingham	ETH (ES)	G	G	G	G	G	G	G	G	G
40	Maggie	ES (ETH)	CW/G	G	G	B	G	G	G	G	G
42	Corriqan	ES (ETH)	CW/G	G	G	G	G	G	G	G	G
43	Sarita	ES (ETH)	CW/G	G	G	B	G	G	G	G	G
44	Klanawa	E	G	G	G	G	G	G		G	G
47	Loss-Jordan	E	G	G	G	B	G	G		G	G

Note: Cave/Karst management is limited to those RMZs with known features or high probability of such occurrence

Tim	Timber	Bio	Biodiversity	C/K	Cave Karst
Wat	Water	Vis	Visual	Cult.Her	Cultural Heritage
Fish	Fish	Rec	Recreation	Acc	Access
WL	Wildlife	Tou	Tourism		

Regimes: S – Special; G – General; B – Basic; H – Higher; E – Enhanced; ES – Enhanced Silviculture; ETH – Enhanced Timber Harvesting; CW – Community Water

Enhanced Timber Harvesting Regime

Overall Goal/Intent: To increase short-term opportunity and flexibility for timber harvesting while sustaining long-term productivity and timber supply, and providing for forest and environmental stewardship in accordance with the legislated requirements of the Forest Practices Code.

Objectives	Strategies
<p>1. To increase the availability of timber,</p> <p>a) cutblock size may be larger than 40 ha pursuant to section 11(2)(a) of the Operational Planning Regulation⁶³; and</p> <p>b) pursuant to section 68(4) of the Operational Planning Regulation, a cutblock is greened-up if it is adequately stocked and the leading species in the cutblock has attained a top height of at least 1 m;</p> <p>unless such cutblock would significantly impact specific wildlife, biodiversity, scenic or recreation values.</p> <p>2. Minimize and/or mitigate adverse hydrological impacts which may result from the practices referred to in objective (1), in watersheds with significant watershed sensitivity and significant fisheries values, as determined by the district manager and designated environment official.</p> <p>3. When proposing the species composition for the purposes of OPR section 39 (3)(o), a person may, pursuant to section 41 OPR, select a single species that is ecologically suited to the area, even if a mix of species was present on the area before the timber was harvested.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • cutblock size should be determined primarily based on economic considerations; • apply silvicultural systems, including innovative systems, which are conducive to achieving the overall goal/intent and timber volume/product objectives of the zone. • pursuant to section 14(1)(b) of the Operational Planning Regulation, a watershed assessment must be conducted in watersheds with significant fisheries values and significant watershed sensitivity, as determined by the district manager and designated environment official. • for the purposes of Enhanced Timber Harvesting objective (2), watersheds with significant sensitivity usually include watersheds where: <ul style="list-style-type: none"> - the total area harvested during the past 20 years, including the yet to be harvested area of a proposed forest development plan, exceeds 25% of the total watershed area, and - a significant number of landslides that entered the stream channel are known to have occurred; or - stream channel stability problems are evident; or - over 25% of the riparian forest along either bank of the main stream channels has been logged over the past 40 years; or - landslide problems are anticipated due to recent harvesting on unstable terrain. • recommendations for forest development plans in enhanced forestry zones prepared by a hydrologist or other qualified registered professional as part of a coastal watershed assessment, should take into consideration the overall intent of the zone to increase short-term opportunity and flexibility for timber harvesting; • in accordance with code requirements, apply watershed restoration measures such as road deactivation, revegetation of stream banks, etc., to minimize or mitigate hydrological impacts.

⁶³ B.C. Reg. 107/98

O.C. 426/98 -

Effective: June 15, 1998

<p>4. Objectives 1 through 3 apply in Enhanced Forestry Zones, as shown on Map 8, save and except in community watersheds as defined in section 41(8) of the <i>Forest Practices Code of British Columbia Act</i>.</p>	<p>Refer also to the strategies offered in the individual zone descriptions.</p>
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Enhanced Silviculture Management Regime

Overall Goal/Intent: To promote timber production to achieve timber volume and /or product objectives through the application of enhanced silvicultural practices.

Objectives	Strategies
<p>To provide for higher timber volumes and/or particular timber products by applying, where practical, enhanced silvicultural practices, including single species management.</p>	<p>The following strategies are offered for consideration, where suitable:</p> <ul style="list-style-type: none"> • minimize regeneration delay ; • plant larger stock; • fertilize at time of planting to shorten green-up time; • effectively control competing vegetation to maximize diameter and height growth of crop trees; • plant genetically improved stock of ecologically suited species, including non-native species; • ensure full stocking/site occupancy; • manage stand density and apply stand tending practices including, but not limited to: juvenile spacing, pruning, commercial thinning; • fertilize to increase yields; • apply rotation periods suitable to optimize timber volume and/or product objectives; • maintain the health and long-term productivity of trees and forests. <p>Refer also to the strategies offered in the individual zone descriptions.</p>

4.3.3.3 Individual Enhanced Forestry Zone Units

This section presents a description of resource values, as well as management objectives and strategies for the 22 individual Enhanced Forestry Zone units.

The objectives and strategies assigned to each resource value have been sorted into primary and secondary objectives in order to provide a better sense of overall management emphasis and intent, and to assist resource managers in their decision making. Fish and community watershed objectives, due to their particular importance on the coast, remain listed under primary objectives. In addition, watershed objectives form an integral part of the enhanced timber harvesting regime, which is primary in the Enhanced Forestry Zone.

The objectives and strategies assigned to each resource value in each unit are presented in abbreviated form, i.e. as the pertinent regime titles (e.g. enhanced timber harvesting), without presenting the detailed wording of each objective and strategy. For complete wording of the enhanced regimes, please refer to the previous section. For complete wording of the general management regimes, please refer to section 4.3.2. Where applicable, and based on available regional scale information, additional management strategies are provided for particular resource values, to clarify management advice in a given unit.

Total area figures given for the units are based on regional scale data, and may include parcels of private land. The objectives and strategies presented in this report, however, apply only to Crown land and private forest land within tree farm licence areas.

RMZ-4: San Josef-Koprino

Location: zone bounded by Cape Scott Park and SMZ 2 to the west, extending south-east, bounded by Holberg Inlet and Quatsino Sound; includes Ahwhichaolto Peninsula

Total Area: approximately 56,000 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced timber harvesting and production, while maintaining fish values and watershed integrity

Primary Forest Objectives

Timber:

Description: generally highly productive ground, with over 50% of forest cover over 120 years old

Objective: *Enhanced Timber Harvesting and Enhanced Silviculture*

Fish:

Description: fisheries values generally lower, intermediate for San Josef River

Objective: *General Fish Management*

Biodiversity:

Description: this zone is part of the San Josef draft landscape unit, which also comprises Cape Scott park and SMZs 2 and 4; CWHvh1 and CWHvm1 are the dominant BEC variants in this zone; CWHvh1 is well represented in Cape Scott park; CWHvm1 is underrepresented in this ecosection (Nahwitti Lowlands), but well represented in the Windward Mountains ecosection; additionally, riparian reserves and management zones, as well as SMZs capture CWHvm1 forests;

Objective: *General Biodiversity Conservation Management*

Strategies: emphasis should be on maintaining old seral forests mainly in riparian reserves and other excluded areas within this zone, as well as in the SMZ portions of the two draft landscape units.

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: areas within this zone have experienced extensive timber development and may reach critical equivalent clearcut area levels; areas of sensitive slopes and terrain occur in this zone.

Objective: *General Watershed Management*

Strategies: emphasis on monitoring hydrological peak flow indicators.

Visual Resources:

Description: visually sensitive areas of local significance identified in Coal Harbour area, Quatsino and Jules Bay and along access route to Cape Scott park

Objective: *General Visual Resource Management*

Recreation Resources:

Description: River based recreation, particularly angler and camping/canoeing opportunities in lower San Josef.

Objective: *General Recreation Resource Management*

Tourism Resources

Description: some coastal tourism capability along Holberg Inlet; facilities in Quatsino

Objective: *General Tourism Management*

Wildlife:

Description: few dispersed pockets of ungulate winter range, mainly in lower San Joseph River area; inventory lacking

Objective: **General Wildlife Management**

Strategies: maintain black bear habitat through stand level forest management practices (e.g. placement of wildlife tree patches)

Cave/Karst:

Description: karst terrain and features occur in various locations

Objective: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate to good potential for coastal finfish and shellfish culture

Mineral Resources:

Description: High metallic mineral potential, moderate industrial mineral potential; many mineral tenures.

RMZ-5: Holberg

Location: zone extending along northeastern shore of Holberg Inlet to Port Hardy

Total Area: approximately 40,500 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced timber harvesting and production, while maintaining fish values and watershed integrity

Primary Forest Objectives

Timber:

Description: generally highly productive ground, with approximately 1/3 of forest cover over 120 years old

Objective: *Enhanced Timber Harvesting and Enhanced Silviculture*

Fish:

Description: fisheries values generally lower

Objective: *General Fish Management*

Community Water:

Description: Calbick Creek drainage area is a designated community watershed

Objective: *Community Watershed Management* in community watershed

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: areas within this zone have experienced extensive timber development and may reach critical equivalent clearcut area levels; areas of sensitive slopes and terrain occur in this zone; Quatse Lake is important for local water supply and proposed for community watershed designation

Objective: *General Watershed Management*

Strategies: emphasis should be on monitoring hydrological indicators

Visual Resources:

Description: visually sensitive areas of local significance identified along access route to Cape Scott Park, and along Holberg Inlet

Objective: *General Visual Resource Management*

Recreation Resources:

Description: very localized opportunities

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: some coastal tourism capability along Holberg Inlet; heritage tourism values in Coal Harbour

Objective: *General Tourism Management*

Wildlife:

Description: lower wildlife values

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Holberg draft landscape unit; CWHvm1 is the dominant BEC variant in this zone

Objective: *Basic Biodiversity Conservation Management*

Strategies: emphasis should be on maintaining old seral forests in riparian reserves and other non-contributing areas.

Cave/Karst:

Description: karst terrain and features occur in various locations

Objective: ***General Cave/Karst Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Non-Forest Resource Descriptions :

Aquaculture:

Description: moderate to good potential for coastal finfish and shellfish culture

Mineral Resources:

Description: High metallic mineral potential, moderate industrial mineral potential; many mineral tenures.

RMZ-6: Keogh-Cluxewe

Location: area of flat to gently rolling terrain, extending from Port Hardy District Municipality along Keogh River system to Cluxewe watershed and Port McNeill

Total Area: approximately 45,800 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced silviculture, and with limited opportunity for enhanced timber harvesting; integration of visual values along coastline and highway corridor, as well as recreational opportunities along Keogh River

Primary Forest Objectives

Timber:

Description: high productivity, with less than 1/3 of forests remaining in mature age classes

Objective: emphasis on *Enhanced Silviculture*, with limited opportunity for *Enhanced Timber Harvesting* in existing old forests

Fish:

Description: high anadromous fish values associated with Keogh and Cluxewe River

Objective: *General Fish Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: generally stable terrain; equivalent clearcut area levels do not appear critical at this point

Objective: *General Watershed Management*

Visual Resources

Description: visually sensitive areas along coastline, as well as highway corridor

Objective: *General Visual Resource Management* with emphasis on above areas

Recreation Resources:

Description: locally and regionally significant recreational values associated with Keogh River and Keogh Lake

Objective: *General Recreation Resource Management* with emphasis on above areas

Tourism Resources:

Description: coastal and facility-oriented tourism opportunities

Objective: *General Tourism Management*

Strategies: maintain visual resources along shoreline (see under visual resources)

Wildlife:

Description: generally lower wildlife values; elk herd in the Waukwaas

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Keogh draft landscape unit; CWHvm1 is the dominant variant

Objective: *Basic Biodiversity Conservation Management*

Strategies: incorporate old seral requirement with riparian reserves and other non-contributing areas

Cave/Karst:

Description: karst terrain and features occur in various locations

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: some moderate potential for coastal finfish culture, limited moderate shellfish culture potential

Mineral Resources:

Description: Moderate to high metallic and industrial mineral potential; many mineral tenures.

RMZ-8: Mahatta-Neuroutsos

Location: bounded by Quatsino Sound and Brooks Bay SMZ to the north and west, extending east surrounding Neuroutsos Inlet; in Windward Mountain ecosection.

Total Area: approximately 64,800 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced timber harvesting and silviculture; wildlife values in Mahatta system (esp. in Mahatta draft landscape unit) and marbled murrelet values in noted drainages require specific integration through maintenance of old seral forest; objectives for other resources are to be integrated at the basic stewardship level in accordance with the Code requirements

Primary Forest Objectives

Timber:

Description: highly productive for timber production; approximately 50% of mature forest remaining

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Wildlife:

Description: high marbled murrelet detections in Teeta, Cayuse, and Cayeghle; moderate (Mahatta draft LU) to lower ungulate wildlife values

Objective: *General Wildlife Management*

Strategies: emphasis should be on retaining old seral forest in accordance with biodiversity objectives (see below) for maintenance of marbled murrelet habitat in above noted drainages; manage and conserve known ungulate winter ranges

Fish:

Description: moderate to high fish values, particularly in Mahatta River, Cayuse, Colonial and Cayeghle Creeks

Objective: *General Fish Management* with emphasis on above noted drainages

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: areas with unstable terrain, as well as drainages with significant amount of early seral stage forests occur in this zone

Objective: *General Watershed Management*

Strategies: hydrological monitoring indicated

Visual Resources:

Description: few areas, mainly along Quatsino Inlet and across from Port Alice are classified as visually sensitive (local significance)

Objective: *General Visual Resource Management* with emphasis on above areas

Recreation Resources:

Description: steelhead fishery in lower Mahatta River (steelhead fishery), and land/water interface and anchorages in Drake Island and Kultus Cove areas are of regional significance

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: mainly associated with coastline along Quatsino and Neuroutsos Inlets; lodge and resort capability in Teeta Creek area

Objective: *General Tourism Management*

Biodiversity:

Description: this zone is comprised by the Mahatta and Neuroutsos draft landscape units; all subzones/variants are well represented in PAs

Objective: ***Basic Biodiversity Conservation Management***

Strategies: consider retaining more than one third of the old seral target if necessary to accommodate marbled murrelet habitat needs (refer to wildlife strategies)

Cave/Karst:

Description: occurrence of cave/karst terrain and features along Neuroutsos Inlet

Objective: ***General Cave/Karst Management***

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Non-Forest Resource Descriptions**Aquaculture:**

Description: considerable good potential for coastal finfish and shellfish culture

Mineral Resources:

Description: Moderate to high metallic mineral potential; low industrial mineral potential; some mineral tenures.

RMZ-10: Nimpkish

Location: area extending from Port McNeill and lower Nimpkish, along Nimpkish Lake eastward into middle reaches of Nimpkish, up to area just west of Woss (SMZ 6 and 9 boundaries)

Total Area: approximately 61,900 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced timber harvesting and silviculture; significant fish, wildlife and biodiversity (CWHxm2) values require active integration (suggested long-term riparian recovery plan for active floodplain area to be developed at landscape level of planning); adaptive road engineering and harvesting methods indicated in sensitive terrain west of Nimpkish Lake

Primary Forest Objectives

Timber:

Description: very productive ground, extensive area of immature second growth forests in lower elevations; approximately 40% of mature forest cover remaining

Objective: *Enhanced Silviculture*, as well as *Enhanced Timber Harvesting*

Fish:

Description: moderate to high fish values, particularly in middle Nimpkish, Kilpala River and Anutz Lakes

Objective: *General Fish Management*

Strategies: develop, at landscape level of planning, a long-term recovery plan for riparian management area, with provisions for maintenance/recovery of old growth attributes along active floodplain of Nimpkish River (this will capture additional CWHxm2 representation - see biodiversity strategies)

Biodiversity:

Description: this zone is comprised by the Lower Nimpkish draft landscape unit; the CWHxm2 variant is regionally underrepresented, and comprises substantial areas in this zone; currently, less than 20% of CWHxm2 forests are in old seral condition within the zone

Objective: *Basic Biodiversity Conservation Management*

Strategies: riparian old growth recovery zone (see fish objective); old growth forest located in riparian management area and elsewhere in CWHxm2 should be retained in accordance with riparian requirements and full old seral target; active silvicultural measures should be applied to achieve old seral attributes and conditions in riparian management area; refer also to SMZ 10

Wildlife:

Description: moderate wildlife values (ungulate winter range) in middle Nimpkish area and in vicinity of Nimpkish Lake and Tsiko Lake (northern goshawk); productive black bear habitat

Objective: *General Wildlife Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: sensitive terrain in Kilpala/Karmuzen Range

Objective: *General Watershed Management*

Visual Resources:

Description: visual values associated with highway corridor and west shore of Nimpkish Lake

Objective: *General Visual Resource Management* with emphasis on above areas

Recreation Resources:

Description: recreation values associated with Nimpkish Lake and River; also cave/karst values

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: capability for backcountry and facility-oriented tourism in area between Kilpala River and Nimpkish Lake and areas adjacent to Nimpkish Lake Park.

Objective: **General Tourism Management**

Strategies: maintain tourism capability through recreation and visual management

Cave/Karst :

Description extensive occurrence of cave/karst terrain and features, including Glory'ole planning area

Objective: **General Cave/Karst Management**

Strategies: refer to Glory'ole plan recommendations

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish and shellfish culture

Mineral Resources:

Description: Moderate to high metallic mineral potential; high industrial mineral potential; some mineral tenures.

RMZ-11: Bonanza

Location: extending from Telegraph Cove along Bonanza Lake to the headwaters of Bonanza River and bounded by the Tsitika-Woss SMZ to the southeast; within the Northern Island Mountains Ecosection

Total Area: approximately 41,900 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, suited for integration and achievement of enhanced timber harvesting and silviculture, as well as conservation of high fish values, and general old growth biodiversity conservation/recovery with emphasis on marbled murrelet and ungulate habitat; integration of visual values and local recreation use in areas identified

Primary Forest Objectives

Timber:

Description: highly productive, lower elevations in second growth, less than 50% of forest cover is in old forest (concentrated in higher elevations); the remainder is second growth up to 60 years old

Objective: *Enhanced Silviculture*, as well as very limited opportunity for *Enhanced Timber Harvesting*

Wildlife:

Description: intermediate wildlife values; dispersed pockets of ungulate winter range throughout; high wildlife capability; marbled murrelet detections in Kokish River drainage

Objective: *General Wildlife Management*

Fish:

Description: high anadromous values in the Kokish/ Bonanza river systems

Objective: *General Fish Management*

Biodiversity:

Description: this zone is comprised by the Bonanza draft landscape unit, which also encompasses the Johnstone Strait SMZ (SMZ 7); CWHvm1 and vm2 are dominant variants; extent of vm1 old seral forests is close to recommended target as per Biodiversity Guidebook

Objective: *General Biodiversity Conservation Management*

Strategies: subject to the Special Timber Resource Management objective for SMZ 7 which requires that OGMA's be concentrated in the SMZ portion of the draft LU, maintain old seral forest in the zone with particular emphasis on riparian, marbled murrelet and ungulate habitat; consider old seral linkages where suitable and possible without exceeding old seral target; consider supplementary second growth connectors; if necessary to avoid severe social and economic consequences, consider harvesting of additional vm1 old forest in the zone below the old seral target (down to no less than two thirds of target) subject to identification of ecologically suitable old seral recruitment areas in vm1 second growth

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: sensitive terrain in higher elevations

Objective: *General Watershed Management*

Visual Resources:

Description: very limited: to coastline (which is mostly in SMZ), around Bonanza Lake and along highway corridor

Objective: *General Visual Resource Management*

Recreation Resources:

Description: local use associated with Bonanza Lake, and along coastline

Objective: **General Recreation Resource Management**

Tourism Resources:

Description: high marine and heritage tourism values at Beaver/Telegraph Cove; backcountry values associated with Bonanza Lake, coastal values are mostly captured in SMZ 7

Objective: **General Tourism Management**

Cave/Karst:

Description: extensive occurrence of cave/karst terrain and features along Bonanza River and in Tsulton watershed, including Glory'ole cave/karst planning area

Objective: **General Cave/Karst Management**

Strategies: refer to Glory'ole plan recommendations

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: limited potential for coastal finfish and shellfish culture; some existing marine and land based facilities

Mineral Resources:

Description: Moderate metallic mineral potential; high industrial mineral potential; some mineral tenures.

RMZ-15: Tahsish

Location: Tahsish River drainage

Total Area: approximately 17,200 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with opportunities for enhanced timber harvesting and silviculture, while maintaining fish and key wildlife habitat, as well as watershed integrity; biodiversity management at the general level; particular attention should be paid to cave/karst features and terrain which are extensive in this zone; objectives for other resources are to be integrated at the basic stewardship level in accordance with Code requirements

Primary Forest Objectives

Timber:

Description: moderate to high productivity; extensive second growth in lower elevations; well over 50% of forest cover remaining in mature

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: moderate fisheries values in the Tahsish

Objective: *General Fish Management*

Biodiversity:

Description: this zone is comprised by the Tahsish draft landscape unit, which also encompasses the Tahsish-Kwois protected area; ecosystems occurring in the zone are well represented in the protected area;

Objective: *General Biodiversity Conservation Management*

Strategies: maintain connectivity across Tahsish valley between protected area and Kainum/Tlakwa range through retention of stand elements with high wildlife/biodiversity values;

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: some sensitive terrain; some drainages may approach equivalent clearcut area limit

Objective: *General Watershed Management*

Strategies: active equivalent clearcut area monitoring indicated

Visual Resources:

Description: lower sensitivity and significance

Objective: *General Visual Resource Management*

Recreation Resources:

Description: river-based, trails

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: generally lower capability, except for backcountry tourism in the Tahsish Lake area

Objective: *General Tourism Management*

Wildlife:

Description: ungulate winter range; marbled murrelet detections in Tahsish watershed

Objective: *General Wildlife Management*

Cave/Karst :

Description: extensive occurrence of cave/karst terrain and features

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: ***General Cultural Heritage Resource Management***

Non-Forest Resource Descriptions

Mineral Resources:

Description: Moderate to high metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-18: Eliza

Location: Eliza and Espinosa peninsulas up to Zeballos Inlet, as well as Zeballos Tahsis peninsula up to Little Zeballos drainage

Total Area: approximately 34,700 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, particularly suited for enhanced timber harvesting in suitable areas (e.g. areas which are not visually sensitive), as well as enhanced silviculture on most productive sites; emphasis on scenic values along coast, and integration of associated recreation/tourism opportunities; objectives for biodiversity are to be integrated at the basic stewardship level in accordance with FPC requirements; adaptive road engineering/deactivation efforts are indicated to maintain terrain and watershed integrity

Primary Forest Objectives

Timber:

Description: generally moderate productivity, higher north of Little Espinosa Inlet and along Espinosa Creek; over half of forest cover is mature

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: anadromous values in several smaller creeks (Kapoose, Tatchu)

Objective: *General Fish Management*

Community Water:

Description: Barton Creek is designated community watershed

Objective: *Community Watershed Management*

Visual Resources:

Description: visually sensitive areas all along coastline

Objective: *General Visual Resource Management* with emphasis along coast

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: presence of unstable terrain, particularly on slopes in Eliza peninsula; equivalent clearcut area monitoring indicated

Objective: *General Watershed Management*

Recreation Resources:

Description: associated with coastline

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: significant use and high capability for coastal tourism

Objective: *General Tourism Management* with emphasis along coast

Wildlife:

Description: lower ungulate values; marbled murrelet detections along coast

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Eliza draft landscape unit; generally lower significance

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of good potential for coastal finfish and shellfish culture; some existing operations

Mineral Resources:

Description: Moderately high metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-19: Tahsis

Location: area extending between Zeballos Inlet and Tlupana Inlet surrounding Village of Tahsis, bounded to the north by Tahsis River and Leiner Creek drainages, to the east by height of land between Sucwoa and Canton drainages; includes McKelvie Creek community watershed

Total Area: approximately 40,300 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with opportunity for enhanced timber harvesting, as well as enhanced silviculture on most productive sites; emphasis on integration of visual values along coastline; objectives for biodiversity are to be integrated at the basic stewardship level in accordance with FPC requirements; adaptive road engineering/ deactivation efforts are indicated to maintain terrain and watershed integrity

Primary Forest Objectives

Timber:

Description: generally moderate to high productivity, except for higher elevations in Mt. Leiner area; over half of forest cover in mature timber

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Community Water:

Description: McKelvie Creek community watershed

Objective: *Community Watershed Management*

Fish:

Description: anadromous values in Leiner/Perry, Hoiss, and Tsowwin Rivers

Objective: *General Fish Management*

Visual Resources:

Description: visually sensitive areas along coastline, and in vicinity of Village of Tahsis

Objective: *General Visual Resource Management* with emphasis on above areas

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: some unstable terrain, particularly on steeper slopes in Leiner area; equivalent clearcut area generally low

Objective: *General Watershed Management*

Recreation Resources:

Description: coastal recreation, karst south of Perry River, particularly Thanksgiving Cave Ridge, backcountry values in higher elevations (Mt. Leiner); heritage trail from Tahsis to Woss

Objective: *General Recreation Resource Management* with emphasis in above areas

Tourism Resources:

Description: significant use and some facilities; coastal, as well as backcountry tourism opportunities

Objective: *General Tourism Management* with emphasis on coastal areas

Wildlife:

Description: generally lower values; known values along the Perry River

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Tahsis draft landscape unit; lower significance

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: karst south of Perry River and west of Tahsis River and Inlet

Objective: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: abundant areas of moderate potential for coastal finfish and limited areas of moderate potential for shellfish culture

Mineral Resources:

Description: Moderately high metallic mineral potential; high industrial mineral potential; some mineral tenures.

RMZ-21: Tlupana

Location: zone surrounding Tlupana Inlet, including Tlupana, Nesook, Conuma and Sucwoa drainages

Total Area: approximately 44,900 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with significant opportunity for enhanced timber harvesting and silviculture, while maintaining high fish, wildlife and intermediate biodiversity values; integration of scenic/recreation/tourism values along coastline

Primary Forest Objectives

Timber:

Description: areas of very high productivity distinctly confined to lower elevations along rivers; second growth forests in lower elevations, well over 2/3 of forests are mature timber

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: high fish values in Conuma, intermediate values in Tlupana and other systems

Objective: *General Fish Management*

Wildlife:

Description: high wildlife values, including ungulate and large carnivore populations; marbled murrelet detections along Conuma and Nesook Rivers

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Tlupana draft landscape unit; CWH vm1 and vm2 are the dominant ecosystems; high old growth values

Objective: *General Biodiversity Conservation Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: sensitive terrain on steeper slopes; generally low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: visually sensitive areas concentrated on coastline around Tlupana Inlet and travel corridors

Objective: *General Visual Resource Management* with emphasis on above areas

Recreation Resources:

Description: coastal setting in Tlupana Inlet, as well as alpine setting between upper Muchalat and upper Conuma drainages

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: site specific opportunities in areas described under visual and recreation resources; several established facilities in Tlupana Inlet and Hanna Channel area

Objective: **General Tourism Management**

Cave/Karst:

Description: dispersed pockets of karst terrain, particularly in Sucwoa drainage

Objective: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions:

Aquaculture:

Description: abundant areas of moderate potential for coastal finfish and good to moderate potential for shellfish culture

Mineral Resources:

Description: Moderately high metallic mineral potential; moderate industrial mineral potential; some mineral tenures.

RMZ-23: Kleeptee

Location: small zone extending along north shore of Muchalat Inlet to Gold River estuary

Total Area: approximately 15,600 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, suited for enhanced timber harvesting and silviculture, while maintaining fish and wildlife, as well as watershed integrity; basic level of biodiversity conservation; integration of coastal scenic and recreation values.

Primary Forest Objectives

Timber:

Description: moderate to high productivity in lower elevations, approximately 80% in mature timber

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: anadromous values in lower stream reaches

Objective: *General Fish Management*

Wildlife:

Description: intermediate values; elk in McCurdy, marbled murrelets

Objective: *General Wildlife Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: some sensitive terrain, low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: associated with coastline along Muchalat Inlet

Objective: *General Visual Resource Management*

Recreation Resources:

Description: coastal values: especially Williamsen Passage

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: coastal opportunities

Objective: *General Tourism Management*

Biodiversity:

Description: this zone is comprised by the Kleeptee draft landscape unit; CWH vm1 and vm2 are the dominant variants; high proportion of old seral forest, but low significance for representation

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish or shellfish culture

Mineral Resources:

Description: Moderate metallic and industrial mineral potential; no mineral tenures.

RMZ-24: Burman

Location: zone extending along southern shoreline of Muchalat Inlet from Silverado Creek to lower reaches of Burman River (bounded by Strathcona Park)

Total Area: approximately 27,800 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced silviculture, as well as limited enhanced timber harvesting; due consideration and integration of riparian and wildlife values associated with Burman River corridor into Strathcona Park; integration of biodiversity, recreation and scenic values as described

Primary Forest Objectives

Timber:

Description: highly productive in lower elevations; high proportion of mature timber remaining

Objective: **Enhanced Silviculture**, as well as limited opportunity for **Enhanced Timber Harvesting**

Fish:

Description: high anadromous values in Burman, Jacklah and lower reaches of other systems

Objective: **General Fish Management**

Strategies: special consideration for Burman River riparian corridor into Strathcona Park

Wildlife:

Description: waterfowl in Burman estuary, elk, marbled murrelet

Objective: **General Wildlife Management**

Secondary Forest Objectives

Access:

Objective: **General Access Management**

Water:

Description: sensitive terrain; low equivalent clearcut area

Objective: **General Watershed Management**

Visual Resources:

Description: moderately sensitive viewsheds along inlet

Objective: **General Visual Resource Management**

Recreation Resources:

Description: coastal values and along Burman River riparian corridor

Objective: **General Recreation Resource Management**

Tourism Resources:

Description: coastal and backcountry opportunities (Matchlee Mtn., Burman River areas)

Objective: **General Tourism Management**

Biodiversity:

Description: this zone is part of the Burman draft landscape unit, which also comprises portions of Strathcona Park; high old growth, moderate wildlife values, low significance for ecosystem representation;

Objective: **Basic Biodiversity Conservation Management**

Cave/Karst:

Description: cave/karst in Pierce Range

Objective: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: limited areas of moderate potential for coastal finfish and shellfish culture

Mineral Resources:

Description: Moderate metallic and industrial mineral potential; some mineral tenures.

RMZ-27: Naka

Location: extending along Johnson Strait, from Tsitika protected area to Mount Palmerston

Total Area: approximately 16,400 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced silviculture and limited opportunity for enhanced timber harvesting in remaining old forests; maintenance of coastal viewsheds and associated recreational values; objectives for biodiversity and other resources are to be integrated at the basic stewardship level

Primary Forest Objectives

Timber:

Description: moderate to high productivity, particularly in Naka drainage; mature forest cover is concentrated in higher elevations

Objective: *Enhanced Silviculture*, as well as limited opportunity for *Enhanced Timber Harvesting* in remaining old forests

Visual Resources:

Description: visually sensitive areas all along coastline

Objective: *General Visual Resource Management* with emphasis along coast

Fish:

Description: lower values

Objective: *General Fish Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: some steeper terrain; generally low equivalent clearcut area

Objective: *General Watershed Management*

Recreation Resources:

Description: high values along coast (killer whale rubbing beaches), alpine setting in Mount Palmerston area

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: high capability for backcountry, and coastal tourism

Objectives and Strategies: *General Tourism Management*

Wildlife:

Description: lower values

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Naka draft landscape unit; CWHvm1 and vm2 are dominant variants and well represented in adjacent protected area; lower wildlife values

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: some areas of moderate potential for coastal finfish culture

Mineral Resources:

Description: Low to moderate metallic mineral potential; low industrial mineral potential; no mineral tenures.

RMZ-28: Adam and Eve

Location: Adam and Eve River watersheds, as well as Cain Creek portion of Davie watershed, up to Tsitika-Woss SMZ boundary; bounded by Newcastle Ridge to the east

Total Area: approximately 70,300 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone* suited for enhanced timber harvesting and silviculture, while maintaining significant fish and wildlife values, as well as visuals along travel corridors; particular efforts to maintain soil, terrain and watershed integrity indicated

Primary Forest Objectives

Timber:

Description: generally highly productive along lower elevations, where second growth forests are concentrated; approximately 60% mature forests remaining, mostly in higher elevations

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: high anadromous values in Eve River system; intermediate non-anadromous values in Adam system

Objective: *General Fish Management*

Wildlife:

Description: intermediate values, ungulate winter range, marbled murrelet capability

Objective: *General Wildlife Management*

Strategies: use old growth management areas to maintain marbled murrelet habitat (refer to biodiversity objective and strategies)

Visual Resources:

Description: associated with highway corridor and along coastline

Objective: *General Visual Resource Management* with emphasis on above areas

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: sensitive terrain on steeper ground; generally lower equivalent clearcut area concerns

Objective: *General Watershed Management*

Recreation Resources:

Description: associated with coast, Adam and Eve junction pool and Newcastle Ridge

Objective: *General Recreation Resource Management* with emphasis on above areas

Tourism Resources:

Description: coastal tourism opportunities

Objective: *General Tourism Management* along coast

Biodiversity:

Description: this zone is comprised by the Adam- Eve draft landscape unit; CWHvm1 and vm2 are moderately underrepresented in this ecosection, but captured in adjacent zones (Tsitika, White)

Objective: *Basic Biodiversity Conservation Management*

Strategies: consider retaining more than one third of the old seral target if necessary to accommodate marbled murrelet habitat (refer to wildlife strategies)

Cave/Karst:

Description: dispersed pockets of cave/karst along middle reaches of Adam River

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: some area of moderate potential for coastal finfish culture

Mineral Resources:

Description: Low to moderate metallic mineral potential; moderate to high industrial mineral potential; some mineral tenures.

RMZ-30: Salmon

Location: Salmon and Memekay watersheds

Total Area: approximately 72,100 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with significant opportunity for enhanced timber harvesting, and enhanced silviculture in second growth forests; fish and wildlife, as well as biodiversity values in CWHxm2 along Salmon riparian area require elevated management attention; landscape level development of long-term recovery plan of old seral attributes in CWHxm2 along Salmon riparian system; integration of significant recreational values associated with Salmon system

Primary Forest Objectives

Timber:

Description: generally moderate to high productivity, more than half of the forests are in second growth, with mature forests remaining in upper reaches of Memekay and higher elevations

Objective: *Enhanced Timber Harvesting and Enhanced Silviculture*

Community Water:

Description: Newcastle Creek community watershed

Objective: *Community Watershed Management*

Fish:

Description: high anadromous values in Salmon and Memekay

Objective: *General Fish Management*

Strategies: develop long term riparian recovery plan along Salmon River at landscape level planning

Wildlife:

Description: moderate present values but high capability in Salmon, high values in upper Memekay, Salmon, Paterson, Grilse Creek areas (ungulate winter range); marbled murrelet and northern goshawk detections

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Salmon draft landscape unit; CWH mm1 and mm2, as well as CWHxm2 are main ecosystem types; CWHxm2 concentrated along middle and lower reaches of Salmon system, almost entirely in early seral condition

Objective: *Basic Biodiversity Conservation Management*

Strategies: retain all existing old seral forest in CWHxm2 until landscape unit objectives for old growth retention have been established; manage to replace old seral attributes in CWHxm2 along Salmon riparian system in accordance with the full old seral target (see fish objectives); consider second growth management to restore mature seral forest connectivity to upland ecosystems in upper Memekay

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: lower Salmon/Sayward road corridor

Objective: *General Visual Resource Management* with emphasis on above areas

Recreation Resources:

Description: significant values associated with Salmon River (fishing, river rafting, etc.)

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: river-based opportunities, particularly in the Sayward Valley

Objectives and strategies: **General Tourism Management** with emphasis in above areas

Cave/Karst:

Description: cave/karst in Memekay, particularly Candlestick Cave

Objective and strategies: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Mineral Resources:

Description: Moderate metallic and industrial mineral potential; no mineral tenures.

RMZ-36: Cous

Location: Cous Creek watershed

Total Area: approximately 15,200 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with particular emphasis on enhanced silviculture and increased growth and yield; fish and visual resources require heightened attention where indicated; other non-timber values, including biodiversity are to be addressed at the basic level of stewardship in accordance with legislation and regulations

Primary Forest Objectives

Timber:

Description: high productivity, with majority in second growth timber

Objective: focus on *Enhanced Silviculture*, with limited opportunity for *Enhanced Timber Harvesting*

Fish:

Description: anadromous values in Cous system

Objective: *General Fish Management*

Visual Resources:

Description: along Alberni Inlet

Objective: *General Visual Resource Management* with emphasis along inlet

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: some drainages with higher equivalent clearcut area

Objective: *General Watershed Management*

Recreation Resources:

Description: basic values associated with roaded access to managed forest land

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: high tourism capability along Alberni Inlet

Objective: *General Tourism Management* with emphasis along inlet

Wildlife:

Description: generally lower values; some dispersed winter range

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Cous draft landscape unit; generally lower old seral and representation values, some CWHxm2 along Alberni Inlet

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst in upper Cous Creek area

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: moderate to moderately high metallic mineral potential; moderate industrial mineral potential; many mineral tenures.

RMZ-38: Effingham

Location: comprises most of the Effingham River drainage, bounded to the south by SMZ 14 (Barkley Sound)

Total Area: approximately 12,400 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with opportunity for enhanced timber harvesting; maintenance of ungulate values, biodiversity conservation at the intermediate level

Primary Forest Objectives

Timber:

Description: lower to moderate productivity, very high proportion of mature timber

Objective: *Enhanced Timber Harvesting*; limited opportunity for *Enhanced Silviculture* (mainly along valley bottoms)

Fish:

Description: anadromous values in Effingham system

Objective: *General Fish Management*

Biodiversity:

Description: this zone is comprised by the Effingham draft landscape unit, which also encompasses portions of the Barkley Sound SMZ; high old growth values

Objective: *General Biodiversity Conservation Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: along inlet; highest values are captured in SMZ

Objective: *General Visual Resource Management* with emphasis along inlet

Recreation Resources:

Description: basic values associated with roaded access to managed forest land

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: capability for coastal and backcountry (around Effingham Lake) tourism

Objective: *General Tourism Management*

Wildlife:

Description: ungulate winter range in Effingham Lake area

Objective: *General Wildlife Management*

Cave/Karst:

Description: dispersed pockets of cave/karst in upper Effingham

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish or shellfish culture

Mineral Resources:

Description: moderate to moderately high potential for metallic and industrial minerals; many mineral tenures.

RMZ-40: Maggie

Location: area south of Toquaht surrounding Maggie Lake and extending south to Ucluelet Inlet

Total Area: approximately 14,600 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with particular emphasis on enhanced silviculture and increased growth and yield; visual values along coast and around Maggie Lake require full integration; other values to be addressed at the basic level of stewardship in accordance with legislation and regulations; need to consider buffer adjacent to Pacific Rim National Park

Primary Forest Objectives

Timber:

Description: moderate to high productivity, mostly in second growth timber

Objective: *Enhanced Silviculture*, and very limited opportunity for *Enhanced Timber Harvesting*

Fish:

Description: intermediate values, anadromous fish in Maggie system and lower stream reaches of smaller streams

Objective: *General Fish Management*

Community Water:

Description: Mercantile Creek (Ucluelet) and Itatsoo Creek (Toquaht Indian Band) are designated community watersheds

Objective: *Community Watershed Management*

Visual Resources:

Description: coastal and Maggie Lake

Objective: *General Visual Resource Management* with emphasis along coast and around Maggie Lake

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: generally low equivalent clearcut area

Objective: *General Watershed Management*

Recreation Resources:

Description: coastal and Maggie Lake

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: coastal tourism capability, facilities in Ucluelet

Objective: *General Tourism Management* in above areas

Wildlife:

Description: lower values

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is part of the Maggie and Kennedy Flats draft landscape units; basic values

Objective: *Basic Biodiversity Conservation Management*

Cave/Karst:

Description: dispersed pockets of cave/karst

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Aquaculture:

Description: very limited potential for coastal finfish, good potential for shellfish culture

Mineral Resources:

Description: low to moderately high metallic mineral potential; moderately high industrial mineral potential; mineral tenures exist in the north-eastern part of the area

RMZ-42: Corrigan

Location: Franklin watershed, including Corrigan Creek; contains two small community watersheds

Total Area: approximately 24,500 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with particular emphasis on enhanced silviculture and increased growth and yield; wildlife values require heightened management attention; intermediate biodiversity significance; other non-timber and non-forest values are to be addressed at the basic level of stewardship in accordance with legislation and regulations

Primary Forest Objectives

Timber:

Description: highly productive, with majority in second growth timber, and blocks of mature remaining in higher elevations and at back end of drainages

Objective: *Enhanced Silviculture*, as well as limited opportunity for *Enhanced Timber Harvesting*

Fish:

Description: intermediate, anadromous values associated with lower Franklin

Objective: *General Fish Management*

Community Water:

Description: two small community watersheds

Objective: *Community Watershed Management*

Biodiversity:

Description: this zone is comprised by the Corrigan draft landscape unit; CWHxm2 occurs in northern part of the zone, mostly in second growth

Objective: *General Biodiversity Conservation Management*

Strategies: if necessary to avoid severe social and economic consequences, consider harvesting of old seral forest in CWHvm1 below old seral target (down to no less than two thirds of old seral target), provided suitable old growth management areas are identified in second growth

Wildlife:

Description: intermediate values - dispersed pockets of ungulate winter range; Vancouver Island Marmot habitat; northern goshawk nesting habitat/detections

Objective: *General Wildlife Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: generally low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: lower significance

Objective: *General Visual Resource Management*

Recreation Resources:

Description: values associated with roaded access to managed forest land

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: limited coastal and backcountry capability

Objective: *General Tourism Management*

Cave/Karst:

Description: dispersed pockets of cave/karst in Coleman Creek

Objective: *General Cave/Karst Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Agriculture:

Description: contains pockets of high capability non-ALR lands

Aquaculture:

Description: very limited potential for coastal finfish or shellfish culture

Mineral Resources:

Description: low to moderately high metallic mineral potential; moderately high industrial mineral potential; some tenures in the north-eastern part of the area.

RMZ-43: Sarita

Location: Sarita watershed extending along Alberni Canal up to Pacific Rim Park; contains two small community watersheds

Total Area: approximately 35,400 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with particular emphasis on enhanced silviculture and increased growth and yield, as well as limited enhanced harvesting opportunity; fish and wildlife as well as community water values require heightened management attention; other non-timber (including biodiversity) values are to be addressed at the basic level of stewardship in accordance with legislation and regulations.

Primary Forest Objectives

Timber:

Description: highly productive, with majority in second growth timber, and blocks of mature remaining in higher elevations and at back end of drainages

Objective: *Enhanced Silviculture*, as well as limited opportunity for *Enhanced Timber Harvesting*

Community Water:

Description: Sugsaw Lake (Bamfield) is designated community watershed

Objective: *Community Watershed Management*

Fish:

Description: intermediate, anadromous values associated with Coleman, Sarita and Pachena systems;

Objective: *General Fish Management*

Wildlife:

Description: lower to intermediate values - dispersed pockets of ungulate winter range; marbled murrelet detections in Sarita (refer also to biodiversity objective and strategies)

Objective: *General Wildlife Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: generally low equivalent clearcut area

Objective: *General Watershed Management*

Visual Resources:

Description: associated with coast, as well as Sarita, Frederick and Pachena Lakes

Objective: *General Visual Resource Management* with emphasis in above areas

Recreation Resources:

Description: values associated with roaded access to managed forest land, particularly in lower Sarita River, Sarita Lake area, and coastline along Trevor Channel

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: facilities in Bamfield area; high coastal tourism use and capability

Objective: *General Tourism Management* with emphasis along coast

Biodiversity:

Description: this zone is part of the Sarita draft landscape unit; marbled murrelet habitat capability

Objective: *Basic Biodiversity Conservation Management*

Strategies: consider retaining more than one third of the old seral forest targets if necessary to accommodate marbled murrelet and other wildlife habitat

Cave/Karst:

Description: dispersed pockets of cave/karst in upper Sarita

Objective and strategies: **General Cave/Karst Management**

Cultural Heritage Resources:

Objective: **General Cultural Heritage Resource Management**

Non-Forest Resource Descriptions

Aquaculture:

Description: limited potential for coastal finfish and some moderate potential for shellfish culture; some existing operations

Agriculture:

Description: contains pockets of high capability non-ALR lands

Mineral Resources:

Description: low to moderately high metallic mineral potential; moderately high industrial mineral potential; some tenures in the north-eastern part of the area.

RMZ-44: Klanawa

Location: Klanawa River watershed

Total Area: approximately 24,800 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with significant opportunities for enhanced timber harvesting and enhanced silviculture; high fish values, and intermediate to high wildlife values; conservation of biodiversity at the intermediate emphasis level.

Primary Forest Objectives

Timber:

Description: highly productive throughout, high proportion of mature timber

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: high values

Objective: *General Fish Management*

Wildlife:

Description: intermediate to high values, dispersed pockets of ungulate winter range, high marbled murrelet detections along Klanawa River

Objective: *General Wildlife Management*

Biodiversity:

Description: this zone is comprised by the Klanawa draft landscape unit; low representation, but intermediate habitat values; high proportion of old forests remaining

Objective: *General Biodiversity Conservation Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: low equivalent clearcut area; terrain stability concerns

Objective: *General Watershed Management*

Visual Resources:

Description: few areas associated with lower Klanawa River

Objective: *General Visual Resource Management*

Recreation Resources:

Description: lower Klanawa River

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: backcountry lower values

Objective: *General Tourism Management*

Cultural Heritage Resources:

Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: low to moderate metallic mineral potential; moderately high industrial mineral potential; mineral tenures overlap southwestern part of area.

RMZ-47: Loss-Jordan

Location: Loss Creek and lower Jordan River watersheds

Total Area: approximately 31,100 ha

Zone Category and Overall Management Direction: *Enhanced Forestry Zone*, with enhanced timber harvesting, as well as enhanced silviculture and increased growth and yield opportunity; general integration of recreation, and tourism values, as well as visuals along road corridor and in Sombrio Creek area; other non-timber (including biodiversity) values are to be addressed at the basic level of stewardship in accordance with legislation and regulations

Primary Forest Objectives

Timber:

Description: moderate to high productivity, with high proportion of second growth timber

Objective: *Enhanced Timber Harvesting* and *Enhanced Silviculture*

Fish:

Description: anadromous fish in lower stream reaches

Objective: *General Fish Management*

Recreation Resources:

Description: coastline and vicinity of San Juan trail, as well as Juan de Fuca Marine trail; high use in proximity to urban areas

Objective: *General Recreation Resource Management*

Tourism Resources:

Description: high capability for coastal tourism

Objective: *General Tourism Management*

Secondary Forest Objectives

Access:

Objective: *General Access Management*

Water:

Description: generally low equivalent clearcut area; terrain stability concerns, fine textured soils

Objective: *General Watershed Management*

Visual Resources:

Description: sensitive values in lower Sombrio Creek area and along road corridor

Objective: *General Visual Resource Management* with emphasis in above areas

Wildlife:

Description: lower values, sparse pockets of ungulate winter range

Objective: *General Wildlife Management*

Strategies: where practical, enhance habitat with silvicultural prescriptions.

Biodiversity:

Description: this zone is part of the Loss and Tugwell draft landscape units; lower representation and habitat values

Objective: *Basic Biodiversity Conservation Management*

Cultural Heritage Resources:

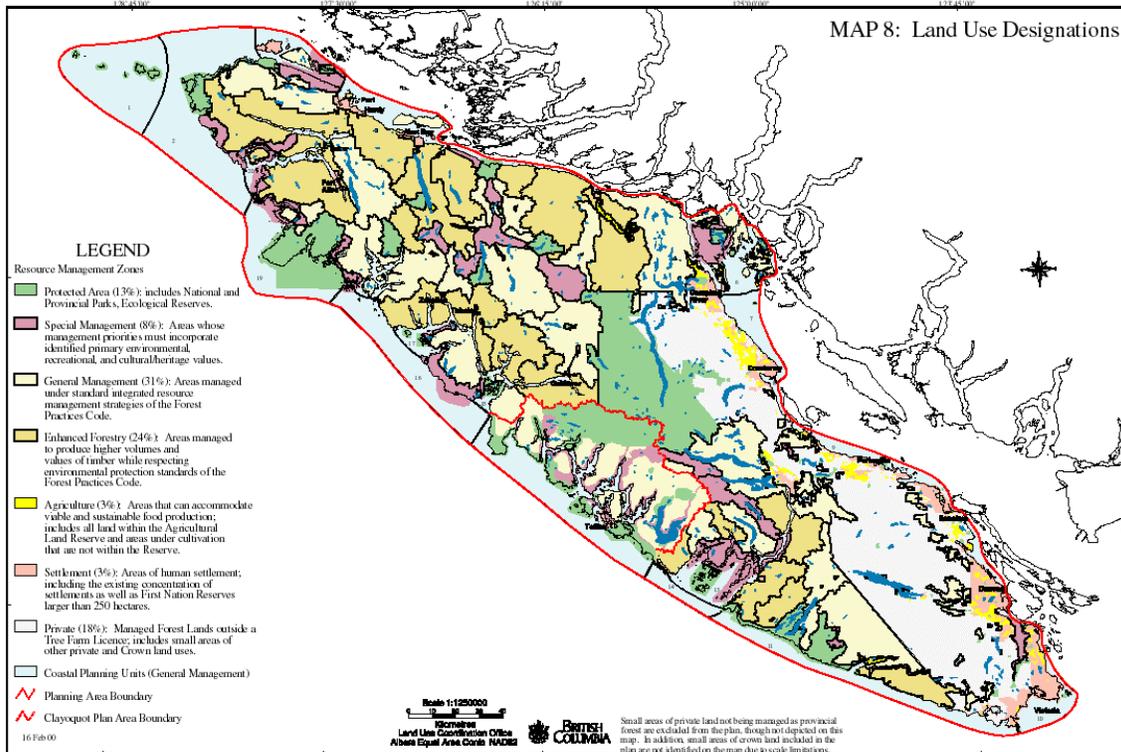
Objective: *General Cultural Heritage Resource Management*

Non-Forest Resource Descriptions

Mineral Resources:

Description: moderately high metallic mineral potential; low to moderate industrial mineral potential; some mineral tenures.

Map 8: Land Use Designations



4.4 Agricultural and Settlement Lands

4.4.1. Intent

The intent of the Agricultural Land designation is to recognize areas that can accommodate sustainable agricultural activity to contribute to community stability, economic diversification and food-self sufficiency on Vancouver Island. This zone generally reflects the boundary of the Agricultural Land Reserve, and large areas of existing farm land outside of settlement areas. It covers approximately 96,500 ha of land, comprising 3% of the Island.

The intent of the Settlement Land category is to recognize lands currently allocated or used for a range of human settlement uses and activities, and which require continued priority for subsequent planning and management due to their impact on regional resources and the environment.

These areas contain public resources and values that will necessitate the involvement of provincial agencies in their planning and management. This category constitutes approximately 108,000 ha of land, which represents 3% of the Island. Due to the scale of the Plan, settlement areas less than 250 ha in size are not shown in this category.

4.4.2 Settlement and Agricultural Land Management Regime

Objectives	Strategies
To identify lands where settlement uses and activities necessitate co-operation between all orders of government to properly manage key public resources and values within and adjacent to settlement areas.	Contribute to the local and regional planning activities of local governments to identify provincial resource objectives, issues and management approaches. Retain agricultural lands and maintain opportunities for such areas to contribute to future food and agricultural commodity production.
To maintain the integrity of the Agricultural Land Reserve and Forest Land Reserve.	Ensure urban expansion does not seriously compromise the contribution of adjacent resource lands to economic and environmental sustainability of the expanding urban area.

4.5 Private Lands

4.5.1 Intent

The private land category shows large private land holdings (over 250 ha in size), primarily on southeastern Vancouver Island, that are used predominantly as private managed forest land. Since the management regimes of this Plan only apply to Crown land and private land within Tree Farm Licences, these private lands have not been designated to a specific land category.

The private land area occupies approximately 18% of Vancouver Island.

4.6 Coastal Planning Units

4.6.1 Intent

Although not an official designation category or land use zone, the Plan divides the coastal zone into 20 Coastal Planning Units (CPUs). CPU boundaries were identified using general oceanographic attributes and geographic location. The intent of CPUs is to establish a geographical framework for the development of future integrated coastal plans at a more detailed scale. Future CPU planning will be driven by the level and nature of development activity, the status of planning in adjacent upland units and available planning resources.

5.0 SOCIO-ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

5.1 Background and Limitations

Due to the incremental nature of Plan completion projects since the 1994 Land Use Decision, no detailed analysis of the overall resource and related socio-economic impacts of the final Land Use Plan has been undertaken. However, some resource analysis data are available for the original 1994 Decision and subsequent Resource Management Zone planning undertaken by the Resource Targets technical team. These analyses provide an indication of the nature and magnitude of impacts associated with the final Plan compared to the Base Case (i.e. in the absence of a land use plan).

The economic impacts of land use changes resulting from the Plan are difficult to quantify, in part because activity in these sectors is dependent on many factors other than land use, such as international commodity prices and land claims. The most significant implications of the Plan are for the forestry sector. The Plan will also affect other sectors such as tourism and mining, although these impacts generally involve potential, rather than existing activity. However, land use change is only one of several factors affecting the viability of economic sectors. Also, the Plan does not directly affect Settlement or Agriculture Land areas.

The most significant source of socio-economic impacts will be new protected areas, as they will preclude forestry and mining activity, but protect fisheries values and preserve scenic and other natural values upon which wilderness tourism is based. The Plan does not result in significant changes in resource management emphasis outside of protected areas, since the balance of SMZ, GMZ and EFZ areas does not differ greatly from proportions expected as a result of application of the Forest Practices Code and other relevant legislation and policy.

In very general terms, the Plan will likely reinforce trends already evident in the population and economic structure of the Island, such as the gradual increase in the importance of the service sector and increasing economic diversification. While the new protected areas under the Plan may exacerbate ongoing difficult adjustments in the forestry industry, it is likely that because of the incremental nature of these impacts, the rate of population and economic growth on Vancouver Island will be similar to the Base Case situation.

The timing of economic impacts is very important to take into account. The impacts of new protected areas announced in the 1994 decision have already been deferred in the initial round of Timber Supply Reviews, but will be considered in current TSRs that will be concluded by the end of 2001. It is also possible to further mitigate timber-harvesting impacts through implementation of other government programs and policies such as Forest Renewal BC.

5.2 Forestry

The analysis of the CORE land use proposals for protected areas and SMZ areas indicated a short-term reduction in timber harvest levels of about 800,000 m³/yr. The impact of protected areas alone was estimated at about 580,000 m³/yr, including an allowance for the Goal 2 areas. However, the final Plan differs from the CORE proposals in several important aspects. Some protected areas were relocated from the Mt. Waddington Regional District to the Comox-Strathcona Regional District. This has not significantly affected the magnitude of timber supply impacts, but redistributes the impacts geographically to areas with lower forest economic dependency. An Enhanced Forestry Zone has been incorporated, which will still be subject to the Forest Practices Code but allows higher harvest levels due to relaxed green-up and adjacency requirements and intensive silviculture.

These changes, particularly the new Enhanced Forestry Zone, will likely mitigate the short-term timber harvest and related employment impacts compared to estimates presented in CORE's proposed Plan. For example, a recent timber supply analysis for the Strathcona TSA indicates that the harvest impact of designating 4% of the timber harvesting land base in SMZs is offset by the 26% of this TSA that is

designated EFZ. Analyses for other management units with equal or smaller proportions in SMZs (e.g. in some TFLs), and larger proportions in EFZs, as well as the application of enhanced silviculture practices may result in partial mitigation of protected area impacts.

These analyses suggest that the short term impact of the Plan would be, at most, a timber harvest reduction on the Island of about 580,000 m³/yr, i.e. the incremental harvest impact attributable to new protected areas. This represents about 5% of pre-Plan AAC on Crown land and about 4% of the total pre-Plan AAC on Crown and private land on the Island. This would potentially place at risk about 420 person-years (PYs) of employment on the Island, excluding pulp and paper impacts.⁶⁴ Including multiplier effects, this potential job impact represents up to 1% of the total labour force in the Regional Districts on the Island most affected by the Plan (Mt. Waddington and Comox-Strathcona).

The short term (e.g. next 10 years) and medium term (e.g. next 50 years) timber harvesting impacts of the Plan will vary by forest management units, depending on the distribution of new protected areas and different management zone types. For individual TSAs and TFLs, the amount of total area in EFZ ranges from a low of less than 10% to a high of almost 100%, while the extent of SMZ ranges from 0% to over 15%. The Plan's short and medium term impacts will be more significant in those TFLs and TSAs where the projected harvest flows are declining to a lower long term harvest level. In management units with a stable or increasing harvest flow, there is more opportunity to absorb or defer short and medium term impacts.

The longer-term timber harvesting impacts of new protected areas should be less than short-term impacts, since the volumes of timber per hectare affected will be smaller for second versus original growth. Across all TFLs and TSAs (outside of Clayoquot Sound), the creation of new protected areas resulted in an overall reduction of the timber harvesting land base by about 4%. The employment implications of longer term harvest impacts would also be less significant because of factors such as technological change and rationalization within the forestry industry, and continued growth in the Island economy. There will be some long term impacts, however, because of the removal of land base for protected areas.

In summary, the Plan's protected area designations have the potential to exacerbate the difficult short-term adjustments in some communities and for some workers. This has been occurring as a result of the downturn in Asian markets and other factors in the Base Case. However, the enhanced forestry provisions of the Plan, including the establishment of the Forest Land Reserve may partially offset protected area impacts, and increased investments in regenerated forests may even hold the promise of higher, future yields in some management units. The phased-in approach of harvest reductions and other government initiatives (e.g. FRBC), as well as appropriate transition strategies by the private sector (e.g. attrition and early retirement) will facilitate adjustments by communities and individuals. The establishment of the Forest Land Reserve will prevent conversion of forest land to urban and related commercial development and keep timber harvest levels and related employment higher than it otherwise might have been in the Base Case.

5.3 Tourism and Recreation

The creation of new Goal 1 and Goal 2 parks should significantly enhance the potential for nature-based tourism growth on Vancouver Island. These new parks will protect some of the most scenic wilderness areas and recreational features on the Island, including the Upper Carmanah, Walbran and Tahsish-Kwois watersheds, and northern coastal areas associated with creation of the North Coast Trail. The future implementation of the joint federal / provincial Marine Protected Areas Strategy should further enhance the Island's attractiveness for marine-based ecotourism.

⁶⁴ *Vancouver Island Land Use Plan*, Commission on Resources and Environment, Volume I, p. 195. This estimate excludes the Clayoquot Sound land use decision since it was not part of VILUP. Pulp and paper processing impacts are also excluded because of the availability of alternative, albeit perhaps more costly, fibre supplies.

In addition, the SMZ areas in which scenic, recreation and other natural values have management priority may also contribute to growth in ecotourism. These SMZs will be particularly important for commercial facilities that may depend on the attributes of, but would not be appropriate to locate in, protected areas. The new Commercial Backcountry Recreation policy, which provides greater certainty of tenure for commercial recreation facilities, should complement the Plan by increasing investor certainty in this sector on some Crown lands.

The realization of ecotourism benefits will occur over time, driven by population growth and demand, and as existing parks and recreation areas become increasingly crowded or have management constraints imposed (e.g. West Coast Trail). Growth in wilderness tourism employment will also depend on other factors such as entrepreneurial experience and capital. Tourism is already a key component in the economic development plans of many communities on the Island, and the Plan will further enhance the opportunities that this sector provides for economic diversification and sustainable growth. This will in turn increase the attractiveness of the Island for new in-migrants.

The new protected areas will also provide benefits other than employment, such as opportunities for recreation by local residents and so-called "existence values", i.e. the value placed on preserving wilderness areas for future generations. For example, a province-wide Ministry of Forests survey in 1993 indicated that the willingness-to-pay for increasing the amount of park land from 6% to 12% in BC was about \$152 million in 1998 dollars, annually. These results indicate that British Columbians are willing to make financial contributions to preserve wilderness and recreation opportunities in perpetuity.

Enhanced Forestry Zone areas and less restrictive adjacency constraints may result in impacts on scenic quality in some areas.

5.4 Mining and Energy

The new protected areas in the Plan have been designed to minimize impacts on the Island's high potential mineral lands. Based on preliminary analysis for the original CORE report, roughly 3% of high mineral potential areas would be precluded from exploration development by the Plan's protected areas. There would be an additional 4% of high mineral potential located in SMZs, which could incrementally increase exploration and development costs. Such an analysis acknowledges the cyclical nature of market conditions for minerals, as well as the hidden nature of mineral deposits, which could result in an underestimate of real impacts. However, government's new *Mining Rights Amendment Act* and tax credits for exploration affirms the right of access to mineral deposits in all lands outside of protected areas and will help to mitigate exploration cost increases.

The Plan should have negligible impacts on the Island's energy sector. Most of the growth in energy demand will likely be met by off-Island sources such as the Vancouver Island gas pipeline and BC Hydro's grid. Co-generation projects, such as the new project in Campbell River, will likely occur on existing industrial lands. Oil and gas exploration and development will depend on federal and provincial decisions regarding the existing offshore moratorium. Mineral and energy prices, determined in world markets, will continue to be the dominant factor determining activity levels in these sectors.

5.5 Fisheries

The proposed protected and special management areas in the original CORE Plan included fish streams with roughly 10% of salmonid escapements on Vancouver Island. The current Plan likely affects a similar proportion of salmonid stocks. This will reduce the risk of habitat degradation for salmonid and freshwater stocks, although impacts may not be substantial for streams already protected by the riparian buffers required in the FPC. The FPC also applies in all zones outside protected areas.

Additional protection provided by the Plan for fish stocks will result in potential benefits for commercial, recreational and First Nations fishers. However, these potential gains, particularly for species such as coho and chinook, are dependent to a large degree on appropriate harvesting systems that target larger, more productive stocks such as Fraser River sockeye, without damaging smaller, weaker stocks. The

precautionary approach recently adopted by DFO to minimize the impacts of mixed fisheries, if continued, would better ensure that the fisheries gains from the Plan are realized. Kelp and wild oyster resources and habitat are well represented in the Plan Area within protected areas, with almost 30% of the major kelp stocks and over 12% of the wild oyster bearing shoreline in the protected area category. Commercial kelp and wild oyster harvesting are limited to stocks outside protected areas.

It should be recognized that the Plan will not affect land use on private or ALR lands, which include a number of important anadromous and freshwater streams. However, the proposed streamside protection measures for urban streams in the new *Fish Protection Act*, and the new Private Forest Land Memorandum of Understanding (MOU), should also reduce the risk of habitat damage to fish stocks. Habitat rehabilitation being undertaken by Fisheries Renewal BC and watershed restoration by FRBC will further complement the beneficial effects of the Plan on the fisheries resource.

5.6 Aquaculture and Agriculture

New protected areas in the Plan, including the one kilometre nearshore buffer on land-based areas, preclude about 14% of ocean area classified as having good potential for finfish aquaculture sites. A number of potential shellfish sites may also be affected. There may also be some expansion constraints on existing operations within new PAs.

Growth in the industry can be accommodated on existing and potential sites outside protected areas. There may be some diversion from Vancouver Island to locations elsewhere in BC that have fewer resource conflicts although this is tempered by the lack of essential infrastructure in more remote regions. Significant growth in shellfish aquaculture activity is also expected as a result of the recent government Shellfish 2000 initiative to make more Crown foreshore available to the industry. Future coastal planning processes for Vancouver Island will assist government in determining the opportunities for aquaculture activities and other coastal uses, including marine protection.

The Vancouver Island Summary Land Use Plan essentially confirms the land currently designated and used for agriculture, therefore a direct impact on existing agricultural activity is expected compared to the situation without a plan in place (Base Case). There may be a reduction in the agricultural land base outside of the Agricultural Land Reserve due to development pressures, particularly in the southeast portion of Vancouver Island. However, this would likely occur in the Base Case situation. The ALR contains sufficient amounts of currently uncultivated or under-cultivated land to accommodate future market growth, assuming these lands are appropriately planned and managed.

5.7 Environmental/Biodiversity Impacts

Given its regional scale and the sequencing of the various reports that comprise the final Land Use Plan, a comprehensive environmental and biodiversity impact assessment has not been possible. However, some general observations and qualitative evaluations can be made. In addition, a quantitative assessment of the current extent and distribution of old growth and the potential effect of the resource management zones and objectives on the projected future old growth on Vancouver Island was conducted by the Resource Targets technical team.

In general terms, an increase in protected areas achieved by the Land Use Plan should result in a net benefit to the environment, through the elimination of resource extraction activities. New protected areas will also contribute to biodiversity through the increase in representation of key ecosystems. The old growth assessment concluded that approximately 250,000 ha of old forests (17% of all old growth on Vancouver Island) are now located within protected areas; this includes approximately 70,000 ha of old growth which was protected by the creation of new parks created through the Plan.

The biodiversity objectives associated with the RMZs will guide the establishment of old growth management areas as part of landscape unit planning in accordance with the Code. It is estimated that

between 160,000 and 220,000 ha of old growth forests (between 10 and 15 per cent of total old growth on VI) will be maintained for biodiversity conservation under the Code⁶⁵.

With more stringent objectives and strategies in SMZ areas there should be a net benefit to environmental and biodiversity values. In many SMZs there will be better protection of rare and underrepresented forest ecosystems.

While the focus of protected areas and many SMZs is the protection of old growth forest ecosystems, forests in EFZs will generally be younger in age, favoring those wildlife species associated with early seral forest stages. The provisions for larger cutblock sizes and relaxed green-up requirements in EFZs have the potential to reduce forest fragmentation and to cut down on the amount of roads and associated hydrological hazards. Although the size of cutblocks in EFZs may increase, the structural retention of wildlife tree patches in accordance with Code requirements will ensure that important wildlife habitat will be maintained. General riparian, watershed assessment, soil, wildlife and other environmental stewardship provisions apply in all zones, including EFZs, in accordance with the legislated requirements of the Forest Practices Code.

It has been suggested that to maintain ecosystem health and biodiversity in a regional landscape, it is not necessary that all land within the region be managed for those goals. There is mounting evidence that the optimum strategy for biodiversity would involve some strong distinctions between the management emphasis on different lands within a region. Thus, it might be more effective to manage some lands primarily for timber - as in EFZs - and some primarily for biodiversity - as in PAs and many SMZs - rather than to try to manage all lands for an equal mix of values. To that end, timber-emphasis zoning through an EFZ designation, and biodiversity emphasis zoning through PAs, SMZs and the biodiversity provisions of the Code, form an integral part of an overall biodiversity strategy for Vancouver Island.

5.8 Social Impacts / Transition and Mitigation

Government revised the original CORE protected area proposals. This resulted in a redistribution of PA timber harvest impacts from Mt. Waddington Regional District with a relatively small, forestry-dependent workforce of about 5,000, to the Comox-Strathcona Regional District where the labour force is much larger (about 50,000) and economic opportunities are more diverse. Analysis for the Protected Areas Boundary Adjustment Team indicated that roughly 20% of mature timber volumes in new PAs is located in the Mt. Waddington Regional District, 50% in the Comox-Strathcona District and about 40% in the rest of Vancouver Island.

It is unlikely that the Plan, in itself, would result in closure of any logging operations or processing facilities. One mitigating factor is the fact that timber-harvesting impacts within TSAs are prorated among licensees based on their current share of the AAC. The same principle though does not apply to TFLs where the license holder has the responsibility for management of the timber supply. However, the Plan could exacerbate the timber supply situation for operations and facilities that were already marginal. Impacts may take the form of reduced income (e.g. resulting from fewer workdays due to periodic shutdowns) rather than permanent job losses.

The positive and negative economic impacts of the Plan will be unevenly distributed among communities and individuals, and in general, displaced forestry workers will not benefit from increased opportunities in tourism and fisheries. Adjustments will be particularly difficult in the North Island due to higher dependence on forestry and the lack of alternative employment opportunities. Some displaced workers will likely move to other communities on the Island and the mainland in search of work. However, based on past experiences, it is assumed that assistance to displaced forestry workers and forestry dependent

⁶⁵ Please note that some of the old growth forest located in protected areas will contribute to the old growth management area requirements under the Code; therefore, old forests in protected areas and old forests in OGMA's overlap to some extent and are not entirely cumulative.

communities would continue through government and industry programs focused on retraining, value-added products, intensive silviculture and watershed restoration programs. Also, appropriate transition strategies (e.g. early retirement and attrition) by industry could mitigate impacts on workers and communities. For example, it is estimated that in 1994, there were 2,000 loggers and sawmill workers on the Island over the age of 50 who were potentially eligible for early retirement.

The net effect of the Plan in the medium to longer term might be to accelerate an already occurring restructuring of the economy. However, taking into account the positive impacts of the Plan on sectors such as ecotourism and fisheries, and the ability of workers and communities to adapt, it is not clear that the Plan will result in net job loss or even reduce employment growth on the Island. This is supported by historical trends that indicate overall growth in employment in both the goods producing and service industries over the 1981-96 period, despite absolute declines in forestry and other resource sector employment. Therefore, the Plan will tend to reinforce the increasing diversification of the Vancouver Island economy, although the adjustments for some individuals and communities could be difficult.

6.0 PLAN IMPLEMENTATION, MONITORING & AMENDMENT

6.1 General Provisions

Implementation of the Plan will be reflected in the delivery of agency programs, initiatives and tenure decisions within the framework of existing legislation, regulations, and management guidelines.

The special and enhanced resource management zones of this plan, as well as key resource management zone objectives for forest practices and resources, will be declared as Resource Management Zones under the higher level plan provisions of the Forest Practices Code, to direct subsequent operational planning.

The strategic direction, objectives and strategies and procedures for non-forest uses and activities represent the approved government policy direction for the Plan area, and are to be followed by agencies.

Government will implement the Plan in accordance with available budget and staff resources. This includes the negotiation and acquisition of private lands identified in the 1994 Land Use Decision and the Special Features Protected Area announcement in 1996.

The term of the plan (life span) is ten years, with a formal review to commence in the year 2003.

6.2 Roles and Responsibilities

The Vancouver Island Inter-Agency Management Committee (IAMC) of provincial government agency managers will coordinate development of a long-term implementation strategy for the Plan. The IAMC will clarify and confirm management actions and agency responsibilities for implementation, and promote and monitor compliance by agencies. In response to agency requests, the IAMC will interpret management objectives and strategies to assist with Plan implementation. The IAMC will coordinate the establishment of a Plan monitoring committee, provide regular liaison with the monitoring committee and existing local community resource boards, and coordinate preparation of scheduled Plan reviews.

Provincial government agencies are responsible for implementing plan provisions, in accordance with legislated responsibilities for land and resource management. Agencies will incorporate plan provisions into existing programs for the Plan Area, and will ensure Plan compliance by resource users. Agencies will advise the IAMC on aspects of Plan interpretation and implementation, provide recommendations on proposed Plan amendments, and participate in scheduled Plan reviews.

The Plan Monitoring Committee is a group of Island-wide stakeholders, government and First Nations representatives, including representatives of community resource boards. The Monitoring Committee will be comprised of individuals nominated from their organizations to represent various interests across the Island, and will be ratified by the IAMC. The Monitoring Committee will advise the IAMC on plan implementation, monitoring and amendment issues, as well as provide advice on Plan interpretation and proposed amendments. The Monitoring Committee will review and comment on scheduled Plan monitoring reports prepared for the IAMC, and will engage the broader public in review of these reports where and when necessary.

The Community Resource Boards established for the Nootka Sound area and the Mt. Waddington Regional District presently have a key role in local implementation of the Plan and local resource use issues. The CRBs will function in accordance with their terms of reference, established in cooperation with government and as amended from time to time. The CRBs will provide representatives to the Plan Monitoring Committee, will have opportunity to provide local input on recommended plan amendments, and may serve as local forums for other government programs, including Forest Renewal BC.

6.3 Plan Monitoring

In collaboration with the Plan Monitoring Committee and agencies, the IAMC will confirm specific “indicators” to monitor the degree to which Plan goals, objectives and strategies are being implemented. These indicators will reflect experience with other strategic plans and will utilize, wherever possible, existing agency monitoring and research programs.

The IAMC will oversee the preparation and review of an annual public report concerning the status and effectiveness of Plan implementation. The first annual implementation report will be completed by March 31, 2001, and will outline actions taken to date to implement Plan management strategies, evaluate the effectiveness of management strategies in achieving Plan objectives, and will propose actions, where appropriate, to respond to ineffective aspects of implementation.

Annual implementation reports will be developed in collaboration with, and formally presented to, the Plan Monitoring Committee. The Committee will coordinate further public review opportunities, if necessary, and will advise the IAMC of any outstanding issues or concerns requiring agency action.

6.4 Plan Amendments

Plan amendments may be proposed to the IAMC at any time. Proposals must be in written form and may be made by the public, CRBs, the Plan Monitoring Committee, or agencies.

Plan amendment proposals will be compiled by the IAMC and reviewed on an annual basis with the Plan Monitoring Committee. These will include:

- Plan document and map editing work;
- revised planning priorities or new inventory information;
- changes to zone boundaries, objectives and strategies resulting from more detailed plans;
- changes required to reflect legislative and policy amendments;
- changes in local planning priorities; and
- results of major project reviews, special studies or treaty negotiations.

A formal Plan review and update is to occur in 2003, at which time all amendments made will be incorporated into a revised plan.

Issues involving interpretation of the Plan should be brought to the attention of the IAMC for appropriate action.

6.5 Future Planning Initiatives and Priorities

Implementation will also occur through the development of more specific, detailed planning activities. Such planning will be undertaken over time and is subject to available funding. Implementation of operational planning of forests in SMZ and EFZ units will be consistent with the objectives and zones established as a “higher level plan” under the *Forest Practices Code of British Columbia Act*.

Local planning initiatives and the resulting products will be guided by, and be consistent with direction in the Vancouver Island Plan.

6.5.1. Landscape Unit Planning

Landscape Unit planning will be led by the Ministry of Forests and the Ministry of Environment, Lands and Parks to address biodiversity requirements of the FPC. Landscape unit objectives will be consistent with resource management zone objectives established as higher level plans under the FPC.

Landscape Unit plans will be prepared according to the Regional Landscape Unit Planning Strategy found in Appendix 1, and as amended from time to time by the Ministry of Forests and the Ministry of Environment, Lands and Parks. Plans will be developed on the basis of the Landscape Unit Planning boundaries and priorities identified on **Map 9** and in Appendix 1.

6.5.2 SMZ Area Planning

SMZ areas will be planned in accordance with the objectives and strategies identified in section 4.3.1. The SMZ plans will also address the issues stakeholders and interests identified in the Planning Framework Statements identified in Appendix 3.

Wherever possible, the planning of SMZ areas will be incorporated into planning of the associated Landscape Planning units.

6.5.3. Protected Area Planning

Management planning for protected areas will be undertaken by BC Parks. This planning will include a high degree of public and stakeholder involvement. BC Parks will work closely with First Nations and community resource boards in the planning process to address issues such as type of uses, levels of development, management of natural, recreational and cultural values. Given the timelines involved in good public consultation and limited staffing, these plans will be developed over time with priority given a number of considerations. These include values at risk or threat; complexity and depth of issues; degree and intensity of public and government agency interest; and formal agreements with other agencies or First Nations.

The two main instruments for directing park management are Management Direction Statements and Master Plans. A Management Direction Statement (MDS) will be created for each protected area unless a Master Plan is recommended as the initial level of planning due to specific issues and values. MDS provide the initial strategic management direction for all protected areas while Master Plans establish operational planning priorities that reflect the need to manage for the long term (200 years) requirements of the ecological components of protected areas. MDS do not negate the need for future, more detailed plans. Instead they will provide direction for such plans, as well as provide direction for the development of annual management for individual protected areas

6.5.4. Coastal Planning Processes

Coastal planning processes will be undertaken for coastal planning units, guided by the priorities identified in Appendix 1 and shown on Map 9. Coastal planning may be done for a variety of purposes and programs, and at various scales.

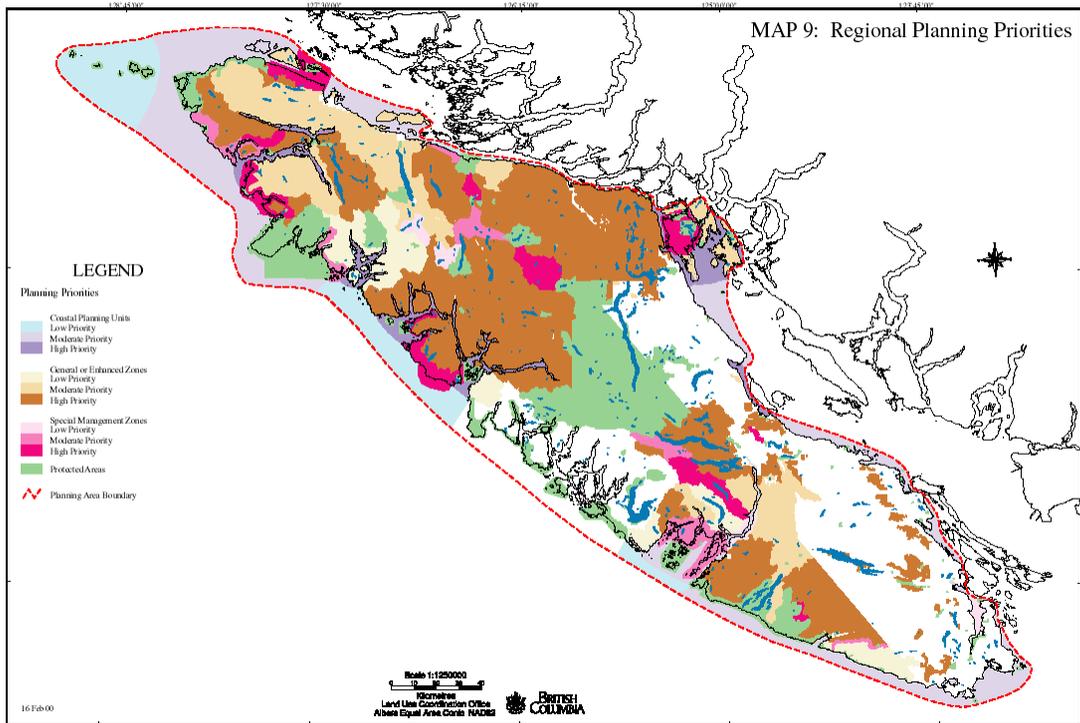
The province will collaborate with federal agencies, local government and First Nations in the planning of coastal areas. Coastal planning will utilize a public participation model appropriate for the scale of planning and the issues being addressed.

In accordance with the federal/provincial Marine Protected Areas Strategy, coastal planning will include consideration of possible MPA candidates.

6.5.5. Settlement Planning Processes

Settlement planning will be undertaken pursuant to the *Municipal Act*, and regional growth strategies pursuant to the *Growth Management Act*.

Map 9: Regional Planning Priorities



Map 10: Visual Resources in Special Management Zones

