

Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

Prepared for:

Regional District of Mt. Waddington,

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MAP INFORMATION

Existing Tourism Use	<u>File Size</u>
Study Area Base Map	1,492KB
Tourism Operator Facilities / Base of Operations	990KB
Tourism Features, Routes and Activity Sites	1,435KB
Tourism Use	1,095KB
Tourism Product Capability	
2WD Touring	1,026KB
4WD Touring	1,126KB
Heritage	986KB
Marine Cruising	1,036KB
Ocean Kayaking	1,015KB
Snowmobiling	986KB
Wildlife Viewing	1,000KB

Mt. Waddington Tourism Opportunity Study

Executive Summary

Adventure tourism and backcountry recreation have become increasingly important components of the tourism industry in the province, particularly along the coast. The North Island has numerous high quality natural resources upon which many of these recreation activities depend. Inventorying and evaluating these resources is an important step in assessing potential opportunities for tourism development.

Evaluating the potential for further development of forest recreation and tourism business opportunities requires sound resource capability information. This information is intended to assist businesses, community groups, and First Nations, in their efforts to develop forest recreation and tourism business opportunities. This data will also provide government agencies such as the Ministry of Forests (MOF) and the Ministry of Small Business, Tourism and Culture (MSBTC) and the Ministry of Environment, Lands and Parks (Lands Division) with important decision-making information.

The terms of reference for the study were prepared and the project was initiated in June, 1997. The study area consists of the Regional District of Mount Waddington on northern Vancouver Island. This area encompasses the Vancouver Island portion of the Port McNeill Forest District.

The overall purpose of the project was to provide analysis which:

- Reviews existing tourism products and recreation activities
- Details products/activities for which capability modelling can be conducted
- Describes methods used in the modelling
- Identifies areas of potential for tourism and recreation
- Specifies the nature of these opportunities and constraints.

The review of existing tourism products is summarized in the following tables.

Accommodation Properties and Units by Type

Type	Number of Facilities	Number of Units
Hotel	11	405
Motel	5	103
Motor Inn	2	68
RV Park	17	632 (Sites)
Lodge/Resort	9	54

Charter Boat	1	
Cabins	5	19
Bed & Breakfast	48	120
Other	7	27
Total	105	796 units / 632 sites

Non-Accommodation Facilities by Type

Attractions		Services	
Attraction	6	Festival/Event	2
Arts/Culture	10	Food and Beverage	17
Museum	2	Fishing Charters	33
		Outdoor Adventure	15
Recreation facilities			
Recreation	8	Transportation	
Golf	2	Tour Operator	4
Marine	4	Transportation Service	10
Ski	1	Service Station	11
		Other	8

The analysis conducted focuses on a number of different tourism products. Many areas of high capability are unique to the product being analyzed, however, there are several areas where the high capability rankings tend to concentrate. These are as follows (from south to north around the coast).

- Johnstone Strait north of Robson Bight
- Telegraph Cove
- Nimpkish Lake, River and Estuary
- Coast south of Port McNeill
- Cormorant and Malcolm Islands
- Coast north of Port McNeill
- Fort Rupert
- Nigel and Balaklava Islands
- Coal Harbour
- Quatsino

- Holberg
- San Josef Bay and Raft Cove
- Winter Harbour
- Klaskino Inlet
- Klaskish Inlet

Acknowledgments

The collection, analysis and interpretation of the information presented in this report has been conducted by the Economic Planning Group (EPG). EPG was also responsible for the facilities database design, tourism product modelling, and overall project management. The computer mapping portion of the project was conducted by Enkon Environmental Limited. Their work included the acquisition of digital files from existing sources, and digitizing of new information, plus the production of facilities and features maps, and tourism product maps. Facility operator interviews and questionnaire completion was conducted by Ms. Mary Murphy.

The authors would like to thank the tourism facility operators of the North Island region for their interest and assistance in providing information on their businesses. Without their cooperation, the facility inventory would not have been possible. Thanks is also given to the Ministry of Small Business, Tourism and Culture (MSBTC), and the Ministry of Forests (MOF) - Port McNeill District for making available their digital inventory files.

We would also like to thank all the project Steering Committee members for their direction and guidance in the design and preparation of this inventory and opportunities study. Particular thanks is extended to Mr. Bruce Whyte, MSBTC for his input and advice, and to Ms. Annemarie Koch, Economic Development Officer for her project administration. The members of the Steering Committee are as follows:

Mr. Cam Brady	Ministry of Forests, Port McNeill District
Ms. Donna Gault	Vancouver Island North Visitors Association
Mr. Mark Harvey	Ministry of Environment, Lands and Parks
Mr. Russ Hellberg	Regional District of Mount Waddington
Ms. Annemarie Koch	Regional District of Mount Waddington
Ms. Teresa Welsh	Mount Waddington Community Resource Board
Mr. Bruce Whyte	Ministry of Small Business, Tourism & Culture

1. Introduction

1.1 Background

Adventure tourism and backcountry recreation have become increasingly important components of the tourism industry in the province, particularly along the coast. The North Island has numerous high quality natural resources upon which many of these recreation activities depend. Inventorying and evaluating these resources is an important step in assessing potential opportunities for tourism development.

Evaluating the potential for further development of forest recreation and tourism business opportunities requires sound resource capability information. This information is intended to assist businesses, community groups, and First Nations, in their efforts to develop forest recreation and tourism business opportunities. This data will also provide government agencies such as the Ministry of Forests (MOF) and the Ministry of Small Business, Tourism and Culture (MSBTC) and the Ministry of Environment, Lands and Parks (Lands Division) with important decision-making information.

Many of the area's resources are located on Crown Land and information is required which will assist in determining areas offering development potential. To assist in this process the tourism sector representative of the Mount Waddington Community Resource Board, approached the Board of the Regional District of Mount Waddington, proposing that the Regional Board sponsor a study which would:

- define priorities and opportunities for backcountry recreation and adventure tourism development in the regional district and facilitate land tenure applications by providing required planning information to BC Lands.
- attempt to minimize conflicts between recreation and tourism users of Crown Land tenures and other Crown Land tenure users.
- provide a blueprint for the development of recreation and tourism opportunities in the northern Vancouver Island portion of the Mount Waddington Regional District to generate investment and employment opportunities in the area.

The terms of reference for the study were prepared and the project was initiated in June, 1997.

The following agencies have had a role in the project:

- The RDMW was responsible for overall project management and administration
- The MOF is responsible for the administration and management of public or non-commercial recreation on Crown lands and supplied information of forest recreation.
- BC Lands administers commercial recreation enterprises operated on a fee for use requiring a Land Act tenure or license, and supplied information on existing Crown Land leases.

- The MSBTC is responsible for ensuring tourism values and interests are considered within the context of its role in provincial, regional and sub-regional land, water and resource use planning initiatives, and provided information from their resource inventories.
- Forest Renewal British Columbia (FRBC) provided funding for the project.

1.2 Objectives

The overall purpose of the project was to provide analysis which:

- Reviews existing tourism products and recreation activities
- Details products/activities for which capability modelling can be conducted
- Describes methods used in the modelling
- Identifies areas of potential for tourism and recreation
- Specifies the nature of these opportunities and constraints.

The specific objectives as outlined in the terms of reference were to:

- Meet with the Steering Committee to discuss strategies for project completion
- Import all existing Forest Recreation Inventory (FRI) and Tourism Resource Inventory (TRI) data sets and develop a working base map
- Develop an operator questionnaire
- Develop product/activity models
- Contact tourism operators and record information on tourism facilities
- Compile a database of information on tourism operators
- Complete all mapped coverages of tourism and recreation resource information
- Prepare preliminary tourism product capability maps
- Review product capability maps with Steering Committee and community/industry representatives
- Edit maps and prepare final capability maps
- Prepare an inventory user manual and development opportunity report

1.3 Products and Deliverables

The following products and documentation have been prepared.

Digital files in ARC/ INFO export and IGDS format, at 1:20,000 scale in BC Albers projection on NAD 83 datum. These files include:

- existing forest recreation/tourism facilities (points) with associated attributes
- existing forest recreation/tourism use areas (polygons) with associated attributes
- existing forest recreation/tourism features (points/lines/polygons) with associated attributes
- capability for forest recreation/tourism products/activities (polygons) for six separate products

Also prepared is this report/users manual.

1.4 Methodology

The overall approach for this study was as follows:

1. Meet with the Steering Committee to discuss approaches, data sources, timeframes and milestones.
2. Identify and import existing digital data sets of biophysical, forest recreation, and tourism resource inventory digital files.
3. Identify existing tourism operators and update facility information and operator use areas.
4. Assemble above information in digital files to accommodate subsequent analysis.
5. Select six tourism products to be modelled.
6. Develop mapping models for these products using the resource information collected in the above steps.
7. Run the product models and produce maps depicting areas of low, medium and high resource capability.
8. Host two Open Houses in the study area to discuss the process, display the draft results, and solicit comments on product capability, resource conflicts, and constraints.
9. Prepare a draft report and maps summarizing the opportunities for tourism/recreation development.
10. Revise the draft report based on Steering Committee input and submit final report and product capability maps.

1.5 Study Area

The [study area](#) is the Regional District of Mount Waddington on northern Vancouver Island. This area encompasses the Vancouver Island portion of the Port McNeill Forest District.

2. Secondary Source Information

Two key sources of existing information were used in this analysis. The Vancouver Island Tourism Resource Inventory documents a large number of physical resources on Vancouver Island, and was accessed from the Land Use Unit of the Ministry of Small Business, Tourism and Culture. The Forest Recreation Inventory was accessed from the Port McNeill Region of the Ministry of Forests. Both are described below.

2.1 Tourism Resource Inventory

- **Methodology**

The Tourism Resource Inventory contained a number of files that were used for this inventory, identified from the list of coverages completed. These included general information of use in our analysis, plus specific information useful for the product modelling. The files were made available electronically, downloaded from the Ministry's FTP site, and cropped to cover the North Island Study Area. This information was accessed from either the Tourism Resource Inventory (TRI), the Coastal Tourism Resource Inventory (CTRI), or the Land Use Coordination Office (LUCO).

- **Results**

The following files or coverages were obtained.

Table 2-1

Tourism Data Sources

Topic or File	Description
TRI/CTRI	
Base Map	Rivers, Streams, Lakes, Wetlands, and Shoreline
	Roads and Trails
	Communities
Features	List of tourism/recreation features important to various activities or tourism products
Digital Elevation Model	Groups of elevation contours
Heritage	Location of heritage features
Harbours	Location of harbours and anchorages
Exposure	Shoreline exposure categories
Shoreline Type	This information was incomplete in the study area and was delineated on marine charts and digitized
Wildlife (Marine File Names)	
Birdcolony	Location of seabird colonies
Grywhale	Spring migration route of grey whales and resident population

Kwhale	Concentration of resident and transient killer whale populations
Otter	Location of sea otter colony
Sealion	Location of sea lion colonies
LUCO	
aculture	Aquaculture and agriculture sites
existingpa	Existing protected areas as used in the CORE process
s2final	New protected areas
allprivate	Private land
lias20	Low intensity use areas as described in the Vancouver Island Land Use Plan
settlement	Communities and population centres

2.2 Forest Recreation Inventory

Forest Recreation Inventory information exists for the entire study area, with the exception of parks and private land. It represents four TFLs, (Tree Farm License) and three TSAs (Timber Supply Area). The forest recreation coverages were made available in both digital and map form. The maps included 40 sheets in a mixture of 1:20,000 and 1:50,000 scales. These maps contained a great deal of recreation features and activity information of which only a portion was relevant to the product modelling. To focus on the relevant recreation features, the information was consolidated and targeted to the tourism products for which capability analysis was conducted.

• Methodology

Major recreation attributes (features and activities) and recreation sites and trails were identified and plotted onto two separate 1:250,000 maps - one for features and activities, and one for sites and trails. The main sources of information included TSA and TFL recreation inventory maps and Ministry of Forests and TFL recreation brochures and guides. Parks and private land information was obtained from Canada Land Inventory recreation maps.

A number of land, water and touring based tourism products were candidates for modelling. This list of products was subsequently reduced to six: Ocean Kayaking, Wildlife Viewing, Boat Cruising, Touring, Heritage/Culture and Snowmobiling. Table 2-2 lists the various FRI (Forest Recreation Inventory) attributes that potentially have application to one or more of the tourism products. (Five additional products for which significant resources exist were also tabulated.)

The general approach in identifying relevant recreation attributes was to:

- Manually identify all FRI polygons on the source maps which have one or more of the Specific or General recreation attributes as listed in Table 2-2.
- Indicate the location of recreation attributes with a point or line on a 1:250,000 topographic base map. Approximately 270 points or lines were identified.

- Identify the type of attribute, using a mapping code of 15 different lower case letters (see Table 2-3). The mapping code conforms closely with the FRI Activity Codes, (e.g., “a” for angling, “b” for boating, etc.).
- Attach “+” to the mapping code when it is associated with a Very High (Class “A”) or High (Class “B”) recreation feature significance class polygon. This was done to potentially allow for segregating “high” and “moderate” importance of attributes for purposes of tourism product modelling. Class “C” polygons were also included if the attribute was specific to one of the selected products.

It is noted that large areas of marine coastline rated High in significance but no relevant features were associated with the areas (e.g., “Vx” for Visual Sensitivity and “Q3” for Shoreline are used). Also, these areas almost invariably had the “b” boating and “a” angling activity codes associated with them. Consequently, extensive areas of significant marine shorelands had little specific information that was useful for tourism product modelling.

- **Results**

The following tables illustrate the results of the coding and analysis. Table 2-2 depicts the specific and general resource attribute features that are relevant to the tourism products selected for assessment. Table 2-3 depicts the features and activities that are applicable to the selected tourism products.

Table 2-2
Recreation Inventory Attributes
Application To Tourism Products

	S N O W M O B I L I N G	O C E A N B R I K A Y A K I N G	W I L D L I F E V I E W I N G	C R U I S E S A I L I N G	T O U R I S M	C U L T U R E		W I N D S U R F I N G	C A V I N G	D I V I N G	S A L T F I S H I N G	F R E S H F I S H I N G
FOREST RECREATION INVENTORY ATTRIBUTES, FEATURES & ACTIVITIES												
SPECIFIC ATTRIBUTES												
A1 - SPORT FISHING a - angling		o		o							X	X
B2 - SAND BEACH B3 - PEBBLE BEACH B4 - COBBLE BEACH		X		o	o							
L5 - KARST k - caving					o				X			
U- HARBOUR		o		X								
Wx - WILDLIFE FEATURES q - wildlife viewing		o	X	o	o							
Cx - CULTURAL Hx - ARCHAEOLOGIC-HISTORIC Px - HISTORIC-ARCHAEOLOGIC					o	X						
b - boating-sailing				X								
d - kayaking-rafting		X										
e - scuba-skin diving										X		
w - snowmobiling	X											
z1 (b) - windsurfing								X				
GENERAL ATTRIBUTES												
A2 - AQUATIC HABITAT			o		o					o		
A3 - FISH RUN VIEWING n - nature study			o		o							
D - HYDROLOGIC FEATURE		o		o	o							
E1 - ALPINE/SUB-ALPINE					o							
E3 - CONIFEROUS (Old Growth)					o							
F1, F2 - WATERFALLS		o		o	o							
G1, G2 - GLACIER-SNOWFIELD					o							

Jx - COASTAL FEATURES		o		o	o								
Lx - LANDFORM FEATURES					o								
Rx - ROCK-FOSSIL FEATURES					o								
Sx - SPRINGS Z4 - hotspots bathing					o								

X = specific attribute with strong applicability to a Tourism Product

o = general attribute with complementary applicability to a Tourism Product

Table 2-3

North Island Tourism Attribute Coding

MAPPING CODE	FRI FEATURES	FRI ACTIVITIES	TOURISM PRODUCT
a - angling	A1 - Fish	a - angling	Fishing
b - boating		b - boating/sailing	Boat Cruising
c - culture	Cx - Cultural Hx - Historic/Prehistoric Px - Prehistoric/Historic		Heritage/Cultural Touring
d - kayaking		d - kayaking/rafting	Ocean Kayaking
e - diving		e - SCUBA diving	SCUBA Diving
f - waterfalls	Fx - Waterfalls		Touring Ocean Kayaking Boat Cruising
h - beach	Bx - Beaches	h - beach activity	Ocean Kayaking Touring Boat Cruising
j - coastal (estuary, lagoon, tide flat, rip tide)	Jx - Coastal Dx - Hydrologic		Ocean Kayaking Boat Cruising Wildlife Viewing
k - caving	L5 - Karst	k - caving	Caving
n - natural/vegetation	E1 - Alpine E3 - Coniferous (old growth)	n - nature appreciation	Touring
q - natural/wildlife	A2 - Aquatic Habitat A3 - Fish Runs Wx - Wildlife E8 - Wetlands	q - wildlife viewing	Wildlife Viewing Touring
r - natural/physical	Rx - Rock/Fossil Lx - Landform (canyon, landslide)		Touring

u - harbour	Ux - Harbour		Ocean Kayaking Boat Cruising
w - snowmobiling		w - snowmobiling	Snowmobiling
z - windsurfing		z(b) - windsurfing	Windsurfing

- **General Comments Regarding Each Recreation Attribute**

a - angling - applies to freshwater lakes and rivers; on marine waters the “A1” Fish feature category and “a” Angling Activity are ubiquitous on the FRI maps

b - boating - this attribute was rarely used because it is ubiquitous to all marine areas with no indication that any areas are more significant than others for boating

c - culture - includes the identification of a limited number of historic sites, historic routes, cultural and First Nations’ features

d - kayaking - the FRI mapping has very little data for kayaking

e - diving - the FRI diving activity mainly applies to the Nigel to Gordon Islands area

f - waterfall - several site-specific waterfalls and a few areas of rapids on the larger rivers are identified

h - beach - identifies, sand, gravel and cobble beaches

j - coastal - identifies shorelines of interest because of the presence of estuary, lagoon, tide flat, pocket beaches or exposed, rocky, shorelines

k - caving - the FRI data included numerous, very large polygons of L5 (Karst) terrain; only the more site-specific cave openings or groups of caves are identified

n - natural/vegetation - identifies two main types of features: attractive alpine areas and old growth forests (significant old growth forests were inferred from the presence of the “E3” feature in Very Highly (Class “A”) (sometimes Highly, Class “B”) significant polygons

q - natural/wildlife - identifies areas with potential for wildlife viewing and fish run viewing

r - natural/physical - identifies significant rock formations and landforms such as canyons, fossil deposits and landslides

u - harbour - bays and protected areas offering small boat protection or moorage potential

w - snowmobiling - the FRI data only showed one or a few high-elevation areas noted for snowmobiling

z - windsurfing - FRI data for this activity applies only to Nimpkish Lake

- **Recreation Sites And Trails**

The following categories of recreation sites and trails were plotted onto a 1:250,000 topographic base map, approximately 55 sites and 30 trail/routes were identified:

C campsite point data

P	picnic site	point data
L	boat launch	point data
T	trails	line data (point if only a short trail)
R	Routes	dashed-line data

The main sources of information for the recreation sites and trails were the Port McNeill Forest District Recreation Map, several TFL recreation and road guides and a trails booklet.

There are some inconsistencies with this data as a particular site may be referred to differently by different sources, i.e., as a campsite by one, as a picnic site by another source. Similarly, there is sometimes a poor distinction between an established trail and a route with few or no improvements.

- **Recreation Attribute Sources**

- (1) TSA (Timber Supply Area) - Ministry of Forests, twenty-six 1:20,000 planimetric recreation inventory maps (1993). These maps generally cover the following areas: north coast of the island west of Port Hardy, Nigel to Malcolm islands, island coast east of Beaver Cove, west coast areas between Quatsino Sound and Klaskish Inlet.
- (2) TFL #6, Western Forest Products - six 1:50,000 topographic recreation inventory maps (1987). These maps generally cover areas around: Holberg, Quatsino, Rupert and Neroutsos marine water bodies and Victoria Lake. This data also covers the present-day TFL #25 (Interfor) southeast of Port Hardy around Waukwaas and Keogh drainages.
- (3) TFL #39, MacMillan Bloedel - four 1:50,000 topographic recreation inventory maps (1986/87). These maps generally cover the Raging River drainage and the chain of lakes of Alice, Maynard and Kathleen lakes.
- (4) TFL #37, Canada Forest Products - two 1:50,000 planimetric recreation inventory maps (covering portions of nine 1:50,000 NTS areas) (1993?). These maps generally cover the Nimpkish lake-river drainage.
- (5) TFL #47, Timber West - two 1:50,000 topographic recreation inventory maps (1986). These maps generally cover the Kokish and Bonanza drainages.
- (6) Canada Land Inventory - 1:250,000 published Recreation Capability map (1967) used as a data source for larger park areas with no available FRI mapping such as at Cape Scott, Brooks Peninsula and Schoen Lake.

3. Tourism Facility Information

3.1 Tourism Facilities

A major objective of the study was to update the listing of tourism operators in the study area. This included basic information to identify the facility, plus information on a range of attributes descriptive of the facility's features.

This information was collected using an operator questionnaire. (See Appendix B.) This four page form included information on facility name and location, type of facility, months of operation, kinds of activities provided, types of services offered, levels of use, and numbers of employees. Additional details were obtained on separate types of facilities including attractions, campgrounds, charters, food and beverage, festivals or events, golf courses, marinas, museums, service stations, ski areas, recreation facilities, and transportation.

- **Methodology**

The following procedures were adopted:

- Obtained the electronic files of the tourism facility inventory for Vancouver Island conducted by the MSBTC in 1996 and cropped the data to include only the North Island.
- Designed a facility operator questionnaire. Circulated to the Steering Committee for review. Finalized the questionnaire.
- Created a list of all accommodation, attractions, recreation facilities, services and transportation facilities.
- Hired a local consultant to conduct the operator interviews.
- Contacted all (or all who could be identified) tourism operators and completed the facility questionnaire.
- Designed a facility inventory data entry system.
- Entered all facility questionnaire information into the database.

- **Results**

The interview and facility inventory process took place during July, August and September, 1997. This is typically a very busy time for tourism operators, but these persons were generally very helpful and forthcoming with their information. Attempts were made to include every tourism facility or business that operated in the North Island during the summer 1997. However, as with any inventory, it is difficult to be 100% complete as a result of:

- business start-ups and closures
- businesses not listed in any of the local directories, guidebooks, or reference sources

- lack of interest in being included
- business operators not available during the inventory period

In spite of the above, we anticipate that the inventory is approximately 95% complete, as of September 1997.

The following tables summarize the questionnaire responses.

Table 3-1
Accommodation Properties and Units by Type

Type	Number of Facilities	Number of Units
Hotel	11	405
Motel	5	103
Motor Inn	2	68
RV Park	17	632 (Sites)
Lodge/Resort	9	54
Charter Boat	1	
Cabins	5	19
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Other	7	27
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Table 3-2
Non-Accommodation Facilities by Type

Attractions		Services	
Attraction	6	Festival/Event	2
Arts/Culture	10	Food and Beverage	17
Museum	2	Fishing Charters	33
		Outdoor Adventure	15
Recreation facilities			
Recreation	8	Transportation	
Golf	2	Tour Operator	4
Marine	4	Transportation Service	10
Ski	1	Service Station	11
		Other	8

3.2 Use Areas

One of the objectives of this study was to update information on the locations and areas that operators use as part of their businesses. This focuses on the areas where fishing guides, wildlife viewing operators, etc., take their clients. This process was applicable mainly to adventure tourism/outdoor adventure activities.

- **Methodology**

The following process was followed:

- Prepared blueprint copies of the study area topographic map (1:250,000 scale)
- As part of the interview and questionnaire completion process, each outdoor/adventure tourism operator was shown a copy of the map and asked to draw a line around the area(s) that they use
- This resulted in 24 maps covering a total of 53 operators, with approximately 150 polygons.
- Since more than one operator could be active in the same area, the use area polygons were consolidated and transposed to a single map and each polygon numbered. This resulted in a total of 38 unique, non-overlapping polygons.
- An Excel spreadsheet database was developed listing the name and ID number of each operator, and the relevant polygons numbers.
- This database was integrated into the ArcInfo GIS.
- Each polygon was digitized to provide a tourism use area map.

- **Results**

The following chart (Table 3-6) describes the areas used by each of the Study Area's 53 operators. It lists:

Map No.	The number of the field map used to draft the use areas
TourCode	The unique identification number of the operator
Operator	The name of the operation/business
Polygons	The number of the polygons used by each business

Table 3-6
North Island Use Area Polygons

Map No.	TourCode	Operator	Polygons
1. 1	100144	North Island Kayak Rentals	5 6 8 10 11 12 15 16 19 25
1. 2	102615	Raindance Charters	1 2 3 8 10 13 19 33
1. 3	101858	Codfather Charters	1 2 3 4 5 15 16 18 33
2. 1	102617	Westerly Charters	1 2 3 4 5 15 16 18 33
2. 2	100090	Eagle Adventures	15 16 17 20
2. 3	102616	Catala Charters	1 2 3 4 5 15 16 18 33
2. 4	100152	Air Rainbow	All
2. 5	100303	Canadian Helicopters	All
3. 1	102618	Dixon Charters	1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 18 21 23 24 25 31 32 37
3. 2	100131	Viking West Charters	1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 18 21 23 24 25
4. 1	102648	Magic Dragon Charters	6 24 26
4.2	102648	Shell Marine	1 2 3 4 5 6 15 16 18 21 23 24 25 26 33 34 37
4.3	102645	Kingfisher Charters	8 10 11 12 19
4.4	102647	Odyssey Kayaking	25 26
4.5	100006	All Kinds Trips	3 5 18 28
5.1	102649	Nimmo Bay Resort	All
5.2	102701	Seafox Charters	6 25 26 29
5.3	101932	End of the Line Charters	7 8 11 12 13 14 19 30 38
5.4	101940	First Light Charters	2 3 5
5.5	102650	Silver Seas Adventure	25 26 29 32
6.1	100979	Sea Fun Divers	3 6 19 15 29
6.2	102285	Sointula Beach House	25 29 31
6.3	102652	Jim Hauling Charters	11 13 17 30 38
6.4	101644	Silver King Ventures	1-19 21 23 24 25 26 27 29 31 32 33 34 37
7.1	102653	Starline Tours	6 23 24 25 26 29

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7.2	102654	Winter Harbour Resort	11
8.1	102664	High Five Fishing Charters	2 5 6 8 10 11 15 16 19 24 25 26 27 29 32 34
8.2	101562	Headwind Charters	6 24 25 26 27 29 32 34
9.1	102665	Arend's Enterprises Charters	2 3 5 15 17 18
9.2	102666	Swiftsure Charters	1 2 3 4 5 15 16 18
10.1	100125	Classic Charters	1 2 3 4 5 15 16 18 27 33 34
10.2	102667	Malei Island Charters	33
11.1	101020	Malcolm Island Lodge	6 24 26 27 28 29 31 32 34
11.2	102062	Last Resort Charters	11
12.1	100166	Telegraph Cove Resort	6 24 26 27 28 29 31 32 34
13.1	102670	Duval Point Lodge	2 3 5 15 33
13.2	102669	C-Scape Charters	8 10 11 12 13 19 38
14.1	102688	Mother Ship Adventures	6 24 25 26 27 29 32 34
14.2	101952	Frosty's Charters	10 11 12 13 17 19 30 38
15.1	102689	Pacific Rim Charters	25 26 31 34
15.2	100271	Island Sauvage Guiding	26 35 36
16.1	102690	Comox Valley Kayaks	25 26 31
17.1	102691	Wild Heart Adventures	25 26 29
18.1	102692	Free Spirit Charters	1 2 3 4 5 15 16 18 33
18.2	100122	God's Pocket Resort	3
19.1	102693	Amarak Sports Fishing	6 24 25 26 29 34
20.1	100167	Stubbs Island Charters	15 16 24 25 26 27
20.2	102320	Sure Hit Charters	6 24 26 29 31 32 34
21.1	102694	Blue Water Adventures	1 2 3 4 5 6 15 16 18 24 25 26 27 29 32 34 33 37
22.1	102678	Northern Lights Expeditions	25 26 29 31
22.2	102700	Scotia Bay Resorts	1 2 3 5 18 28 33
23.1	101023	Wayward Wind Whale Watching	6 24 25

4. Tourism Product Analysis

4.1 The Process

Early in the research program, a system was devised to assess and rank a series of tourism products. The system was intended to evaluate tourism products/activities against a series of criteria, in order to determine which tourism products appeared to offer tourism development potential. It was intended that those products/activities that were based on high quality resources; had market potential; and, generated economic benefits to the community, would form the basis of the opportunity analysis. This process was designed to be rigorous and defensible, while being consistent among the range of products.

The evaluation matrix rated 31 tourism products grouped under the following headings:

- Snow-based
- Water-based
- Land-based
- Touring
- Services

Each of these products was rated against the resource, the market, and the community criteria, using a scale of zero to four, where:

- 0 = N/A
- 1 = Poor
- 2 = Average
- 3 = Good
- 4 = Excellent

This process attempts to numerically rate each tourism product on a five point scale, based on the knowledge of the topic by the analyst. Although this process relies on the judgment of the evaluator, it allows a great deal of information to be summarized very concisely. A description of the criteria used for the evaluation is presented in Table 4-1.

Each product was put through the evaluation and the numbers totalled for each row. (See [Table 4-2](#)) The higher the number, the “better” the possible tourism potential for each product. It is important to note that all twelve evaluation criteria (column headings) are unweighted meaning all topics are deemed to be similar in importance. This was done intentionally so as not to skew the evaluation towards any one product or group of products.

Table 4-1
Definitions of Tourism Product Evaluation Criteria

Evaluation Criteria	Definition
<i>Resource Criteria:</i>	
Quantity	Refers to the extent of resources available to support each product.
Quality	Rates the quality of the resource from an activity or tourism perspective.
Accessibility	Refers to the ease with which the product can be accessed relative to distance, safety, terrain and parking.
Seasonality	Reflects the number of months or seasons during which the product can be utilized.
<i>Market Criteria:</i>	
Existing Market	Rates the importance of the product relative to the area's existing tourism market
Trends	Reflects consideration of local/regional/national trends in activity participation.
Market Potential	Rates the potential of the product to attract visitors or increase length of stay based on consideration of resource quality, existing market profile and market trends.
Geographic Origin	Refers to the number of visitor markets to which the product appeals. For the purposes of this analysis, the four market categories include: B.C.; Regional (border states and provinces); North American long haul; and International.
<i>Economic Criteria:</i>	
Job Creation	Rates the likely job creation potential associated with expanding the market for each product.
Job Duration	Reflects the duration (in weeks/months of the year) of jobs created to support each product. (Should be similar to resource seasonality.)
Tourism Revenue	Rates the amount of revenue generated (or the amount of money spent) by tourists, to participate in the activity.
Employment Income	Rates the contribution of the product to the generation of employment income based on direct and spin-off job creation.

4.2 Tourism Product Selection

The Study Team reviewed the list of 35 products to determine which of these products should make up the six products to be modelled. It was considered important to develop a process for the selection of these products to ensure that effort was expended on the “best” or most viable products.

The Product-Market Match matrix was an attempt to assess, in a systematic way, subjective information about each product. The numeric totals indicated that the products tended to fall into three groups - those with scores over 30, those between 25 and 29, and those under 24. Ten products were in the over 30 category and another five in the 25 to 29 range.

This group of 15 was condensed to eleven based on some initial screening and consolidating. This list is as follows (in alphabetical order):

- boat cruising (power and sail)
- caving
- culture/heritage (European and Native)
- diving
- fishing (salt water)
- fishing (fresh water)
- ocean kayaking
- snowmobiling (included as the only winter/snow-based product)
- touring (ground and air)
- wildlife viewing (land and water)
- windsurfing (included because of the unique quality of the resource)

A series of criteria were considered in order to determine the most suitable products to model. The issues were:

- potential job generation (i.e., the number and seasonality of jobs that could be created, both directly and indirectly)
- business development opportunities (i.e., the ease with which the product can be put into place)
- future outlook for the product (i.e., where the product is in the product lifecycle - emerging, growing, maturing, declining)
- quality and quantity of the resource (i.e., how good the resource is and its competitive advantages)
- data needs (i.e., the data that is needed to run the models)

– data availability (i.e., the data that is available to run the models)

The following table (Table 4-3) charts information on the eleven products, grouped into primary and secondary categories. It is noted that the secondary group products are not necessarily less important, but rather products that have small niche markets and require special skills or equipment, (i.e., caving or diving), or are very dependent on resource availability (i.e., fish).

Table 4-3
Northern Vancouver Island Tourism Inventory
Product Selection Evaluation Matrix

Product	Score	Rationale	Data Needs	Data Availability
Primary Products				
Ocean Kayaking	35	Rapidly growing activity. Very good resources. (bays, shoals, wildlife, protected waters). Reasonably easy to develop.	Exposure Shoreline type Road access Beaches	Shoreline type not available for the north Island.
Wildlife Viewing	38 water 35 land	Very popular activity. Growing rapidly. Excellent water resources. Good land resources. Reasonably easy to develop.	Road access. Marine wildlife info. Land wildlife info. (species and abundance).	No ungulate info. available. Marine mammal info available through CTRIP
Boat Cruising	27	Growing activity. Excellent natural resources. Provides mix of economic benefits.	Marinas Anchorages Scenic Features	FRI features
Touring	33 road 30 air	Numerous logging roads. Variety of land and water scenery Broad market appeal. Tour development opportunities	Highways/roads Scenic Features	FRI features
Heritage/Culture	26 Euro 36 Native	Good European and excellent Native resources. Strong market appeal. Numerous development opportunities.	Heritage info. Native Cultural info. Access	TRI for Heritage. Native cultural data available but confidential

Snowmobling	22	Large network of logging roads for access and touring. Expanding markets. Good spin-off benefits for service sector	Road network Terrain info (DEM) Snowpack	Basic road data available. Snowpack contour line available.
Secondary Products				
Windsurfing	20	Very good resource at Nimkish Lake. Specialty activity with limited market	Road access. Locations with suitable winds.	Relatively easy to map locations.
Scuba Diving	38	Excellent quality resources. Specialty activity with limited market. Good spin-off benefits within the market.	Underwater resources (flora and fauna).	Information does not exist in digital form. May be relatively easy to map key locations.
Saltwater Fishing	34	Historically very important. Growth dependent on health of fishery. Mature product	Fish run info by species and by month	Not available digitally.
Fresh Water Fishing	27		Fish location info by river, by species and by month	Not available digitally.
Caving	Not rated	Very good resources. Small market activity.	Location of caves. Access roads	Information may be confidential.

4.3 General Coverage Models

Development of the product models indicated that two factors were of particular importance for nearly all the product models - namely access and features. Access refers to the ability or ease with which an area can be reached, either by land or by water. Features refers to the natural resources or facilities that exist in the area to enhance the visitor experience.

A third topic of importance to all the models was constraints, or land uses that would compromise or hinder the development of tourism. This included various kinds of existing use and various kinds of land designation.

- **Access Map**

The Access Map was designed to illustrate both the road network in the North Island and the opportunities for marine access. The **road access** layer included all paved and gravel roads in the study area. Basic road information was obtained from the regional district and from Terrain Resource Inventory Management (TRIM) data files from the provincial government.

A paper copy of a 1:250,000 scale map of logging roads was obtained from the Regional District. The Recreation Officer for the Port McNeill Forest District reviewed the map and marked the logging road mainlines. This information was transferred to a digital plot of roads, which were re-digitized to distinguish the mainlines from the other logging roads.

All the roads were then “buffered” to create a swath or a linear area within which features or facilities may be located. Based on the volume to traffic and the ease of access, the three different classes of roads were buffered at three different widths.

- Paved 5.0 km (2.5 km either side of center)
- Mainlines 2.5 km (1.25 km either side of center)
- Other Gravel 1.0 km (0.5 km either side of center)

The **marine access** layer provides information on areas of the coast where it is possible land a small craft. The information is a combination of shoreline type and exposure. The information was expected to come from the Land Use Coordination Office (LUCO), however, data on the North Island was incomplete. Consequently, the shoreline designations were done manually on marine charts, and each segment digitized. The interpretation was provided by Mr. Bruce Whyte, Ministry of Small Business, Tourism and Culture, Inventory and Land Use Planning Unit.

Each segment of coastline was digitized. This created a series of coastal zones segmented by the suitability for marine access, based on categories of high, medium and low. Generally, steep shoreline or areas that are exposed to the open ocean received a low rating. Bays, coves, heads of inlets and other sheltered on gently sloping foreshore land received a high rating.

• Features Map

The other key topic which impacts most of the product models is features and facilities. The Recreation Features and Activities Map charts the location of resource features, and the location of things to see and do. The legend lists of numerous point recreation features which have been mapped and labeled, from angling to wildlife viewing. A series of approximately a dozen recreation activities have been delineated by lines. These range from angling (mainly river fishing) to windsurfing.

Point Recreation Features

Angling
Beaches
Boat Launches
Boating and Sailing Areas
Campsites (Public, Forest Service and

Linear Recreation Features

Angling
Beaches
Caving
Coastal
Culture

Private)	
Caving	Diving
Cultural Sites	Harbours
Diving Areas	Landforms
Harbours	Kayaking
Kayaking	Snowmobiling
Landforms	Vegetation
Picnic Sites	Wildlife
Vegetation Areas	Waterfalls and Rapids
Waterfalls	Windsurfing
Wildlife Viewing Areas	

- **Land Tenure and Use Map**

All of the capability analysis is based solely on the suitability of the physical resource to sustain the activity. A constraint to future tourism development is the current or planned use of the land and its tenure or designation. To illustrate land use issues, we charted and mapped several land designations. These included the following topics.

<u>Designation or Use</u>	<u>Source</u>
Protected Areas	Vancouver Island Land Use Plan (accessed from MSBTC)
Private land and Indian Reserves	Vancouver Island Land Use Plan (accessed from MSBTC)
Low Intensity Use Areas	Low Intensity Areas/Special Management Zones in Vancouver Island Land Use Plan
Local Recreation Use	Mapped by Recreation Officer, Port McNeill Forest District
Aquaculture and Agriculture Sites	Vancouver Island Land Use Plan (accessed from MSBTC)

5. Product Models

5.1 Modelling Process

The process of tourism resource capability analysis involved the following steps:

- determine the attributes or resource features that are required for each product
- ensure this information is available in digital form
- write a schematic model linking the product attributes to areas of high, medium and low capability
- program the digital data to create maps of product capability

It is noted that the product capability analysis process is a very powerful analytical tool, but should not be considered the final word on determining tourism development opportunities, as it does have a number of shortcomings. The strengths and weaknesses of the process are summarized below:

Strengths

- Capable of detailed analysis of large areas.
- Capable of analyzing a number of related and unrelated data sets.
- Capable of overlaying one resource coverage over another.
- Capable of changing the variables and conducting new analysis.
- Can be depicted visually in map form.
- Many different scales can be depicted.

Weaknesses

- Only as good as the input data.
- Requires field verification.
- Based solely on resource capability and hence does not consider market information.

Models have been developed for the following products/activities, in alphabetical order:

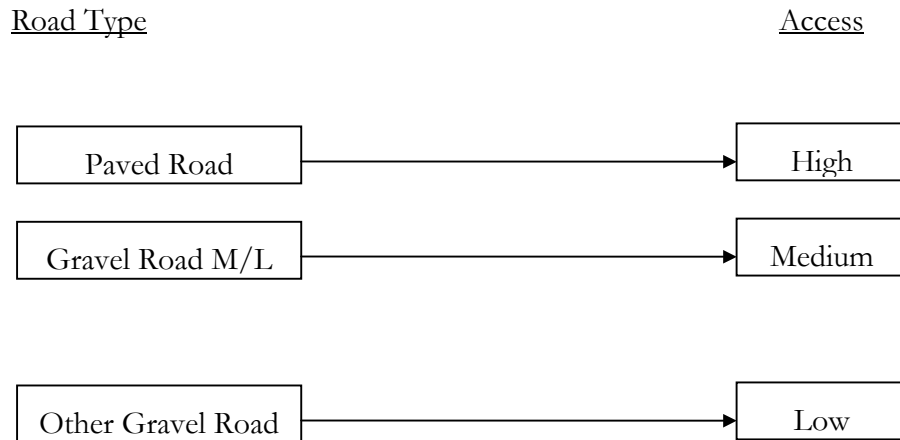
- **Cruising:** Powerboat or sailboat cruising in the waters adjacent to the study area shoreline. Generally involves small (not including car top boats) to mid sized craft.
- **Heritage:** The combination of European and First Nations heritage and culture. Involves archeological sites and built facilities.
- **Ocean Kayaking:** Involves the paddling of ocean style kayaks in the waters adjacent to the study area shoreline.
- **Snowmobiling:** The operating of motorized snowmobiles. Typically done on trails or in open glades or bowls in areas having reliable snow depth.

- **Touring:** Includes automobile and recreational vehicle touring on both paved and gravel roads.
- **Wildlife Viewing:** The observing of wildlife, including birds and sea mammals.

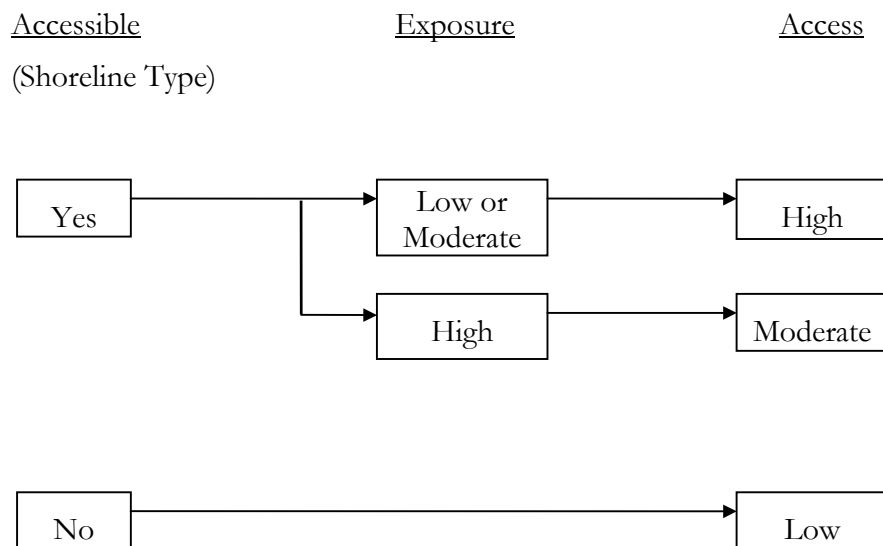
The key ingredients of these models are the actual resources needed to pursue the activity (i.e., snow for snowmobiling, protected waters for kayaking, animals for wildlife viewing, etc.), and access (the ability to get to the resource). The resources are unique to each activity but access and related features are consistent to all the products.

Figure 5-1
Access Model

Land Based



Marine



Shoreline Types

Accessible

Estuary
Intertidal flat
Mud flat
Sand flat
Beach (sand, gravel, cobble, pocket)
Lagoon

Not Accessible

Rock Formation
Rock Cliffs

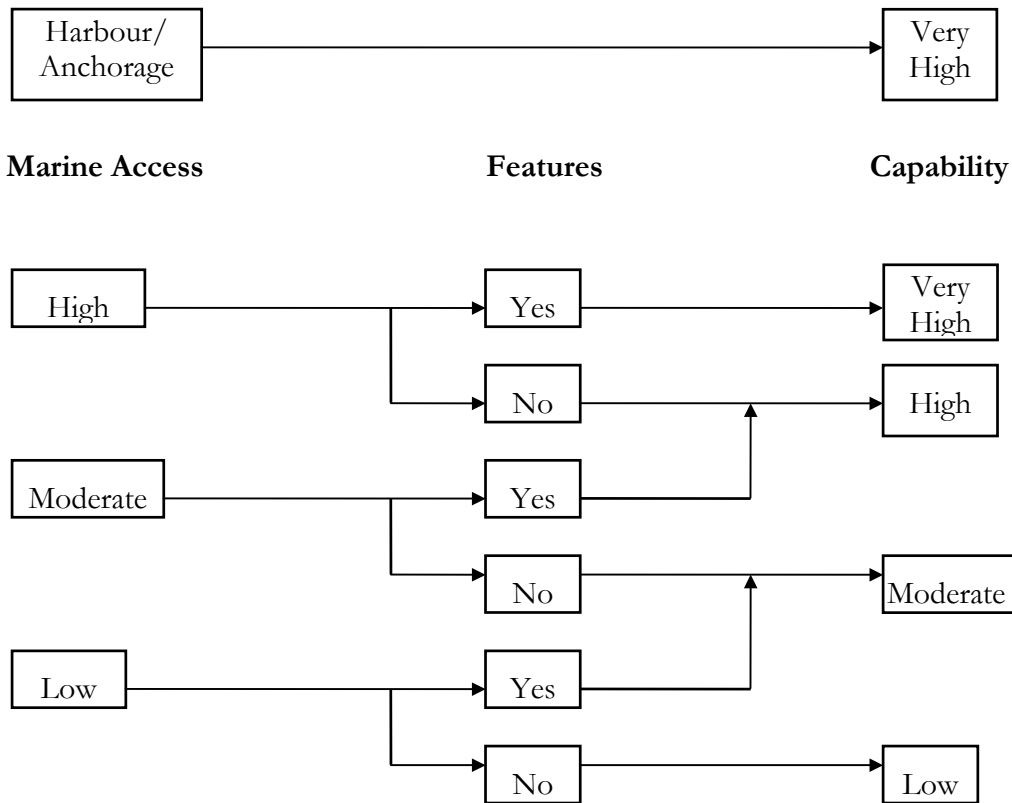
5.2 Cruising

• Product/Activity Attributes

Critical attributes for power and/or sailboat cruising are anchorages, marine access, exposure, and the existence of interesting shoreline features.

- Requires the Marine Access Model to determine the presence of marine access.
- Requires features from the TRI and FRI to determine the presence or absence of shoreline features.
- Marine Access model and features points are overlaid and modelled as per Figure 5-2 below.

Figure 5-2
Cruising Model



- **General Capability Observations**

The North Island has several hundred kilometers of shoreline, numerous islands and islets, dozens of bays and estuaries, and one major sound. Much of the coastal areas tend to be exposed to the weather, but numerous protected areas exist.

The areas rating very high tend to be the harbours, protected bays, and areas with gentle shoreline. These areas are concentrated along the eastern shoreline and around Nigel and Balaklava Island. The areas rating high include much of the east coast between Port Hardy and Port McNeill, Malcolm Island, Cape Scott, Winter Harbour, and Klaskino Inlet.

The areas rated as moderate include much of the west and north coast. The low area include Quatsino Sound, Holberg Inlet, Rupert Inlet, and Neroustsos Inlet.

- **Highest Ranking Areas/Sites**

- Robson Bight
- Telegraph Cove

- Alert Bay
- Nimpkish River Estuary
- Port McNeill Harbour and northern coast
- Port Hardy
- Balaklava Island
- Browning Pass
- Cape Scott
- Koprino Harbour
- Klaskish Basin

• **Constraints**

The main constraints include the distance from the main boating centres to the south, the distance between harbours and anchorages in the Study Area, plus visibility and inclement weather. The availability of fuel and marine supplies and services is also a limiting factor.

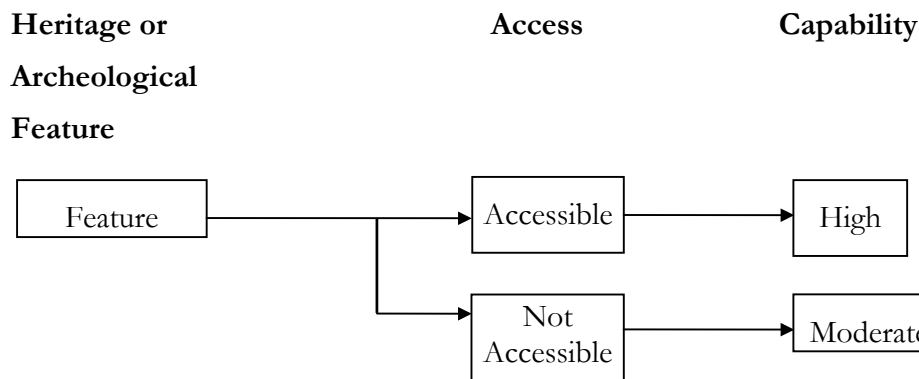
5.3 Heritage

• **Product/Activity Attributes**

Critical attributes for development of the heritage/culture product are the existence of heritage or archeological sites, and the ability to be able to access the sites.

- Plot all heritage sites (points).
- Determine those that fall within the access buffers and classify those as high.
- All others that are not accessible are ranked as moderate.

Figure 5-3
Heritage Model



- **General Capability Observations**

There are numerous heritage sites in the Study Area distributed from south to north, as well as along the coast and inland. By definition, all the sites ranking as high are accessible. These sites tend to reflect the broad industrial heritage in the area which includes logging, transportation, mining, fishing, and whaling. It also includes the military presence in Holberg and the settlements at Cape Scott and Sointula. It is noted that the area also has a rich native culture and history but the archeological information on the location of these sites is confidential to ensure their protection.

- **Highest Ranking Areas/Sites**

The high ranking sites can be grouped into three categories.

- Coast: Beaver Cove, Nimkish River, Port McNeill, Cape Scott, San Josef Bay, Raft Cove
- Inland: Woss Lake, Nimkish Lake, Atlack Lake
- Communities: Port McNeill, Fort Rupert, Coal Harbour, Holberg, Quatsino, Port Alice, Winter Harbour

- **Constraints**

There are several constraints to the development of heritage as a theme for the area, and preservation of the resources is perhaps the most serious. Most are outdoor resources and artifacts, subject to deterioration in the elements. Other constraints include ease of access, land tenure, and the funds required to restore the buildings and artifacts depicting the area's history.

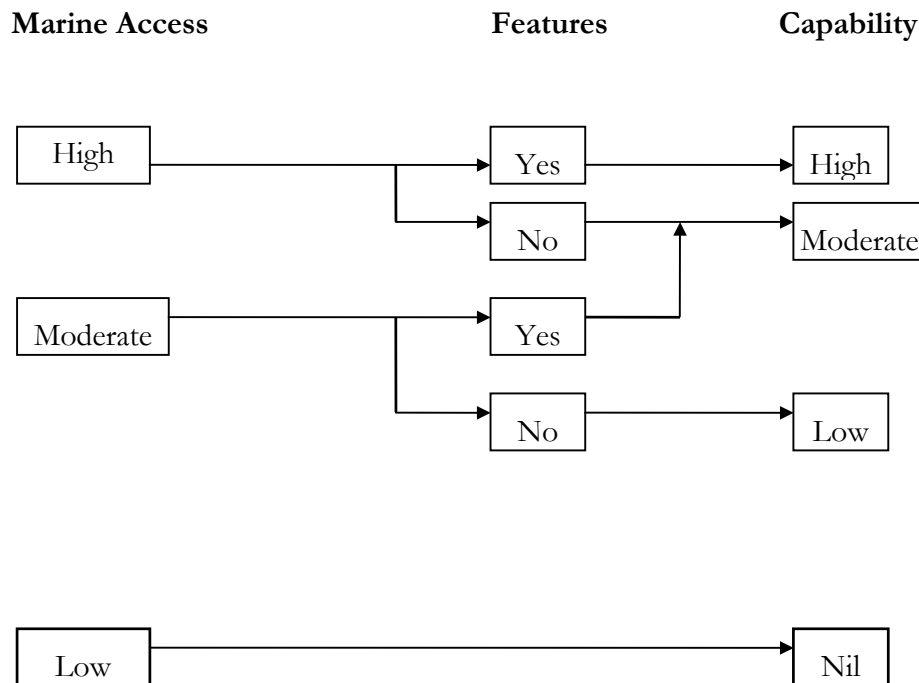
5.4 Kayaking (ocean)

- **Product/Activity Attributes**

The critical attributes of ocean kayaking are protected or non-exposed paddling areas, accessible shoreline, and the existence of interesting features along or near the shore .

- Access the marine access coverage layer.
- Overlay the features coverage layer.
- Map the incidence of high, medium and low capability based on Figure 5-4 below.

Figure 5-4
Ocean Kayaking Model



- **General Capability Observations**

Virtually all of the best kayaking areas are along the east coast of the Study Area. These include Robson Bight, Telegraph Cove, Nimkish River Estuary, portions of the coast between Port McNeill and Port Hardy, Balaklava Island, and parts of Nigel Island. Areas ranked as moderate include parts of the coast between Port McNeill and Port Hardy, Cormorant Island, Malcolm Island San Josef Bay, Raft Cove, Winter Harbour and Klaskino Inlet. Due to exposure, nearly all of the west coast is ranked as low for kayaking capability.

- **Highest Ranking Areas/Sites**

- Robson Bight
- Telegraph Cove
- Nimkish River Estuary
- parts of Hardy Bay and Duval Island
- portions of the coast between Port McNeill and Port Hardy
- Balaklava Island and Browning Pass
- parts of Nigel Island

- **Constraints**

The key constraint to increased ocean kayak use of the area is the widely distributed location of the sites. Often the best sites are isolated and travel between sites is in unprotected waters. There is also likely to be increased competition for the best bays and coves by other marine users including floating fishing camps and aquaculture sites.

5.5 Touring

- **Product/Activity Attributes**

Critical attributes for vehicle touring are the existence of roads and the presence of interesting features. This is the case for both 2 wheel drive and 4 wheel drive touring. However, 2WD touring requires paved or hard surfaced roads as the primary attribute, while 4WD touring requires the existence of a network of less accessible roads. Note that 4WD model is the opposite of 2WD model.

- Use the Access model which separates the roads into paved, mainline and other gravel.
- Isolate the features and buffer roads as per the Access model.
- Apply capability analysis to the road segments as per the model in Figure 5-5 below.

- **General Capability Observations**

The North Island has a variety of roads and road types. The paved roads provide access to the North Island, and link the key communities, (particularly on the east coast and in the central areas). Mainline gravel roads provide access to the other communities. A vast number of logging roads provide access to the backcountry. The approximate length of roads in the area as follows:

- Paved 300 km
- Mainline Gravel 800 km
- Other Gravel 4700 km

Two Wheel Drive Touring

Generally, the paved roads were categorized as having moderate capability for touring, with localized areas of high capability based on the existence of specific features. Most of the mainlines were ranked as having low capability, with pockets of high capability based on features.

By definition, touring is a mobile activity and the ideal configuration is a loop. No paved road loops exist, but several paved/mainline gravel road circuits are possible. These are note below as loops. The following is a listing or the areas ranking highest for two wheel drive touring.

- Port McNeill to Telegraph Cove
- Woss Lake to Port McNeill
- Nimpish River Bridge to Port Hardy
- Port Hardy to Coal Harbour
- Highway 19 to Port Alice
- Port McNeill to Alice Lake to Three Lakes Creek (Loop)
- Circuit around Victoria Lake and Alice Lake (Loops)
- Nimkish Lake to Bonanza Lake (Loop)

- **Constraints**

In the paved road options, the key constraints or limitations is the overall appeal or draw of the North Island. A vehicle trip to the North Island involves a trip up and back on the same road. A touring trip to the area will likely involve a visit to one or more communities. Growth of the touring product will rely on the success of the North Island in promoting its unique resources and encouraging people to visit.

The gravel road constraints are centered around the use of these industrial roads during active logging hours. This is more of a cautionary issue than a constraint.

Four Wheel Drive Touring

The striking factor about the Four wheel drive Touring Map is the vast number of logging roads suitable for off-road touring. There are several hundred individual logging roads (with a combined total of approximately 4,700 km), situated throughout about 80% of the Study Area. This provides a tremendous resource 4WD touring.

The main concentrations of logging roads, from south to north are around the following features:

- Vernon Lake
- Woss Lake
- Bonanza Lake
- Nimkish Lake
- Victoria and Alice Lakes
- Coal Harbour
- Holberg
- Winter Harbour

• Constraints

The key obstacles to furthering the development of off-road touring are the industrial use of the active roads and the regular deactivation of many of the other roads. The former issue involves safety of both recreational and industrial users of the roads. There is also an issue of road damage and equipment vandalism. The latter issue refers to the regular program of de-activating roads that are no longer in use for timber harvesting. This involves blocking access by trenching or mounding.

5.6 Wildlife Viewing

• Product/Activity Attributes

The critical attributes of wildlife viewing are the presence of wildlife and the ability to access the viewing sites. The model hierarchy is based on the relative number of species that could be expected in various zones. Since access is predominately a shore based attribute, access has not been included in the analysis.

Note that due to lack of information on land based animals, the wildlife viewing model focuses on marine mammals. It is also noted that information does not exist to rank the quality of the viewing experience.

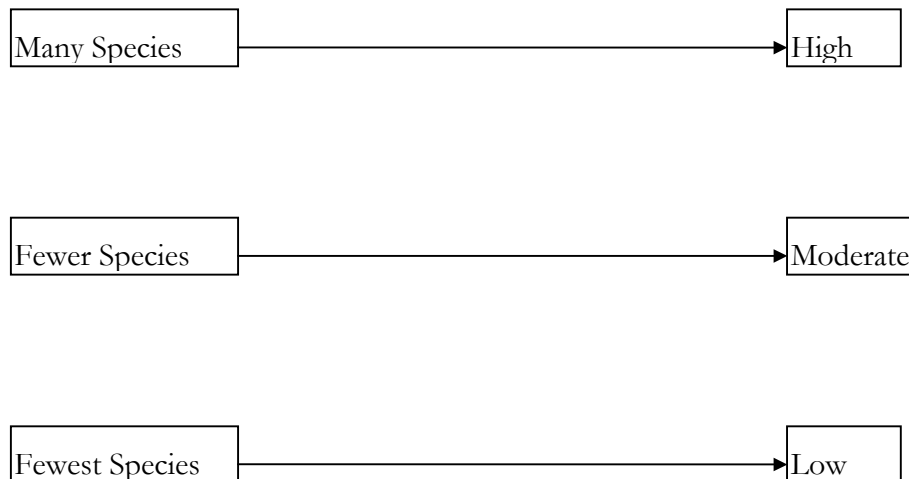
- Utilize marine wildlife information from the Coastal Tourism Resource Inventory
- Incorporate wildlife features from the FRI.
- Draw buffers around clusters of wildlife points or polygons.
- Apply the wildlife viewing model as described in Figure 6 below.

Figure 5-6

Wildlife Viewing Model

Wildlife Features

Capability



• General Capability Observations

The marine capability analysis for coastal BC was prepared by the Coastal Tourism Resource Inventory Project (CTRIIP). This digital inventory recorded the locations where several key species of marine mammals and marine birds are expected to be found. Marine mammals tabulated include harbour seals, sea lions, sea otters, gray whales and killer whales. The sea bird inventory includes the location of bird colonies, concentrations of sea ducks and marine birds, and bald eagles.

With the exception of point locations for the bird colonies, the moderate and low capability areas cover large areas. This occurs due to the mobile nature of the animals included in the inventory.

Generally, the highest ranking areas are small islands and islets where bird colonies are located. The moderate ranked area includes the entire Johnstone and Queen Charlotte Straits. The lower ranked area is the west coast of the Island, Quatsino Sound and the waters south of Malcolm Island. The different rankings of these two large areas is due to the presence of killer whales on the mainland side of the Island.

Commercial wildlife viewing opportunities, for marine wildlife, appear to be very good in the North Island generally. This is because of:

- the number of mammal and bird species
- their relative abundance
- their concentrations during much of the year
- the existence of highly prized species (i.e., killer whales and bald eagles)

- **Constraints**

Constraints to increased wildlife viewing are minor and relate to the mobile nature of the animals and the reliability of finding them.

5.7 Snowmobiling

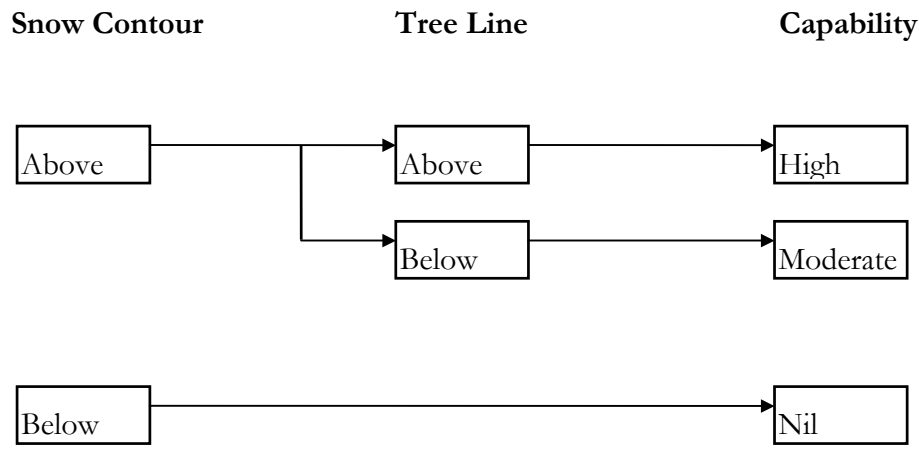
- **Product/Activity Attributes**

The critical attributes for snowmobiling are areas having suitable snow depth, (at least one metre and preferably above tree line), and the ability to access these areas.

- Plot the snow contour above which consistent snow can be expected. For the North Island, this was deemed to be 1,000m.
- Overlay the vegetation layer to depict alpine areas.
- Plot road access to the base of the snowmobile areas.
- Define areas as per the model in Figure 5-6 below.

Figure 5-7

Snowmobiling Model



• **General Capability Observations**

Snowmobiling was selected as a potential product because of its anticipated suitability to the North Island. In fact, the maritime influence of the climate renders the few potential areas to the highest mountain peaks. These are all located in the Study Area's southern portion.

Seven areas were delineated by the computer modelling process as having some snowmobiling potential. All of these were designated as moderate with no sites having high capability. All are similar in size at approximately 7 to 10 square kilometres, and are all accessible by road. Terrain analysis (degree of slope) was not analyzed, although it is expected that much of the terrain is steep and unsuitable for the recreational snowmobiler. Consequently, it is unlikely that a viable commercial snowmobiling venture could be sustained in these areas.

5.8 Other Tourism Products

The objective of this project was to research and model resource capability of six products. Rationale for the selection of the chosen products was outlined in Section 4.2, but generally it had to do with the high quality of the resource, market potential, and relative ease of development or entry into the market. This section also indicated that several other products appeared to have development potential, based on the availability of good quality resources. These products were caving, fishing, scuba diving, and windsurfing. Resource descriptions of these activities are described below.

• **Caving**

Caves exist in the extensive karst formation that occur in the study area. Karst is the limestone formations of underground streams, sinkholes, springs and caverns. Based on Geological Survey of

Canada maps, karst formations occur in a broad band in the central portion of Vancouver Island which extends through the Mount Waddington Regional District. This material covers about 4% of Vancouver Island in which there are an estimated 1,000 caves.

Vancouver Island has more known caves than the rest of Canada combined, and internationally is known as the “Island of Caves”. Most of the known caves are on Northern Vancouver Island, including Canada’s longest and deepest caves.

The MOF Recreation maps identify numerous caves in the higher elevation regions in the southwestern portion of the study area. Many sites have been identified and explored while many more are known but not publicized to protect them from vandalism. Due to the extensive nature of the karst formations, many more caves are expected to exist but are as yet undiscovered.

- **Fishing**

Saltwater fishing for salmon has historically been the most popular visitor activity over the last few decades. The area is noted for its high quality fishery of all five species of salmon (but particularly coho and spring), and more recently for bottom fish (halibut, ling cod and snapper). Numerous productive fishing locations exist, both on the east and west side of the Island. Reduced fish stocks over the past few years, combined with changing regulations and adverse publicity, has dramatically affected the commercial sports fishing industry.

Fresh water fishing is a popular activity in the area’s many lakes rivers and streams. The current issue of BC Fishing Directory and Atlas lists 26 rivers and 24 lakes containing various species of trout and salmon. Depending on the season and the water body, species include rainbow, cutthroat and brown trout, dolly varden, summer and winter run steelhead, plus coho and spring salmon. Due to the vast network of logging roads in the area, nearly all rivers and lakes area road accessible.

- **Scuba Diving**

British Columbia is reputed to have some of the best diving waters in the world, based on the variety of marine flora and fauna. Vancouver Islands reputation as a dive destination has been enhanced recently with the sinking of several Canadian naval ships as artificial reefs. These ships have been sunk off Sidney, Nanaimo, Sechart and Campbell River.

Diving in the North Island is popular in many locations in Queen Charlotte Strait, Johnstone Strait, and parts of Qatsino Sound. The more well known dive sites are around the islands off Port Hardy, in Goletas Channel, Browning Pass, and around Cormorant Island.

- **Windurfing**

Windsurfing is a specialized activity, pursued in a very limited number of locations in British Columbia. The most well known sites are the Squamish Estuary and Harrison Lake on the mainland, and Nitinat Lake and Nimpkish Lake on Vancouver Island. These sites are popular because of the predicable and sustained thermal winds.

At Nimpkish Lake, the study area contains one of the two most popular windsurfing locations on Vancouver Island and one of the few in the province. The location favoured by windurfers is the

southern tip of the lake where the on shore winds funnel down the lake. A Forest Service campground is located here.

6. Conclusions

6.1 Tourism on the North Island

- **The Past**

Tourism has historically been a relatively minor component of the economy of the North Island. This was particularly the case up to the 1980s, due to the relatively small numbers of visitors to the area, and the dominance of primary industry. Forestry has been by far the major economic sector, but the area has had a thriving mining and fishing industries.

Over the last two decades tourism has grown slowly but steadily. It has grown in actual numbers of visitors due to several factors. One was the advent of the BC Ferries terminal moving from Kelsey Bay to Port Hardy in 1979, to service the Inside Passage run to Prince Rupert. Another factor was the construction and paving of Highway 19 from Campbell River to Port Hardy. A third development has been the huge expansion in adventure tourism and wildlife viewing. Another factor has been the draw or appeal of the area's unique resources, including caving, windsurfing and scuba diving.

The area's tourism plant consisted of small hotels, motor hotels, and motels. In recent years there has been a significant increase in B&Bs. The area has good (although only one) road access, scheduled air service out of Port Hardy, several marinas and harbour facilities, ferry service to Prince Rupert, and a ferry service to Sointula and Alert Bay. The area hosts several annual festivals, has a mix of food and beverage facilities, and has numerous land and water based commercial tour companies. The area offers much outdoor adventure recreation including sports fishing, boating and skiing.

Tourism statistics prepared by Tourism BC in the late 1980s provide the following characteristics of non-resident visitors:

Number of visitor parties was only 1% of the Vancouver Island total.	42,000 vs. 3,090,000
High proportion of packaged tours.	19%
Most travel parties are couples.	60%
Most visits occurred in July and August.	55%
Very high percentage are non Canadian.	26% California, 22% other US, 27% Int'l
Major interest is touring and sightseeing.	68%
Preferred accommodation was campgrounds and the homes of friends.	28% campgrounds, 37% friends

The Future

The Canadian tourism industry is likely to witness many significant changes entering into the new millennium. These changes are being brought on by such factors as much improved transportation, vastly improved technology, volatile world economies, and demographic shifts.

Tomorrow's tourists are also changing in terms of their attitudes and expectations. It is expected that there will be greater demand to experience something different and educational. There will be more viewing and observing, and increased interest in learning about different cultures. Tomorrow's travellers will also be more adventurous and spontaneous, and be interested in high quality, natural settings. Another trend is increased interest in travel providing a sense of achievement in addition to rest and relaxation. These factors will have significant implications for tourism on the North Island.

The Canadian Tourism Commission (CTC) has recently published a report entitled - *Travel Forecast 2000*, July 1997. This report addresses a number of issues which are expected to impact tourism. We have used this source and others to relate some of the more pertinent issues for the North Island over the next decade.

Table 6-1
Implications of Travel Trends

Travel Trend	Implications for the North Island
An aging population	More people with the interest and financial means to travel
Greater proportion of empty-nesters	As above
Steady economic growth anticipated in North America and much of the western countries	Tourism tends to follow the economy - people will have the means to travel
Travel will continue to increase as a popular topic for discretionary spending	Increased market size
The Internet will emerge as a major travel booking tool	Tourists will be able to deal directly with the tourism service providers
The Internet will become a powerful marketing tool for operators	Very economical marketing technique for all operators, especially small businesses
Specialty tour operators and travel agencies will replace the generic companies	Local tour companies will be able to target their marketing to the tour operators that specialize in their product
Growth in accommodation chain affiliation	Opportunities for existing and new operators to affiliate with well know brand names
International air travel is expected to get less expensive and grow in size	Increased access to international markets
Vancouver's share of international air traffic is expected to be the highest in Canada	Vancouver is the gateway airport for long haul traffic to BC

Existing and new resorts will increasingly specialize in specific markets	Northern Vancouver Island has a number of high quality specialty products
Growth in combined business/pleasure market	Opportunities to increase corporate share of the travel business
Health concerns could reduce the popularity of traditional “sun destinations”	Increased popularity of less sunny destinations and for more off-season travel
Adventure tourism will continue to grow	Increased interest in existing and new outdoor adventure products
Continued interest in cultural tourism	Opportunities to build on First Nations, Finnish and Danish settlements and history
Sustainable tourism will grow	Added opportunities to ensure protection of tourism resources, and to control tourism growth

The North Island’s tourism industry have historically been based on outdoor/adventure style activities, and we anticipate that this trend will continue. Adventure tourism relies on high quality physical resources and the study area possesses a number of resources that are of provincial or national significance.

The activities that are based on these high quality resources include ocean kayaking, salt and fresh water fishing, whale watching, caving, windsurfing, and scuba diving. The study area is readily accessible by road, air and water, and the area’s resources are very accessible by the network of logging roads. Opportunities exist to build on the area’s growing reputation as destination for a mix of outdoor recreation pursuits.

6.2 Specific Opportunity Areas

The analysis described above focuses on a number of different tourism products. Many areas of high capability are unique to the product being analyzed, however, there are several areas where the high capability rankings tend to concentrate. These are as follows (from south to north around the coast).

- Johnstone Strait north of Robson Bight
- Telegraph Cove
- Nimpkish Lake, River and Estuary
- Coast south of Port McNeill
- Cormorant and Malcolm Islands
- Coast north of Port McNeill
- Fort Rupert
- Nigel and Balaklava Islands

- Coal Harbour
- Quatsino
- Holberg
- San Josef Bay and Raft Cove
- Winter Harbour
- Klaskino Inlet
- Klaskish Inlet

6.3 Where to from Here

This analysis has focused on resource capability for a series of selected tourism products. It has identified a number of areas and sites that appear to have tourism development potential. The process has been successful in narrowing the focus to a handful of areas that represent “a few percent” of the land area in the North Island. To ensure that this analysis is of assistance to expanding the tourism industry in the area, a series of actions are recommended.

- Make this report available to interested parties
- Encourage BC Lands to use the analysis in evaluating pending land use tenures
- Review options for encouraging development of selected sites and areas.
- Conduct market research reviews of the selected products to verify financial viability.

7. Appendices (links to pdf files)

Appendix A – Tourism Business Listings

Appendix B – Tourism Operator Questionnaire

Appendix C – Questionnaire Categories and Codes