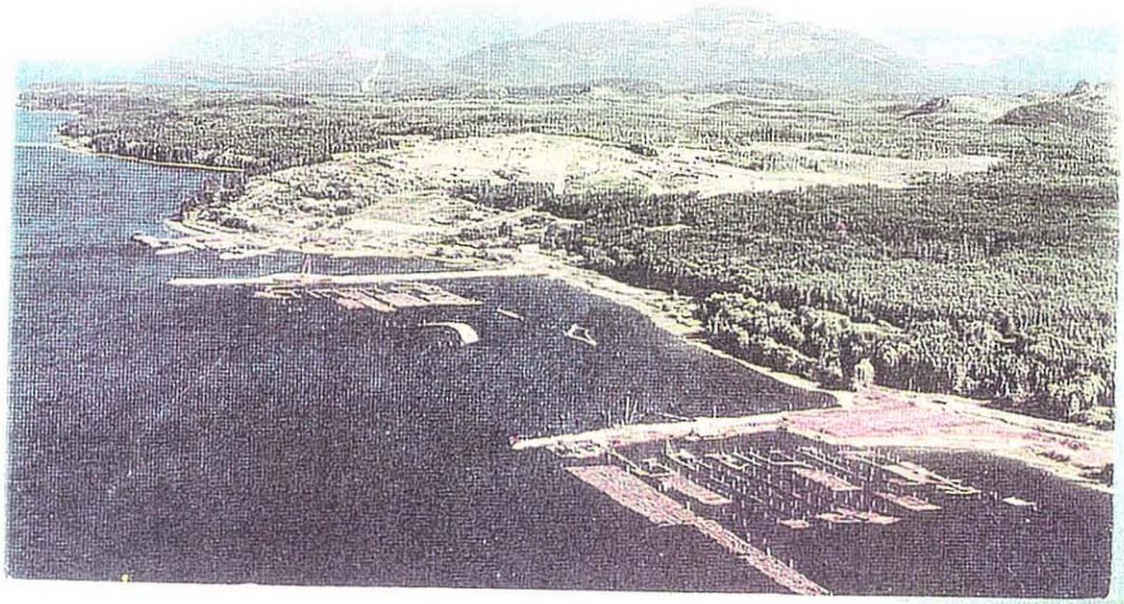
TOWN OF PORT MCNEILL

Official Community Plan



October 1997

TOWN OF PORT MCNEILL
BYLAW NO. 490, 1997

A Bylaw to adopt the Town of Port McNeill's Official Community Plan Bylaw No. 490, 1997.

WHEREAS the Council wishes to adopt a new Official Community Plan pursuant to Part 29, Division 1 of the Municipal Act;

AND WHEREAS the Council in its consideration of this bylaw had due regard to the requirements of Section 947 of the Municipal Act;

NOW THEREFORE the Council of the Town of Port McNeill in open meeting assembled hereby enacts as follows:

1. This bylaw shall be cited as the "Town of Port McNeill Official Community Plan Bylaw No. 490, 1997".

2. The following schedules attached hereto are hereby made part of this bylaw and adopted as the Official Community Plan for Port McNeill:

   2.1 Schedule "A" - Text

   2.2 Schedule "B" - Land Use Map

   2.3 Schedule "C" - Development Permit Areas

3. All dimensions and other measurements in this bylaw are expressed in the Metric system. Equivalents in the Imperial system (acres, feet, etc.) shown in brackets are included for convenience only, and do not form part of this bylaw.

4. The Town of Port McNeill Official Community Plan Bylaw No. 290, 1986 is hereby rescinded.

5. If any section, subsection, sentence, clause or phrase of this bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder.

Read a first time the 4th day of March, 1997

Read a second time the 4th day of March, 1997

The Public Hearing was advertised in the North Island Gazette newspaper on March 12th and 19th, 1997.

Public Hearings were held on the 24th day of March and the 15th day of April, 1997.

Third Public Hearing advertised in the September 3rd and September 10th, 1997 editions of the North Island Gazette.

Third Public Hearing was held on the 16th day of September, 1997

Read a third time the 16th day of September, 1997

Reconsidered, finally passed and adopted on the 7th day of October, 1997.

Mayor

Municipal Clerk

Certified to be a correct copy of Bylaw No. 490, 1997 as adopted.

Municipal Clerk

BYLAW NO. 490, 1997

SCHEDULE "A"

OFFICIAL COMMUNITY PLAN

TOWN OF PORT McNEILL

APLIN & MARTIN CONSULTANTS LTD.

PROJECT NO. 96086

1997

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Appendix (ii) Shoreline Habitat Assessment, Port McNeill, BC, Gary Williams & Associates

OFFICIAL COMMUNITY PLAN, PORT McNEILL, B.C.

1. INTRODUCTION

Community planning is a strategic management process by which a community directs change, and shapes its future rather than reacting to change. The community planning process should be inclusive and involve the participation of community stakeholders, all citizens/residents, landowners, and elected and appointed officials.

The updated Official Community Plan for Port McNeill has analyzed the social and economic environment, and identified a range of opportunities and constraints governing future development before recommending a course of action to guide the future growth and development of the municipality.

1.1 OFFICIAL COMMUNITY PLAN (OCP)

An OCP, as mandated by Part 26 of the Municipal Act, is a general framework or pattern for directing the physical growth of the Municipality in a manner which is consistent with environmental and other requirements.

The Municipal Act specifically outlines the following elements for identification in the plan:

- Location of residential development;
- Location of commercial, industrial, institutional development;
- Sand and gravel deposits;
- Public use facilities such as schools, parks, waste disposal sites;
- Environmentally sensitive areas; and
- Location and phasing of any major road, sewer and water systems.

An OCP can outline areas and policies for heritage conservation, and local area revitalization; and prescribe guidelines to direct the form and character of commercial, industrial and multi-family development.

An OCP presents a long-range land-use strategy which serves as a guide for the day-to-day decisions regarding the rezoning or subdivision of lands.

Because of the significance of the forest industry to Port McNeill and the relevance of coastal environmental issues, two background studies have been undertaken as part of the OCP process. Forestry Economists F.L.C. Reed Associates were asked to prepare an updated perspective of the timber supply and contemporary issues in respect of processing and value-added enterprise. G.L. Williams & Associates have prepared an environmental overview of the issues associated

with coastal habitats and regulatory requirements. Both reports are included as appendices to the OCP and their recommendations incorporated as policies in the OCP.

1.2 PURPOSE OF THE TOWN OF PORT MCNEILL OCP

Port McNeill is a resource based community with a relatively young history. Consequently, conventional text book planning criteria and large city standards might not realistically apply (i.e., population/density ratios, park standards, retail/commercial square foot ratios). The updated OCP must consider and address the issues which are unique to Port McNeill's situation.

The specific purpose of the Port McNeill OCP will be to achieve the following broad objectives:

- Provide a focus for future development consistent with the Region's natural resource base;
- Provide direction to the future growth and development of the community in coordination with the provision of infrastructure services and the preservation of the environment;
- Provide senior governments with information and a certain direction for the future growth of the community;
- Provide the private sector with information about the suitability of the community for investment and the municipality's policies with respect to growth; and
- Establish a foundation and direction for the more site-specific regulations such as the Zoning Bylaw; subdivision control and other regulatory bylaws and guidelines.

2. COMMUNITY BACKGROUND

2.1 FUNDAMENTAL ISSUES

The Town of Port McNeill has been a centre of logging activity on Northern Vancouver Island since its inception as Pioneer Timber's logging camp in the late 1930's. The community has grown from a few homes and bunkhouses, as families replaced single employees during the 1960's. As most of the people work outside the community in the various forest company harvesting operations, the community can best be described as a residential and service community for the forest industry. The forest industry will likely continue to be the major employer in the North Island Region.

There is virtually no industrial tax base as there are no sawmills, pulp mills, mine mills or similar installations inside the Town boundaries. This has proven to be a major challenge to Port McNeill municipal councils since incorporation in 1966 (the first budget in 1966 was about $20,000.00).

Through donations and the work of volunteers, the Town has managed to stretch its tax dollars to produce a fairly complete municipal framework which includes amenities not normally found in a logging camp. The following issues pose a challenge to the long-term growth and stability of the Town.

2.1.1 Economic Base

The Town of Port McNeill is fundamentally a resource based community which has been historically dependent on the forest industry. Logging has played a major role in the community's economy since the 1930's. Because of a number of factors, the forest industry continues to be a major employer in the North Island Region. This trend will likely continue. The community in 1996 does not have a major secondary industry. The attraction of secondary industry and expansion of the tourist service sector are vital to the Town's economic future.

2.1.2 Commercial Development

Approximately one half of the commercial lands in Port McNeill are undeveloped particularly in the downtown core and in the vicinity of the shopping centers. It appears that general commercial development and infilling could occur without spreading out the commercial core. Attractive commercial enterprises in the downtown core with an orientation to the waterfront would be an asset.

2.1.3 Service Industrial

The downtown core is characterized by a mix of commercial activities and service industrial development. Additional industrial activities occur in the industrial area on Mine Road. The service industrial lands appear to be developing gradually and there is approximately 50 acres of undeveloped industrial lands in the Town's land supply.

2.1.4 Harbour Development

The Port McNeill harbour is constrained for expansion by the existing MacMillan Bloedel breakwater on the west and the Federal breakwater on the east. The inner harbour contains the Municipal Marina, the Department of Fisheries & Oceans (DFO) (formerly Public Works Canada) Marina and the Mid Coast Properties floats and fuel facilities where sea planes dock. The Small Craft Harbours Branch of the Federal Department of Fisheries and Oceans has prepared a Harbour Management Document (Westmar Consultants) (1990). The B.C. Aviation Council prepared a proposal (1984) to improve the Float Plane facilities in Port McNeill. Mid Coast Properties have prepared a marina development plan for the inner portion of water lot 1645 (Sandwell Swan Wooster 1990). The Town of Port McNeill Harbour Commission is actively pursuing harbour development options including potential development of Beach Camp as a marine industrial park and private marina combined with a rationalization of uses in the inner harbour.

The long-term development of the Town's marine industry is related to the port planning which effectively addresses the community's requirements, industry needs and environmental considerations.

2.1.5 Residential Expansion

The Town of Port McNeill has experienced considerable residential growth in the 1990's. The Town's engineering consultants have prepared a draft residential subdivision plan for the Pioneer Hill Subdivision which includes 85 lots. The MacMillan Bloedel lands towards Beach Camp are situated for expansion and it is understood that the municipality is actively discussing the development of these lands with MacMillan Bloedel. A mobile home park on Mine Road is in the planning stages by a private developer.

2.1.6 Land Tenure and Land Ownership

Most of the lands surrounding Port McNeill are owned by two major property owners (i.e., MacMillan Bloedel, Western Forest Products) thus creating a market situation which is not governed by conventional supply/demand considerations. Future development and municipal expansion must involve these major landowners.

2.2 COMMUNITY HISTORY

The Town of Port McNeill began as Pioneer Timber's Logging Camp which was floated from Malcolm Island in 1937. By 1959, a logging road linked Port McNeill to the Port Hardy airport. In 1961, Cominco established staff houses in Port McNeill for the Benson Lake Coast Copper Mine. The Town set aside 25 acres of land for future recreation and school facilities. The first residential subdivision was the 24 lot Kingcome Place. This was followed by Mount View Crescent, Woodland Drive, Englewood Drive and Cassiar Place. The Port McNeill Plaza was constructed in 1974 and the Pioneer Mall in 1979. The completion of the Island Highway in 1979

replaced the ferry from Beaver Cove to Kelsey Bay and reduced travel time to southern Vancouver Island.

2.3 REGIONAL ECONOMY

2.3.1 Forestry

Port McNeill's commercial, industrial and residential base is tied to the forest industry of Northern Vancouver Island, and the adjacent mainland to the north (see photos 1 and 2).

The major regional industrial sector on Northern Vancouver Island is the forest industry which includes the logging operations of MacMillan Bloedel, Western Forest Products, Canfor, Timberwest, and Interfor.

The Port McNeill Forest District collects over $150,000,000.00 in stumpage and royalties annually which is appropriated directly to provincial general revenue. Town Council contends that 10% of these revenues should stay in the region to assist various North Island communities to provide the same level of municipal services and infrastructure enjoyed by the neighbouring communities with major processing facilities such as pulp mills and sawmills (i.e., Campbell River, Powell River, Port Alberni, Nanaimo and Vancouver). Council feels that these municipalities benefit from an industrial tax base which is reliant on the resources produced by the North Island Region. This produces severe inequities at the local level owing to the disparity of income generated by industrial property taxes.

Historically, the distance from major markets and transportation costs have precluded the establishment of secondary wood processing in the region. Consequently, most of the major timber companies are committed to processing facilities outside the region. A study conducted for the Community Futures Society shows that employment in the forestry sector has been shrinking due to a number of factors including the following:

- Technological changes in harvesting;
- Changing wood markets and competition in fibre supply from other regions of the world;
- Changing harvesting and management regulations which have removed land from the forest base;
- Alienation of operable forest areas to parks and preserved areas; and
- Aboriginal land claims which result in uncertainty for investors.

Because of the changes associated with the forest industry and the potential impact on the Town of Port McNeill, Council authorized as part of the OCP, a Timber Supply study to be prepared by F.L.C. Reed and Associates. This study is included as an appendix to the OCP.

PHOTO #1 - MacMILLAN BLOEDEL DRYLAND SORT

PHOTO #2 - MacMILLAN BLOEDEL BOOMING GROUNDS

Reed identifies the diminishing timber supply and reduced annual allowable cuts on Vancouver Island due to a number of factors including the following:

- Protected Area Strategy;
- C.O.R.E. Program;
- Forest Practices Code; and
- Aboriginal Claims.

The coastal log harvest has diminished from an historic high of 33.8 million cubic meters in 1987 to 26 million cubic meters in 1995 (23% reduction). Reed examines the AAC's for the Timber Supply Areas (TSA's) and compares this supply to the Long-term Harvest Levels (LTHL's), as projected by the Ministry of Forests Timber Supply Reviews.

The Coast TSA's show a total volume reduction from 10.54 million cubic meters in the 1980's to 8.21 million cubic meters in 1996 (a 22.1% reduction). The Ministry of Forests projects a total long-term harvest level for the Coast TSA's at 5.6 million cubic metres (a further 32% reduction).

The Port McNeill Forest District is centered in the Kingcome TSA. The major tenure holders include Interfor, Western, MacMillan Bloedel, Mill and Timber, Richmond Plywood, Shushartie Log Sales and SBFEP. The major tree farm licences include TFL 6 and TFL 25 (Western Quatsino), TFL 39 (MacMillan Bloedel) and TFL 37 (Canfor, Nimpkish Valley). These TFL's had a combined AAC of 3.4 million cubic metres, of which most of the harvest is shipped to mills in the south or traded on the Lower Mainland or South Island log markets.

Reed reports that the timber supply outlook for the working circle within a 300 km radius of Port McNeill shows a loss of 2.1 million cubic metres since the 1980's and projects a further loss of 1.8 million cubic metres by the year 2025 (i.e., a total loss of 31%).

The coast-wide reduction in timber supply means that most existing mills on the coast are experiencing difficulty in finding wood supply, consequently, Reed concludes that it would be difficult to develop a prospect in Port McNeill which would divert existing commitment to a new venture unless existing facilities in urban areas are shut down. Reed suggests several options for forest related enterprises. These are outlined in Section 2.4.1 of the Plan.

2.3.2 Commercial Fishery and Aquaculture

Historically, the commercial fishery has been a significant industry on the North Island with approximately 300 locally licensed vessels and approximately 100 vessels that annually fish Areas 11 and 12 (i.e., Johnstone Straits and Queen Charlotte Strait). Most of the commercial fleet has been based in Alert Bay, Sointula and Port Hardy, with only a few boats based in Port McNeill. Additional employment is generated by processing plants and fish hatcheries.

The present commercial fishing industry is faced with numerous uncertainties due to changes in harvesting regulations and the license buy back program of DFO. However, the global market for fish products is strong and the North Island Region is an important location for fish hatcheries, the aquaculture industry and the commercial fishery.

Port McNeill has a good harbour. The community should continue to pursue its role as a site for seafood processing, aquaculture or processing of geoducks, urchins, octopus, kelp, etc. The regional aquaculture has resulted in construction and operational jobs in Port McNeill.

2.3.3 Mining

Although the B.H.P. Island Copper Mine, Port Hardy, has ceased production, mineral exploration and development has been significant on the North Island including Zeballos (gold and iron), Benson Lake (iron and copper), Nimpkish (iron), Yreka near Port Alice (copper) and Haddington Island (andesite). Ongoing exploration has continued at such areas as Craft Creek and Benson Valley, Holberg Inlet and Coal Harbour.

2.3.4 Tourism

The regional tourism industry has grown in significance since the completion of the Island Highway and the relocation of the B.C. Ferry Terminal to Port Hardy from Kelsey Bay and the introduction of the Mid Coast service in 1996.

The B.C. Ferry Inside Passage trip from Port Hardy to Prince Rupert is a major tourist attraction. Pleasure craft utilize the Inside Passage from Vancouver to Prince Rupert. Data derived from B.C. Ferries shows the significance of the Port Hardy to Prince Rupert run (see Tables (i) and (ii) below). Of note is the significant increase in volume of tour buses carried by the Queen of the North, as compared to the relatively moderate change in overheight and underheight vehicles.

It is felt that Port McNeill could examine this growing market and give consideration to future tourist initiatives such as forestry tours, charter fishing, and hotel accommodation to capture the growing bus tour market.

TABLE (i)
B.C. Ferry Data
Port Hardy - Prince Rupert
Annual Volumes 1990 - 1996

YEAR	BUS	CV	PVOH	PVUH	PASS
1990	181	210	4,380	13,345	69,481
1991	178	151	3,875	13,167	67,271
1992	179	144	3,703	12,399	64,875
1993	192	135	3,885	13,220	69,657
1994	256	145	3,985	13,444	71,357
1995	311	121	3,618	13,390	77,001
1996	331	150	3,764	12,913	72,175

TABLE (ii)
B.C. Ferry Data
Summer Volumes
1990 - 1996

YEAR	BUS	CV	PVOH	PVUH	PASS
1990	164	72	3,418	8,230	48,200
1991	165	54	3,111	8,142	47,184
1992	159	51	2,952	7,668	44,518
1993	177	46	3,147	8,282	48,153
1994	239	43	3,260	8,369	50,477
1995	295	32	3,005	8,311	54,108
1996*	226	27	2,423	6,088	50,562

*1996 is up to and including June

Bus - Bus Coaches
CV - Commercial Vehicles
PVOH - Private Vehicle Overheight
PVUH - Private Vehicle Underheight
PASS - Passenger

The Broughton Archipelago is a major destination for kayaking and whale watching. Cape Scott Provincial Park has become a major wilderness destination. Private resort developments like Telegraph Cove, Hidden Cove, Alder Bay, Greenway Sound, Sullivan Bay, Nimmo Bay Lodge and Stubbs Island Charters are important, and are serviced from Port McNeill.

A 1989 study estimated that the tourist industry provided 140 full-time seasonal jobs, 64,000 tourists traveled via B.C. Ferries and 28,000 tourists registered in private campgrounds, while 8,000 visited fishing lodges in the region. In 1995, kayakers numbering 8,000 launched from nearby Telegraph Cove.

2.3.5 Service Industries

Two major components of the service sector on the North Island in which Port McNeill plays a significant role are equipment sales, retail services and government services. Small business provides services in sales, repair and manufacturing (equipment repair, fuel, explosives, welding, machine shops, tire service) and professional services (finance, real estate, accounting, legal and insurance). Port McNeill business outlets supply other communities such as Sointula, Alert Bay, Bella Bella, Klemtu and outlying forestry and fishing camps.

The public sector includes such government agencies as DFO and Transport Canada (Federal), Ministry of Forests, Ministry of Health, Environment (Provincial) and local/regional government and School District No. 85.

2.4 FUTURE REGIONAL GROWTH

The growth of the regional economy will have a significant impact on Port McNeill's future. Regional growth will probably be generated by the small business sector which capitalizes on niche market opportunities in the resource sector and supply services. Because of its location and its historic role as a service and supply centre to the forest industry, Port McNeill's future role in the regional economy will be tied to forestry, fisheries, transportation and tourism, education and health services.

2.4.1 Forestry

In spite of changes in the forest industry, several potential opportunities exist for future development:

- Although the timber companies are harvesting to a closer utilization standard, waste and opportunity wood might be processed in an economical manner;
- New technologies for making use of wood waste;
- Silviculture, silviculture training and forestry management; and
- Niche market manufacturing.

2.4.2 Fisheries and Aquaculture

The commercial fishing industry is in a major state of uncertainty. However, the following opportunities exist in which Port McNeill might play a role:

- Expansion of aquaculture through increased tenures of shellfish and salmon farms;
- Seafood processing, if they relocate from the Lower Mainland;
- Custom processing of geoduck, octopus, sea urchins, clams, mussels, prawns;
- Cooperative venture between processors and aquaculture producers (Atlantic Salmon stock); and
- Scientific research and development related to the fishery or aquaculture industry.

2.4.3 Tourism

The tourism industry of the North Island will probably continue to expand due to the wilderness attractions of Cape Scott; the North Coast Trail; the B.C. Ferries Inside Passage route and the new Mid Coast service; the pleasure craft opportunities of the Broughton Archipelago; and Knight Inlet eco-tourism, diving and wilderness tourism.

Port McNeill's location, attractive setting and amenities position the community to capitalize on potential investment opportunities presented by a developing tourist industry. Opportunities for additional services opportunities might include the following:

- Possible hotel, conference centre facilities;
- Improved recreational vehicle parking;
- Downtown revitalization;
- Heritage development, logging history, forestry tours;
- Special events;
- Whale watching and eco-tour;
- Diving;
- Pocket cruises; and
- Joint tourism efforts with Sointula and Alert Bay.

2.5 PORT MCNEILL COMMUNITY PROFILE

2.5.1 Population

B.C. Stats conducts detailed population projections based on such variables as: fertility; mortality; and migration. B.C. Stats states that the reductions in the annual allowable cut and no appreciable mineral development to replace the Island Copper Mine closure could produce job losses and possible out migration in the Mount Waddington Region. B.C. Stats feels that the natural population increase will offset out migration for part of their forecast period. (i.e., 1996 - 2021) However, they forecast a population decline for the Mount Waddington Region.

Table (iii) below shows population projections for the Region.

Table (iii)
Population Growth Projections Mount Waddington Regional District

Year	Population Growth Rate	Population
1997 - 1998	-.9%	14,975
1998 - 1999	-.4%	14,834
1999 - 2000	-.3%	14,729
2000 - 2001	.0%	14,729
2001 - 2002	.1%	14,734
2002 - 2003	.2%	14,749

Source: B.C. Stats PEOPLE Projection 21

The Town of Port McNeill in 1996 has a population of approximately 2,925. Table (iv) shows the historic population growth of the municipality.

TABLE (iv)
Town of Port McNeill Population Changes 1976 - 1996

Year	Population	5 Year Population Change	5 Year % Change	Annual % Change
1976	1480			
	>	1294	+87%	17.5%
1981	2774			
	>	-214	-8%	-1.6%
1986	2560			
	>	81	+3.2%	+0.6%
1991	2641			
	>	159	+6%	+1.2%
1996	2925	284	+10.8%	+2.2%

(Source: Stats Canada)

The growth has been moderate and is due to employment in the forest industry, the change in housing from bunkhouse camps for single men to a community of family homes and normal services such as hospital, schools, recreation facilities, retail services, and light industrial services.

Table (v) below compares the differences in population by age group between the years 1986 and 1991. At the time of the plan review, no detailed demographic breakdown was available for 1996 census data.

TABLE (v)
Port McNeill Population by Age Group

AGE GROUP	YEAR		
	1986	**1991**	**1996**
0 - 9	400	485	490
10-19	465	520	510
20-34	820	695	705
35-64	715	880	1,140
65+	35	45	80
Total	**2,435**	**2,625**	**2,925**

(Source: Stats Canada 1997)

This data reflects a decrease in the 20 - 34 age cohort probably due to changes in entry and intermediate seniority position in the primary resource industry. The increase in the 65+ cohort reflects a change in the retirement level population probably due to retirees continuing to live in Port McNeill rather than leaving.

The 1996 Statistics Canada base rate of 2925 has been used as a base in calculating the projections in Table (vi).

Assuming that the future population growth of Port McNeill will range between the B.C. Stats projected regional growth rate and the annual norm (i.e., .6%), Table (vi) below projects alternative growth scenarios for Port McNeill.

Table (vi)

Alternative Population Projections for Port McNeill

Annual Growth Rate

Year	.1%	.6%	1.1%
1997	2928	2942	2957
1998	2931	2960	2990
1999	2934	2978	3023
2000	2937	2996	3056
2001	2940	3014	3090
2002	2943	3032	3124
2003	2946	3050	3159

The Town of Port McNeill building permit data shows considerable residential growth in the years 1991 - 1995. (i.e., 67 single family residences, 42 mobile homes). This shows an average of 13 single family residential starts per year and 8 mobile homes per annum.

Stats Canada data shows the average household size in Port McNeill of 2.9 persons per household. Applying this average household composition to the population projections in Table (vi), would produce the following scenario:

.1% annual population growth would generate a potential demand for 1 additional residence per year

.6% annual population growth would generate a potential demand for 6 additional residences per year

1.1% annual population growth would generate a potential demand for 10 additional residences per year.

It should be noted that the above statistical projections are simply a manipulation of projected figures. They do not take into account such variables as economic diversification, new economic stimuli, or financial criteria (incomes, mortgage rates).

2.5.2 Employment Characteristics

Table (vii) illustrates the Town of Port McNeill Employment Characteristics, as reported by Stats Canada. These should be considered in a generalized context only. Because of the reporting format of Stats Canada, these numbers might not stand up to rigorous local scrutiny.

TABLE (vii)
The Town of Port McNeill Employment Characteristics

Occupation	Males	Females
Managers/Administration	70	50
Teachers	20	40
Medicine/Health	20	25
Clerical	15	135
Sales	45	95
Services	20	75
Primary Occupation	180	5
Processing	10	
Machine Products	125	
Construction	90	
Transportation		120
Total	**595**	**545**

Source: Stats Canada

Discussions with the major forest companies show the following complement of employees all of whom live in Port McNeill:

Canfor	200
Western Forest Products	85
MacMillan Bloedel	125
Timber West	80
Lemare Lake Logging	85
Total Direct Logging	575

Although Port McNeill's basic employment is tied to the forest industry, a significant level of employment is generated by the service sector.

Table (viii) below shows the building permit activity for Port McNeill between the years 1991 and 1996. A considerable amount of construction activity associated with new residential, commercial and industry occurred in this period. Stats Can reports 565 single-family, semi-detached housing

and apartment units in Port McNeill in 1981. An increase of 67 dwelling units between 1991 and 1996 represents a 12% increase in the housing stock within the last five years.

The population growth in Port McNeill over the last five years has been moderate (i.e., 1.2% per annum). This has probably been due to relatively low rates of employment growth in the forest industry.

However, housing starts have been significant (i.e., 10 in 1994, 29 in 1995, and 22 in 1996), as well as home renovations. This could reflect a trend from rental to home-ownership or retirees choosing to remain in the community.

The OCP should allow sufficient serviced subdivided land for an increase of 5 - 10 housing units per year.

TABLE (viii)
TOWN OF PORT McNEILL BUILDING PERMITS 1991 - 1995

Year	New Construction						Renovations			Value
	Res. Single-Family	Res. Multi-Family	Mobile Homes	Commercial	Industrial	Other	Res.	Com.	Other	
1991	8		10				18	5		$3,619,354
1992	6		11	2		2	22			$1,737,490
1993	14		10	2		1	19	3	1	$2,076,216
1994	10		5	2	2		19	7		$3,191,000
1995	29	6	6	4	5	1	36	3		$5,102,875
1996	22		10	10	1	2	39	5		$6,231,250
Total	**89**	**6**	**52**	**20**	**8**	**6**	**153**	**23**	**1**	**$21,958,185**

2.5.3 Port McNeill Community Services

Port McNeill is serviced by the following public services all of which have a significant impact on the municipality.

2.5.3.1 Government Services

Port McNeill is a regional centre for a number of government departments and public sector agencies (Forest Service, Regional District and Municipal Government, health care and education). The table below shows the employment by the public sector.

TABLE (ix)

GOVERNMENT RELATED EMPLOYEES

Provincial Government and others	100
School District	90
Hospital	15
Town of Port McNeill and Regional District	18
TOTAL	223

2.5.3.2 Health Care

The Port McNeill Hospital (constructed 1979, expanded 1988) offers an integrated health facility comprising 10 acute care beds, 6 emergency beds, lab and x-ray facilities. Medical staff includes 4 full-time doctors, a family practitioner and 9 full-time nurses. Outreach programs include alcohol and drug abuse, and mental health counseling. The dental clinic has a staff compliment of 8 persons.

The hospital serves a wide catchment area which includes communities and logging camps such as Sointula, Telegraph Cove, Hyde Creek, Woss, Zeballos, Kingcome, Gilford, Kyuquot, Holberg and Rivers Inlet.

2.5.3.3 Education

School District #85 operates the Cheslakees and Sunset Elementary Schools and the North Island Secondary School. The Sunset Elementary School (K-7) has a capacity for 340 students (1996 enrollment 336). The Cheslakees Elementary School has an enrollment of 200 students (K-7).

The North Island Secondary School (Grades 8 - 12) has an enrollment of 500 students (1996). North Island Secondary draws students from Alert Bay, Sointula, Port Alice and Woss.

2.5.3.4 Retail and Commercial Services

Port McNeill's commercial sector has a limited range of retail and commercial services. The services located in the downtown core include accommodation, restaurants, banking, groceries, hardware, laundromat, pharmacy, bakery, hair dressers, insurance agent, gas stations, aviation and marine fuels, auto repair, bus service/travel agent, body shop, mechanical repairs, truck repairs, industrial, clothing stores, tire shops, skilled trades (plumbers, electricians, machinists, welders), cement and concrete, sand and gravel, building contractors, bulk fuel distributor, marine and aviation fuels, helicopter companies, float plane base, parts stores, grocery stores, furniture stores, marine repairs and boat sales, dive shop, radio, telecommunication, water taxis, charter boats.

2.5.3.5 Recreation Facilities

Port McNeill is developed around a large block of School District property, with most of the community recreation facilities, the arena, swimming pool and curling rink, clustered near the High School. Tennis courts, softball diamonds, and a high quality track and field facility have been developed on the school grounds by the Town, the School District and Volunteers. All of these facilities are within walking distance from all parts of Town; residents of Alert Bay and Sointula walk to these facilities from the ferry.

Port McNeill has a second recreational complex which includes the old elementary school recreation center, the Scout Hall, the Community Hall, and a softball diamond. A logging sports area has been developed on logging company property across the street from the ball field. MacMillan Bloedel is considering development of a picnic area on this site. The Town has developed a small pleasure boat marina adjacent to the Government Small Craft Harbour. This facility serves the needs of local residents fairly well, but becomes very crowded during the tourist season. Port McNeill has a variety of landscaped parks throughout the community. Year by year these landscape parks are being upgraded.

2.5.3.6 Municipal Services

Sanitary Sewer

The treatment plant will be located east of Beach Camp and will be of the sequenced batch reactor type. The process of site acquisition has now been completed and completion of the plant and its related sewage pumping main is planned for 1998. The treatment plant has been designed for 5,000 persons but allowance has been made for future expansion, both in the site area and in the details of the structure. The Town's collection system and pump stations are reported in good condition and can accommodate future growth.

Water

The Town is supplied with domestic water by ~~three~~ Two wells, of which the No. 2 provides the bulk of the water needed. This well currently runs about 23 hours of the peak day, and is supported by Well No. 3. Well No. 4 has recently been drilled near the MB dryland and shows a substantial flow according to the geologist. The municipal engineer is preparing a design for connecting Well No. 4 into the water system.

The Town's water storage capacity is ~~2,100~~ 200,000 gallons. Additional storage capacity is being designed by the Town's engineer.

The Town's water distribution system generally performs well. The Town's consulting engineer suggests that fire protection to the harbour is a concern and that adequate fire pressures should be provided in this zone.

Storm Water Management

Port McNeill is serviced by a system of open ditches and storm drains which discharge into the sea. Average rainfall is 80-85 inches per year. A number of drainage problems exist, notably in Pioneer Hill, near Woodland Drive, and on Beach Drive. Drainage is generally dealt with on a case-by-case basis, except where lands are being developed by the Town, when proper drains are now routinely being installed.

2.5.3.7 Community Attitudes

In the spring of 1996, the Town of Port McNeill undertook an extensive community survey to identify residents' attitudes about Port McNeill. Questionnaires were distributed to residents via a community newsletter. Approximately 55 completed responses were returned.
A wide variety of community issues were identified by respondents, most of which related to the OCP. Among the positive issues identified were the following:

- Views, attractive harbour;
- A great place to raise kids;
- Quiet, safe;
- Good neighbors, a strong sense of community; and
- Proximity to municipal services.

The negative issues identified included the following:

- Traffic safety, speed limits on major arterials;
- Road improvements, fill in ditches; and
- Community beautification, litter clean-up, landscape treatment, sidewalks, walkways.

Several community planning issues were identified including the following suggested improvements:

- Creation of a gateway entrance to Town;
- Industry along Campbell Way in wrong location;
- Attractive harbour, capitalize on this;
- Sea wall - promenade, additional wharves, washrooms;
- Beautify downtown, make it attractive (landscaping, flowers, hanging baskets);
- Enforcement of bylaws; and

- Bed and breakfasts should have adequate off-street parking.

Under the general public services category, the following issues and concerns were identified:

- Desire for covered swimming pool, tennis courts (bubble roof);
- Additional competition in the retail sector (the market will decree);
- Tourism industry, interpretation of the forest industry;
- Teen centre;
- Additional Moms and Tots time;
- Turnover in doctors, frequency of locums;
- Dog control, animal control; and
- Road improvements (repair road by high school, signalized intersection at Bank, realignment of McNeill Road).

Numerous improvements were suggested in respect of community recreation.

- Need for a recreational programmer/recreation director;
- Trail system around the bay to Ledge Point (there is one);
- No beach area waterfront park;
- Park clean-up, litter, dog control;
- Need for teen activities;
- Arts/entertainment, possibly revive Arts Council;
- More activities for kids and families; and
- Need for more volunteers for recreation programs.

(The tennis courts were renovated in 1997)

3. PLANNING CONSIDERATIONS AND FUTURE GROWTH

3.1 THE FUTURE ROLE OF PORT MCNEILL

Port McNeill will continue to be a service and residential community for the forest industry, as well as a service centre to other coastal communities. Representative groups in the community include the forest companies, Municipal Council and administration, the Regional District, The Community Health Council, the Harbour Commission, The Chamber of Commerce and the Community Futures Society. All have a vested interest and role in furthering the economic health and future growth of the community. A major challenge of the OCP is the coordination of each group's initiatives into a cohesive and cooperative development framework.

Because it is a northern resource-based community, future urban growth will not be driven by the conventional market forces which characterize the more heavily populated and developed urban centers of southern Vancouver Island and the Lower Mainland. Consequently a major purpose of community planning should be to attract suitable development and to identify future investment, and employment opportunities particularly in the forestry sector. Planning should be proactive and establish a land-use framework to encourage and accommodate future growth, as compared to being a tool for regulatory purposes.

Although Port McNeill has had an OCP in place since 1979, the following developments reflect an absence of planning principles in a pioneering community. At the present scale and character of Town development, these items might not in themselves be considered undesirable, but in the long run this precedent might set a pattern of development which could generate conflicts and be costly to rectify.

- A mix of industrial, commercial and residential activities in the downtown core and along Campbell Way and upper Mine Road;
- Although the Town has strategically located lands for schools and community recreation facilities, there appears to be an absence of neighbourhood parkettes for children, as well as an absence of a community waterfront park;
- The inner harbor is severely constrained and at times severely congested; and
- The downtown core does not represent an attractive or aesthetic focal point for the community. A community survey conducted in 1996 showed a strong response to the need to beautify the community.

The above issues must be addressed in the updated OCP. Consequently, the following initiatives are deemed to be major priorities for the future development of the community:

- Ongoing economic development, particularly in the Forest industry;
- Harbour development;
- Downtown revitalization; and
- Future community expansion.

3.2 ENVIRONMENTAL CONSIDERATIONS

G.L. Williams & Associates has provided a preliminary shoreline habitat assessment which identifies environmental considerations related to future waterfront development in Port McNeill (see Appendix I). This assessment identifies actual habitat areas, development issues and requirements.

G.L. Williams & Associates' analysis examines the Port McNeill waterfront in terms of 6 shoreline units (i.e., Unit 1 - Mill Creek delta and the flats; Unit 2 - Log Handling operations; Unit 3 - Port McNeill Harbour; Unit 4 - Beach Drive Shoreline; Unit 5 - Hoy Bay; and Unit 6 - Beach Camp).

3.2.1 Mills Creek

Approximately 480 m of the Mills Creek delta are within the municipal boundary of Port McNeill. It is under enhancement for chum, coho and pink salmon. The area is a significant habitat area and any development would require extensive mitigation and habitat compensation.

3.2.2 Log Sort Area

The log handling operation of Western Forest Products and MacMillan Bloedel comprises approximately 2 km of shoreline and includes two causeways/breakwaters.

3.2.3 Port McNeill Harbour

The Port McNeill harbour facility includes the area between the MacMillan Bloedel causeway/ breakwaters and Public Works Canada Breakwater. A major environmental feature is the inter-tidal flat fed by a small stream at the west end of the harbour.

The same harbour area supports vegetation that is productive feed and refuge for fish, and waterfowl. Most of the inter-tidal habitat has been developed for marine related uses and has been colonized by wetland vegetation.

3.2.4 Beach Drive Shoreline, Hoy Bay and Beach Camp

The Beach Drive shoreline from the B.C. Ferry causeway east to Hoy Bay contains limited habitat values due to wave exposure. Vegetation colonization of the inter-tidal zone is sparse.

G.L. Williams & Associates suggests that future development or improvement (i.e., port related), may require compensation and mitigation consistent with DFO policies. He recommends that any marine development activities be undertaken in cooperation with the authorities having jurisdiction.

3.3 PORT DEVELOPMENT

Historically, Port McNeill's port potential has been developed by the forest and mining industry which has used the sheltered location for log booming and the shipping of mineral concentrates (Coast Copper Mines).

The present Port McNeill inner harbour contains a number of important economic activities. However, it is limited in size (15 acres) by the MacMillan Bloedel causeway and the Federal breakwater (B.C. Ferry terminal). The inner harbour contains two marinas, sea plane base, a barge ramp, public boat ramp and fuel dock (see photos 3 - 6).

The Federal wharf on the outside of the breakwater contains a warehouse which is used on an intermittent basis. An A-frame hand winch crane is located on the Federal wharf.

The Government of Canada Fisheries and Oceans Small Craft Harbours Branch (DFO) facility comprises seven floats which provide a total berthing length of approximately 481 metres. Depending on boat lengths, a range of 30 - 70 boats can be accommodated.

The Federal breakwater was built to provide shelter for the marina area, as well as a replacement access for the original timber causeway. It was later adapted to handle B.C. Ferries docking facility.

The Municipal Marina is located immediately west of the DFO facility. At peak times in the summer season there are approximately 60 - 90 boats at the municipal facility, of which approximately 1/3 are local. The municipal floats have a total of 1,280 metres of berthage.

There are two barge ramps in the inner harbour. The Public Works Canada ramp is located to the west of the municipal marina. Its major users are self-propelled landing barges which pick up groceries, furniture, dry goods and machine parts for delivery to coastal communities and supplies for the fish farms in the area. There is no covered area for sorting freight. Overland Freight is the delivery agent which consolidates freight lots for shipping by Marine Link Ferries. The MacMillan Bloedel causeway has a barge ramp which serves heavy logging equipment and oversized machinery destined for remote camps.

The Westmar Management Plan prepared for Small Craft Harbours (1990) identified several deficiencies including the following:

- Lack of moorage during peak season which results in rafting of vessels thus causing a public safety and fire hazard condition;
- Lack of a suitable unloading crane for handling bulk goods;
- A lack of shower facilities for itinerant boaters (now using hotel day rooms);
- Required upgrade and maintenance of the electrical distribution system; and
- a need for organized, protected parking for short and long-term users.

PHOTO #3 - PORT McNEILL HARBOUR

PHOTO #4 - PORT McNEILL HARBOUR FROM MacMILLAN BLOEDEL CAUSEWAY

PHOTO #5 - PORT McNEILL MUNICIPAL MARINA AND M.O.T. BARGE RAMP

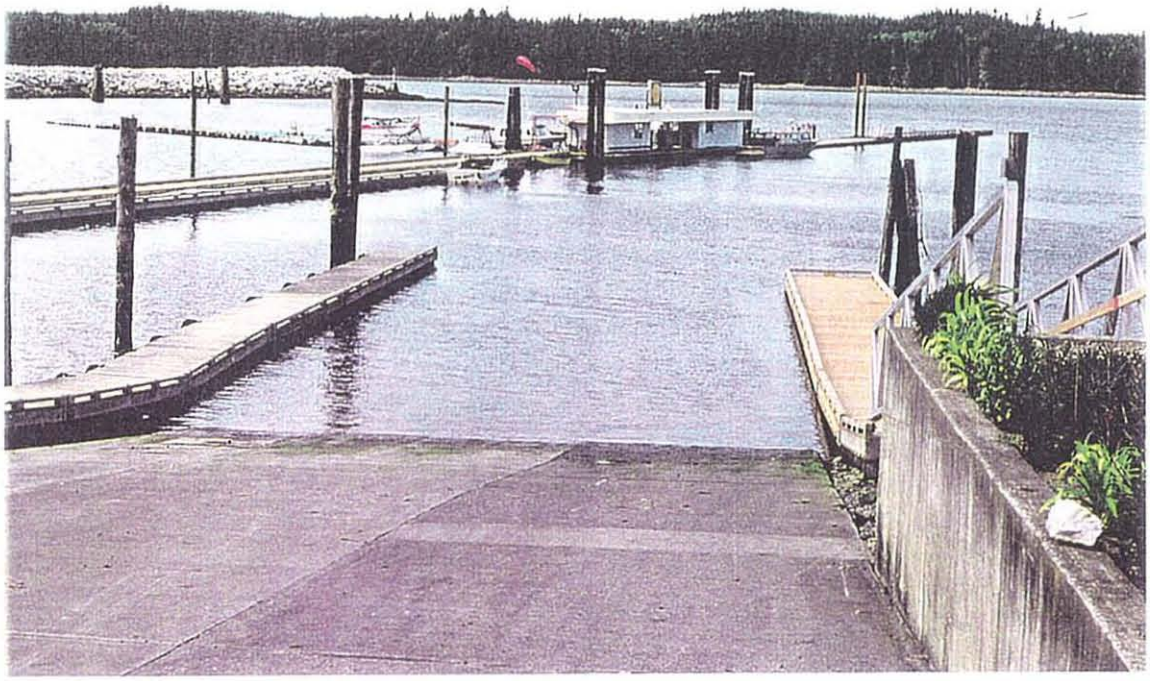

PHOTO #6 - BOAT LAUNCH

The Westmar Report makes recommendations for improvements to the harbour on a short-term, medium-term and long-term basis. Suggested improvements include the wharfhead to allow vehicle accessibility, a crane and loading berth, and the installation of additional floats.

Unfortunately, the Westmar Report does not relate the harbour functions to the industrial and commercial sectors of the local economy or relate the future impact of marine expansion on the Town of Port McNeill (i.e., what marine services are tied to the downtown core (e.g., tourist related, and what functions might be located elsewhere). Nor does the study identify what major improvements might be made to increase the capacity of the inner harbour (i.e., dredging or consideration of Mid Coast Development's plans for marine development). The significance of the sea plane base and its location is not analyzed.

A Port Development Plan prepared by Chuck Rowan for the Town of Port McNeill Harbour Commission considers development of the inner harbour in three phases. The first phase included dredging between the Municipal marina and the barge ramp, now completed. The intermediate phase includes dredging the tidal flats between the barge ramp and the MacMillan Bloedel causeway. The third phase consists of extension to the breakwater and improvement to the inner harbour. The Rowan plan does not take into account the environmental constraints or the need for improvements to transportation and back-up facilities.

The Port McNeill harbour is a significant tourist resource for pleasure craft and a major gateway to the community and the downtown core. A sea wall extending from the marinas east past the B.C. Ferry terminal provides public access to the waterfront. The Harbour Commission is recommending the development of a fishing pier along the breakwater.

The Beach Camp area was built as an industrial loading site for mineral concentrates, iron ore, and a bulk terminal for incoming fuels. It has been considered a candidate site for future port development. The area is subject to south-east and north-west winds. However, the water depths are relatively shallow for a distance of 250 - 300 feet, consequently, the construction of a breakwater is relatively practical to the east. The Beach Camp alternative could be suited to industrial traffic and back-up support services. It has had an active history as a port facility to the mining industry, and is presently the site of the Shell fuel dock and tank farm. MacMillan Bloedel has leased approximately 10 ha and has attracted interest from potential purchasers. The site of the proposed sewerage treatment plant and outfall lies to the east of Beach Camp. It is serviced by Mine Road and the municipal water system. Future uses could include marine related industrial dock facilities, warehousing and storage, and seafood related processing plants.

The Harbour Commission has suggested an ambitious port expansion concept which would extend from Beach Camp to Hoy Bay. It includes the development of a breakwater east of DL 1429, and sufficient area for commercial marina and public marina development, and approximately 40 acres of back-up industrial lands.

The future development of the Beach Camp port facilities could allow the rationalization of the Port McNeill inner harbour to uses which more strongly tie to the service commercial downtown functions.

3.4 COMMERCIAL DEVELOPMENT

Conventional retail and commercial services respond to market forces (i.e., supply/demand, wholesale costs, transportation and competition). Port McNeill's commercial core shows a moderate percentage of vacant floor space and vacant properties.

The downtown core focuses on the waterfront and represents a key focal point to the Town. The core shows a mix of commercial and industrial land-uses. Recent "people" oriented uses such as parks and restaurants are starting to develop. A sea wall walkway has been constructed and further landscape treatment is planned.

The following improvements are suggested for consideration for enhancing the Town core and waterfront:

- Sea wall/walkway system along the inner harbour waterfront (see photos 7 - 10 which illustrate a fishing pier on the breakwater at Comox and a sea wall walkway at Sidney, B.C.);
- Improved parking facilities;
- Shower facilities for the inner harbour;
- Landscaping;
- Building facade improvements;
- Heritage revival (logging camp bunkhouses) and signage illustrating the community's past;
- Exposure to the RV park; and
- New museum - visitor centre.

3.5 FUTURE COMMUNITY DEVELOPMENT

3.5.1 Residential Expansion

Port McNeill has experienced moderate rates of growth in the last 5 years. Presently, there are approximately 10 vacant residential lots in the community. The Town of Port McNeill owns 12 ha known as the Pioneer Hill subdivision. The lands are sloping and provide views of downtown and Broughton Strait. The Town's consulting engineer has prepared a draft plan of subdivision which creates another 85 lots. This would complete residential development in that area.

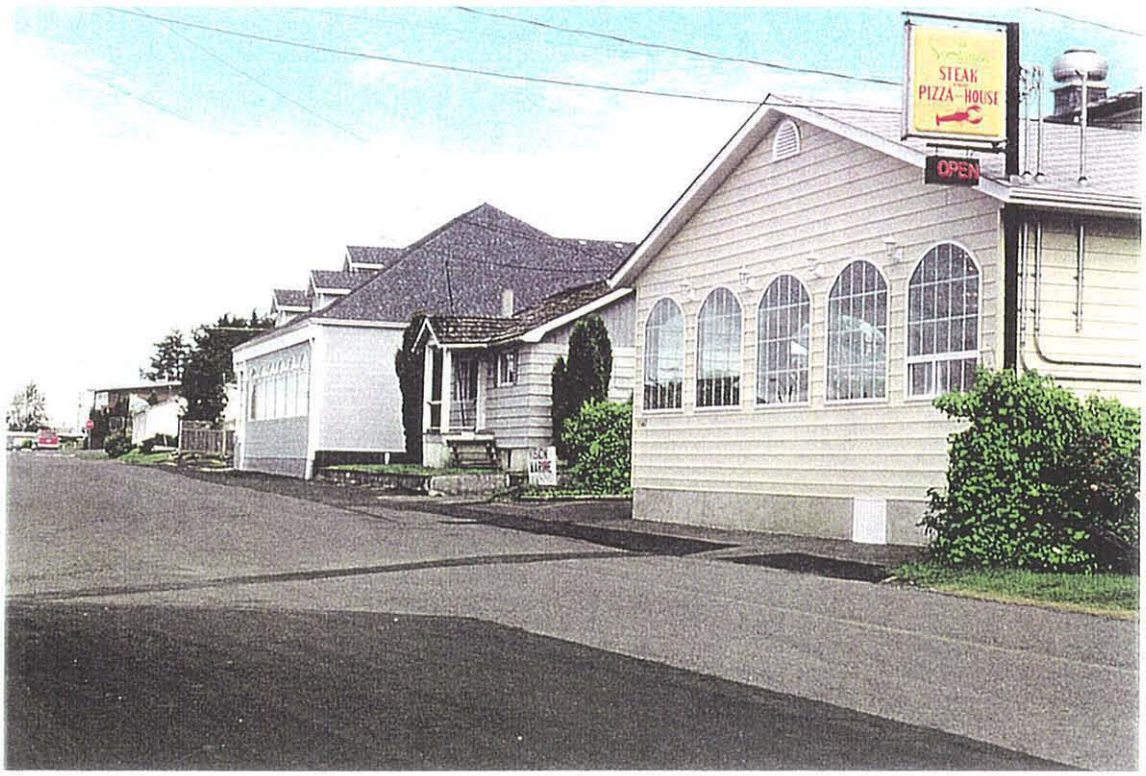

PHOTO #7 - NEW COMMERCIAL ENTERPRISES ON BEACH DRIVE

PHOTO #8 - SEA WALL IMPROVEMENTS AT THE WATERFRONT

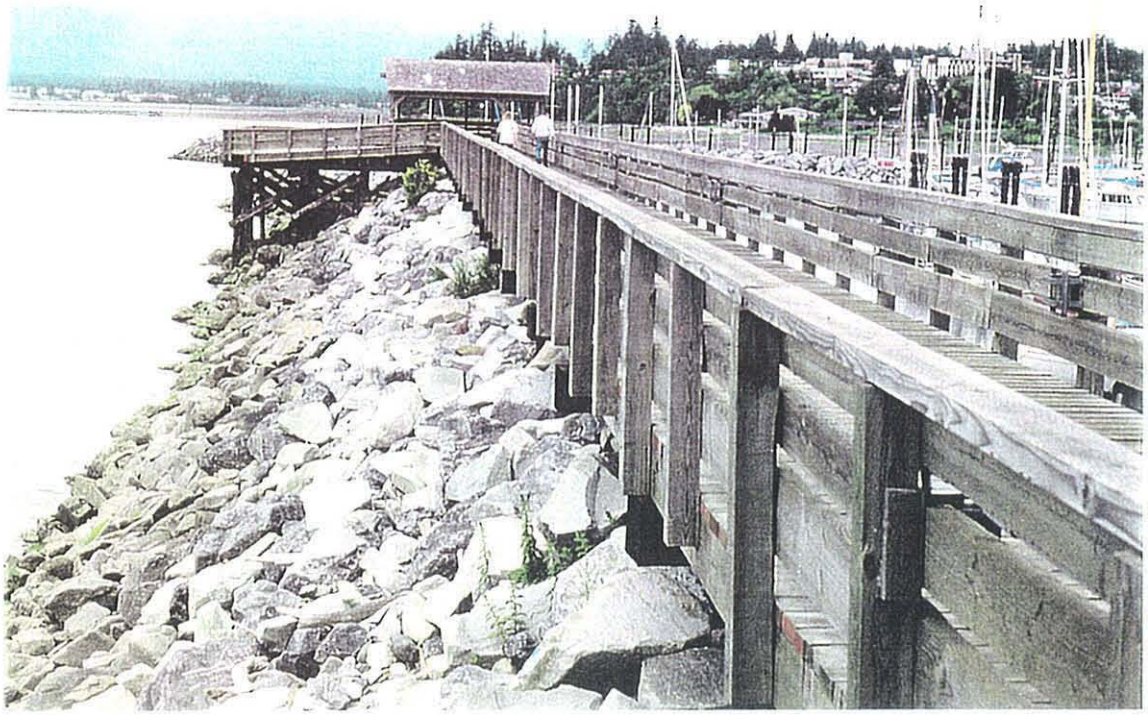

PHOTO #9 - FISHING PIER AT COMOX HARBOUR

PHOTO #10 - SEA WALL AT SIDNEY, B.C.

The Hoy Bay/Beach Camp area is the NE¼ of Section 18 comprises approximately 60 ha (150 acres) and shows the following ownership:

- MacMillan Bloedel (12 ha zoned industrial 42 ha in private Tree Farm License);
- WFP (4 ha) remnant of beach residential development; and
- Town of Port McNeill remnant of Cardena development.

The Hoy Bay area has considerable potential for future residential expansion, as it would be serviced by the new municipal sewer and by extension of Cardena and Woodland Crescents. At single-family residential densities, this neighbourhood could contain 500 units. Water system pressures would be good and the land will be serviced by the future sewage force main. The municipal engineer cautions that development below the 46 foot elevation will require pumping stations. The OCP land-use schedule shows designations in the area for residential, park/open space and industry. A land development plan would involve purchasing lands from the forest companies or developing a joint venture program to develop and sell subdivided lots. MacMillan Bloedel has submitted a harvesting plan for logging the area in 1998 and has plans for the subsequent development of these lands. Development of these lands would probably require the approval of the Forest Land Commission and removal from the T.F.L.

3.5.2 Parklands and Open Space

Port McNeill enjoys a beautiful waterfront setting and is surrounded by forest land. Due to the foresight of previous councils, land was set aside for community recreation and schools. A second recreation complex includes the old school recreation center in the downtown core, the community hall, Centennial Park, softball diamond and logger sports field.

Recent subdivisions have not taken the statutory 5% park dedication, and it would appear that in some areas of Town there is a deficiency of parkettes or tot lots for children.

Reference has been made to the development of a community park in Hoy Bay. The updated OCP supports the development of a 6 ha (15 acre) park which retains native vegetation, as well as providing picnic sites and playground amenities for the community. This should be linked to the community with a walking trail network from Beach Drive.

Ledge Point lies outside the boundaries of the municipality, but is a significant aesthetic backdrop to the municipality. The area is vacant Crown Land and is widely used by Port McNeill residents as an outdoor recreational amenity. The Plan supports the retention of this area as a recreation reserve for the residents of Port McNeill.

Discussions with the Town's consulting engineer indicates that under the Land Titles Act, a deficiency of dedicated public lands in the amount of approximately 155 feet exists in the lands fronting Broughton Straight in the west ½ Section 18. This frontage could be the basis for the Hoy Bay Park at the east end of the Western Forest Products' property.

3.5.3 Future Municipal Growth Strategies

The Town of Port McNeill has historically grown in a conservative and fiscally responsible manner. Municipal growth has been contained close to services and in a manner which respects the surrounding managed forestry lands. Consequently, the industrial park was developed on Upper Mine Road rather than at a location closer to the Island Highway.

The OCP Land-use Map identifies the future development potential of the Hoy Bay Beach camp area over the next 5 years (to the year 2001). A longer range consideration for the expansion of the municipality should show future growth in an east-west direction to include the industrial infrastructure of the forestry companies to the west, the airport and possibly Hyde Creek to the east. The Hyde Creek area includes 2 - 5 acre rural lots which have developed over the last 15 - 20 years and provides an ideal rural quality of life.

The Port McNeill airport lies outside the municipal boundaries and is undergoing runway expansion. The area presently includes industrial enterprises, as well as considerable opportunity for expansion. The Town is presently pursuing boundary adjustment of lands which will include the existing airport and the new runway as well as the sewage treatment plant site.

The extension of the west boundary of Port McNeill to Highway 19 should be considered, thus adding additional land for highway commercial and light industrial activities. Sewer and drain servicing appears possible, but water pressures will be unacceptably low and require significant upgrades. No urban development should be considered on or near Highway 19 which would interfere with the free flow of highway traffic as the Island Highway. Future planning initiatives should ensure that there is never a need to "bypass the bypass."

4. COMMUNITY GROWTH POLICIES

The following objectives and policies are intended to serve as a broad vision and a framework for the community against which ongoing and proposed development activities in the Town of Port McNeill should be evaluated and measured.

4.1 GOAL OF THE OCP

A major goal of the OCP is the economic and orderly growth of Port McNeill in such a manner as to develop a fully serviced and sustainable community which attracts and maintains a viable population, and promotes and protects the quality of life for all residents.

4.2 OBJECTIVES AND POLICIES OF THE OCP

4.2.1 Community Objectives

The following objectives are proposed to achieve the above referenced Community Goal. They represent outcomes to which future municipal policies and programs should be applied, and monitored periodically:

- To maintain Port McNeill's role as a service centre to the forest industry and aquaculture industry;
- To diversify the local economy;
- To ensure that future development capitalizes on the natural beauty of the Town's setting (see photo 11);
- To retain and foster a community spirit of volunteerism and participation;
- To encourage downtown development which recognizes waterfront amenities and supports tourist services;
- To encourage the availability of serviced residential land for affordable housing (see photo 12);
- To provide a level of municipal services consistent with community needs, the ability to pay and regulatory requirements;
- To encourage a future urban form which follows the principle of infilling and orderly expansion;
- To encourage port development which provides sufficient land for marine and upland industry; and
- Encourage an open and coordinated planning process between Council, Municipal Administration, the Advisory Planning Commission, the Harbour Commission, the major landowners in the community and senior government agencies having jurisdictional authority.

PHOTO # 11 - VIEWS FROM PIONEER SUBDIVISION

PHOTO #12 - MODERN PORT McNEILL SUBDIVISION

4.2.2 Economic Policies

The forest industry is vital to Port McNeill's economic health. The recommendations of the F.L.C. Reed Timber Supply Study (Appendix II) point to a significant role which the Council of Port McNeill should play in initiating forestry programs to ensure the long-term stability of the community.

- Council shall adopt the F.L.C. Reed Timber Supply Implications report and strike a committee with the responsibility for developing a forest management strategy which initiates and coordinates the recommendations of the F.L.C. Reed Report;
- Council shall encourage the location of industries and small businesses which service the Region's primary resource industries consistent with the land-use designations of the OCP;
- Council, in cooperation with the Harbour Commission, shall develop a comprehensive port plan for both the inner harbour and Beach Camp which allows for small boat harbour and marine industrial uses;
- Council shall actively cooperate with the Regional District Economic Development Department and the Community Futures office in order to promote Port McNeill as a location for economic development and investment;
- Council shall maintain an ongoing liaison with senior government agencies having jurisdiction for port and transportation development and economic development in order to ensure that any proposed resource development recognizes Port McNeill's locational advantages;
- Council shall encourage the B.C. Ferry Corporation to retain the present Ferry Terminal as the primary facility for the Sointula, Alert Bay route;
- Council shall recognize Port McNeill's role as a regionally significant service centre to the North Island tourism industry and actively support the development of tourist related services. Suggested projects include the following:
  - Promote the Regional District RV park and plan for expansion of the facility;
  - Promote the area's sports fishing lodges and fish guiding operators, and departure port to Sointula and Alert Bay;
  - Market Port McNeill's accommodation facilities; and
  - Pursue the development of a destination resort/convention center.

4.2.3 Land-use Policies

The OCP Land-use Schedule illustrates a combination of existing and future land-uses in a conceptual format. It defines in a broad manner the future direction for growth in the community in respect of the existing residential neighbourhoods, the downtown core, and inner harbour area.

Beach Camp and the heavy industrial areas. Development which extends beyond the infill capacity of the municipality shall be considered a long-range solution to meet future growth demands.

4.2.3.1 Residential Policies

Port McNeill is characterized by two residential neighbourhoods on the west and east side of Campbell Way which offer a mix of single-family and multi-family residences. A trailer court is located adjacent to the downtown core. The Town's recreation and school facilities provide a community focal point which is within walking distance for most municipal residents.

- Council shall ensure that all future subdivisions are designed to a fully serviced standard, including curbs and sidewalks;
- Council shall complete the Pioneer Hill subdivision in a manner which most effectively reflects the market requirements (i.e., phasing of the subdivision);
- Council shall encourage the development of rental accommodation in Port McNeill for residents of the community unable to afford home ownership or who choose rental tenure;
- In lots which allow ocean views, Council shall encourage residential development which does not impede views and which minimizes conflict between the location of residential units;
- Council shall cooperate with Western Forest Products and MacMillan Bloedel to develop a comprehensive residential plan for the Hoy Bay neighbourhood in Lot 18 TWP 1; and
- Council shall encourage the provision of affordable rental and special needs housing as part of new housing development by the private sector, non-profit societies, or any agency of the Provincial or Federal government.

4.2.3.2 Port Development

Through the preparation of the OCP, considerable attention has been paid to future port development options through meetings and correspondence with the Harbour Commission. The consultant recommends that the Harbour Commission consider a rationalization of port activities such that the inner harbour be designated for pleasure craft and small boat activities which could generate tourism benefits to the downtown core and Beach Camp be considered for industrial traffic.

Policies

- Council and the Harbour Commission shall coordinate a review of port and marina activities in order to identify the long-term needs and rationalization of activities in the inner harbour and at Beach Camp; and
- Council shall support the retention of the existing B.C. Ferry terminal and encourage a revised system of automobile traffic management at the ferry terminal.
- Council shall continue to discuss with MacMillan Bloedel and Western Forest Products the long term port potential of the lands and water between the two forestry causeways.

4.2.3.3 Commercial Policies

The commercial core comprises approximately 16 ha (40 acres) and is characterized by the waterfront features including two marinas, the float plane dock, the B.C. Ferry terminal, and the waterfront commercial and retail services (i.e., the Harbour Manager's office and travel information office, restaurant and pub, coffee shop, Western Forest Products office and a public walkway system). The upland is characterized by a strip mall, free-standing industrial/commercial uses, hotels, restaurants and two major shopping centers.

The following policies shall apply to the future commercial development in Port McNeill:

Policies

- The Commercial core shall be designated for land-use activities related to a waterfront location such as retail, accommodation, food and beverage services, and commercial uses such as offices and personal services;
- Council shall consider the downtown core as a candidate for the provincially funded Village Square program and Downtown Revitalization program in order to identify detailed design elements for enhancing the commercial core including such elements as waterfront uses, landscaping, parking, street lighting etc.
- Council shall give favourable consideration to comprehensive developments which include residential accommodation above ground floor retail or commercial uses, subject to appropriate rezoning and development permit conditions; and
- Council shall control by zoning the development of new neighbourhood convenience retail facilities.

4.2.3.4 Industrial Lands Policies

The Town has developed an industrial area for light industry which services the primary resource sector. This is located on upper Mine Road and includes such activities as the B.C. Forest Service, Micron Machine Works, Fountain Tire, and Prism Helicopters. Considerable service industrial activities are located on Campbell Way and on Pioneer Hill.

- Council shall ensure that there exists an adequate supply of serviced industrial lots in Port McNeill;
- Industrial uses shall be separated from residential areas. Where necessary, noxious uses shall be buffered from residential or public use areas by setbacks, landscaping or berms;
- Council shall pursue the development of an industrial park in the Beach Camp and the East Main Road areas in cooperation with MacMillan Bloedel; and

- Council shall pursue the development of forestry related industries in the MacMillan Bloedel, Western Forest Product industrial lands.

4.2.3.5 Parks and Recreation

Port McNeill is relatively well provided with recreation facilities and services. The major recreation facilities in Port McNeill include the central recreation complex by the School District properties which comprises the arena, curling rink, swimming pool, running track, tennis courts, softball diamonds, and school yards. A second recreation complex includes the old school recreation center, the Scout Hall, the Community Hall, ball field and loggers sports grounds.

By most planning standards, Port McNeill is deficient in neighbourhood parks and tot lots. Port McNeill has been characterized by a high degree of volunteerism in the development and operation of recreation facilities and programs.

Policies

- Council shall ensure that the statutory parkland requirements and public access to water are administered in future subdivision developments;
- Council shall monitor the recreational needs of the citizens, and plan for facilities and services in a fiscally responsible manner;
- Council, in cooperation with Western Forest Products and MacMillan Bloedel, shall encourage the development of a municipal park in the Hoy Bay area which allows the community generous access to the waterfront; and
- Council shall encourage the development of a public walkway system on the downtown waterfront, as illustrated on the OCP land-use schedule.

4.2.3.6 Transportation and Utilities

Roads

Port McNeill has developed a system of roads which could be classified as arterials, collector streets and local streets. Arterials are major roads which tie the municipality to provincial roads and link different neighbourhoods in the municipality. They are intended to carry high volumes of traffic and usually do not accommodate access from individual lots. Collector streets are designed to convey traffic from a number of local streets to an arterial (i.e., Campbell Way). Local streets are designed to provide access to individual lots within a subdivision. They usually are designed to accommodate low traffic speeds.

The major arterial in Port McNeill is Campbell Way from Highway 19 to Broughton Boulevard. and Mine Road from Beach Camp to Campbell Way.

A deficiency appears to be bottlenecks presented by the intersections of Campbell Way at Broughton, and McNeill Road at Beach Drive.

The development of the MacMillan Bloedel, Western Forest Products lands should be done in such a manner as to direct traffic along Mine Road rather than making Cardena and Woodland collector streets.

Sidewalks

Council shall work towards the provision of sidewalks on at least one side of all arterial and collector roads in order to provide pedestrian access to institutional facilities and the commercial core.

Council shall ensure that sidewalks or walkways are provided in all new plans of subdivision.

Sanitary Sewer

Council shall ensure that all future development shall be connected to the municipal sewer system.

Water Supply and Distribution

The municipal water distribution system shall be monitored in order to upgrade areas where insufficient pressure exists.

Storm Water Drainage

Council shall maintain and upgrade the municipal storm water system, as required on a continuing basis.

4.2.4 Development Permit Areas

Under the provisions of Part 26 of the Municipal Act, a municipality may implement a system of development permits to regulate development and design control.

Five categories of Development Permit areas include the following:

- Protection of natural environment;
- Protection of development from hazardous areas;
- Protection of provincial and municipal heritage sites;
- Revitalization of an area in which commercial use is permitted if the area has been designated for that purpose by the Minister of Municipal Affairs; and

- Establishment of objectives and the provision of guidelines for the form and character of commercial, industrial, mobile home and multi-family residential development.

The following area has been designated as a Development Permit Area subject to Part 26 of the Municipal Act.

New developments within this designated area will be subject to first obtaining a Development Permit which meets the requirements of the Development Guidelines set out in this Section for each Development Permit Area and shall be subject to the coordinated review by the Advisory Planning Commission, Harbour Commission and Council.

The area designated as Development Permit Area is shown on Schedule C, and includes Development Permit Area 1 - Waterfront Planning Area.

The justification and guidelines for the Development Permit Area are set out below.

4.2.4.1 Waterfront Planning Area - Development Permit Area 1

(a) *Category*

The waterfront area is designated a Development Permit Area under Part 26 of the Municipal Act to establish objectives and guidelines for the form and character of commercial and multi-family residential development.

(b) *Area*

The Waterfront Development Permit Area is shown as DP Area 1 on Schedule C.

(c) *Justification*

Commercial and multi-family residential development in the waterfront area is designated within a Development Permit Area in response to the following objectives:

- Recognize the waterfront area as a critical area due, in part, to its high potential for new development and redevelopment;
- Ensure a high quality of both tourist oriented commercial development and new residential development;
- Encourage uses, building design and landscaping which build on the unique opportunities presented by the inner harbour; and
- Establish design guidelines for development within the waterfront area to maintain the small town character, promote compatibility and architectural integrity with existing development, and preserve views.

(d) *Guidelines*

Development Permits issued in this area shall be in accordance with the following guidelines:

- Building and site design should strive to reduce the apparent mass of structures and to integrate the development within its site and local context.
- Preserve and create view and pedestrian corridors to the waterfront.
- Variety of uses and pedestrian interest should be expressed in the design of buildings, especially at ground level.
- Landscape screening requirements should be supplemented to separate parking clusters and to mask storage and service areas from any adjacent residential uses and pedestrian view.
- Where the rear yard of one development is adjacent to the front yard of the adjoining development, care should be taken to completely mask storage and service areas with walls, fencing, hedging, planting, other screening materials, or a combination of these materials.
- Natural landscape and significant tree stands should be retained and incorporated into site development plans when feasible.
- Buildings and structures should be permanent in nature, and should not be trailers or appear to be temporary structures.

4.2.5 Environmental Policies

Port McNeill contains an inner harbour, coastline and several tributary streams which have been identified by Federal and Provincial agencies. In addition, several raptor nests exists in the MacMillan Bloedel lands east of Cardena Crescent. The following policies are intended to maintain environmental integrity in the Town of Port McNeill.

(a) Where appropriate, Council shall ensure that in new subdivision development, urban redevelopment or action that affects watercourses, the Stream Stewardship Guidelines shall be applied.

(b) Where any development has a potential impact on trees containing raptor nests, the developer shall negotiate an appropriate protective buffer area with the Fish and Wildlife Branch of the Ministry of Environment.

(c) Any dredging or filling of the foreshore shall receive the approval of the authorities having jurisdiction.

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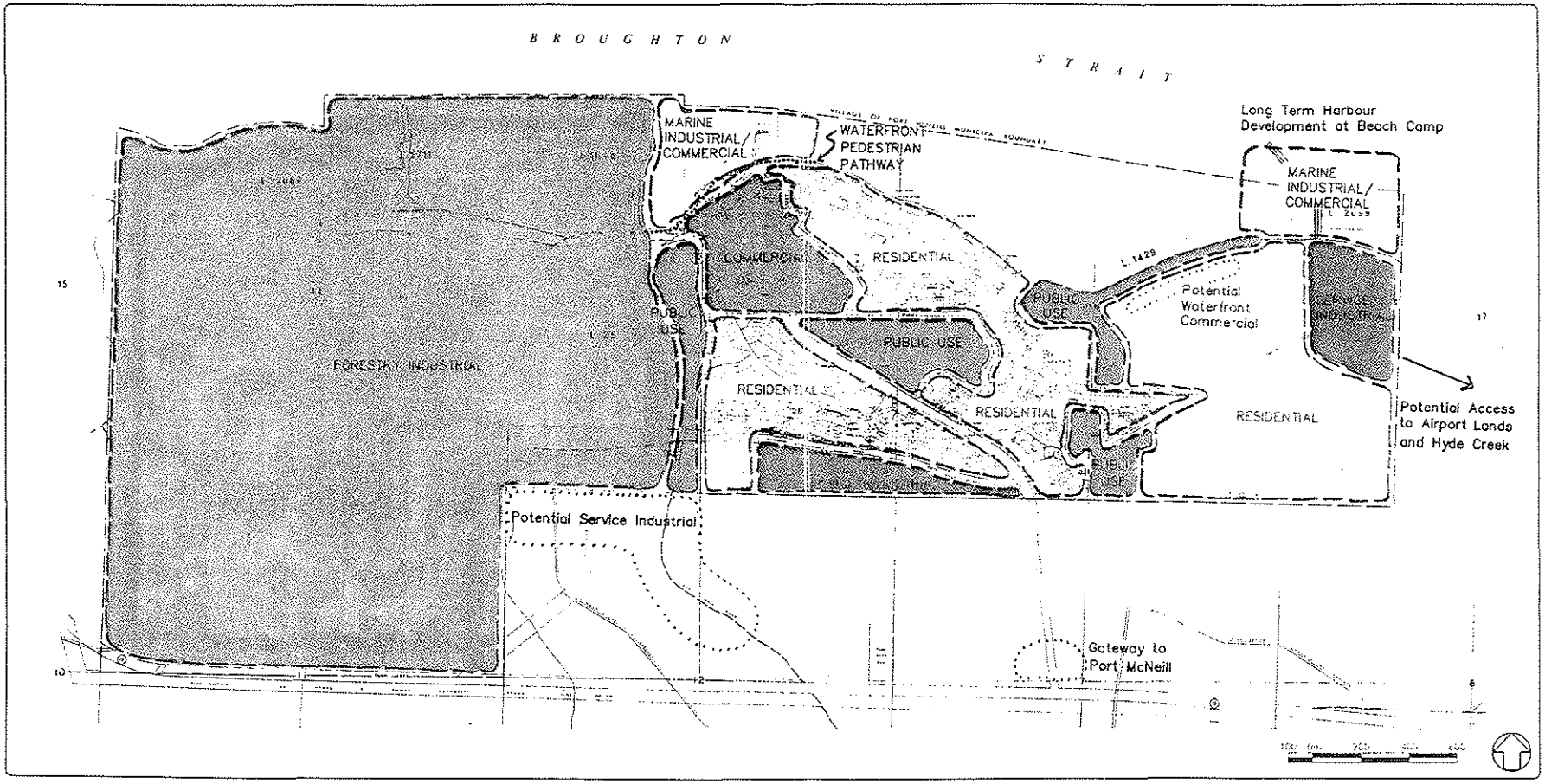
SCHEDULE A - TEXT

This is Schedule "A" attached to and forming part of the Town of Port McNeill Official Community Plan Bylaw No. 490, 1997.



PORT McNEILL OFFICIAL COMMUNITY PLAN LAND USE DESIGNATIONS SCHEDULE B

Legend

- Residential
- Commercial
- Public Use
- Service Industrial
- Forestry Industrial
- Marine Industrial/Commercial

This is Schedule B forming Part of By-Law # 490

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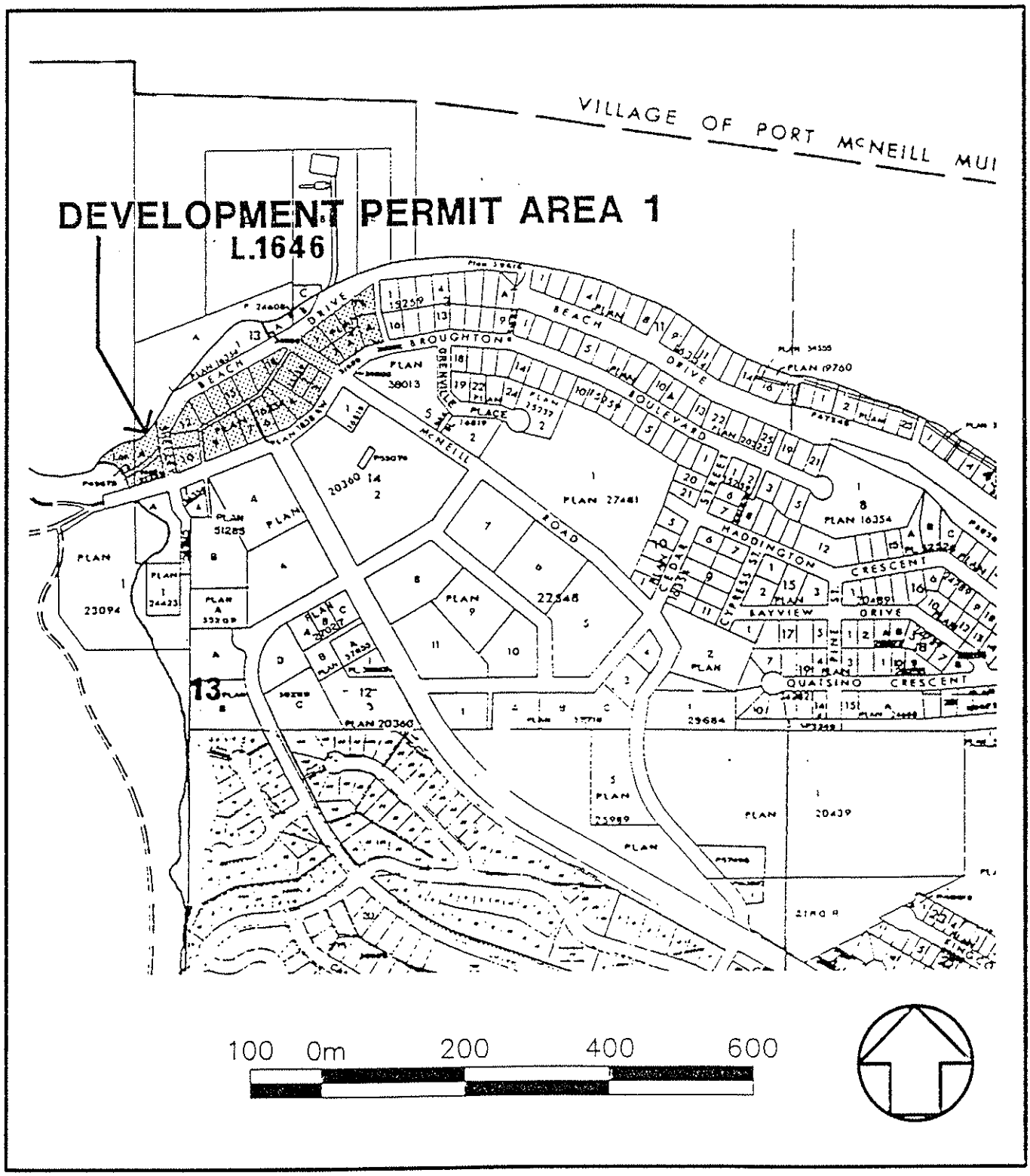
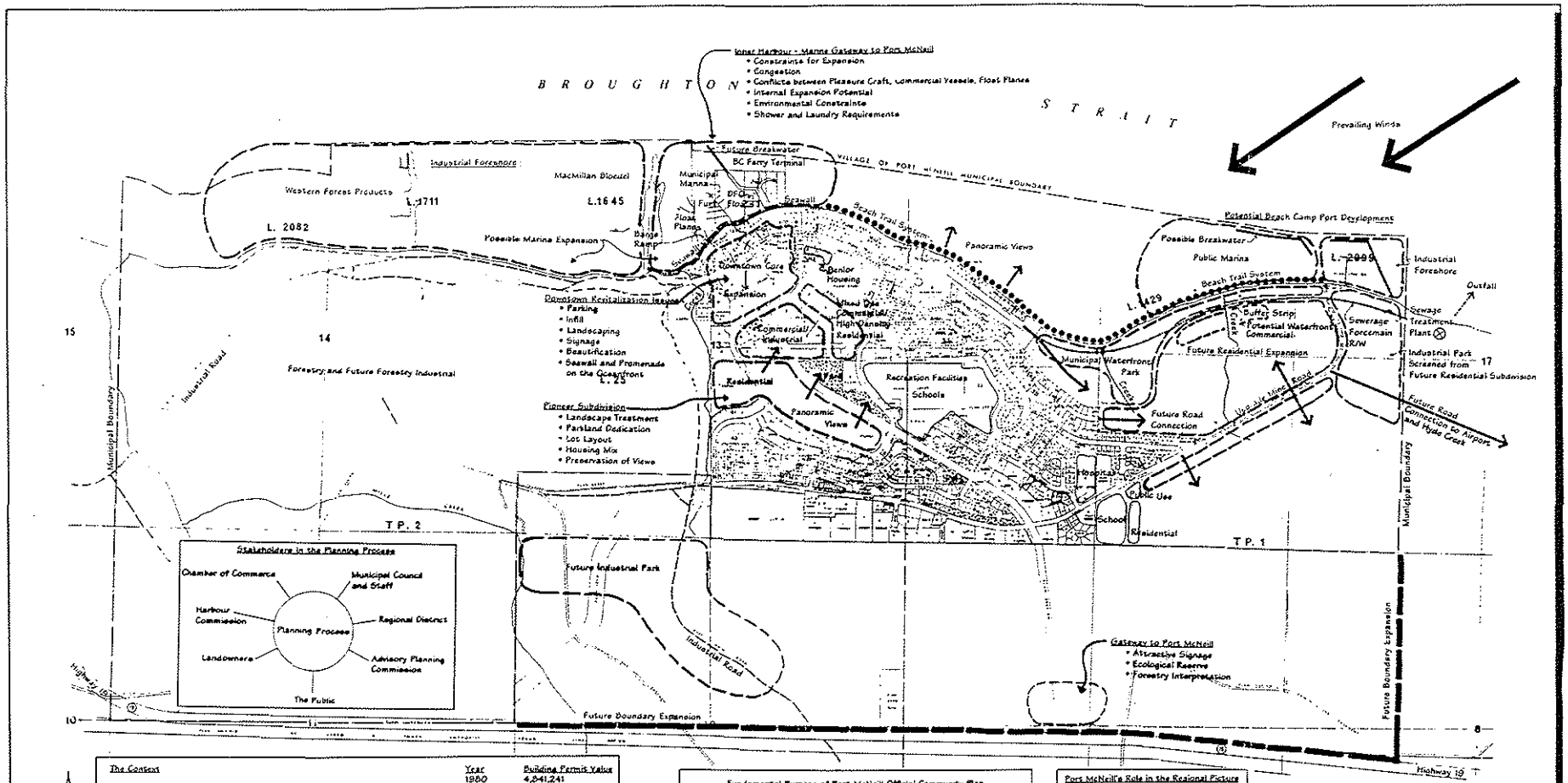
Project No. 96056



PORT McNEILL
OFFICIAL COMMUNITY PLAN
DEVELOPMENT PERMIT AREA 1
SCHEDULE C



The Context

Positive Rates of Growth - from Logging Camp to Municipality in 30 Years

Year	Population
1971	935
1976	1488
1981	2474
1986	2560
1991	2641
1996	2925

Year	Assessed Values
1976	3,861,256
1986	103,186,000

Year	Occupied Dwellings
1981	740
1991	865
1986	1044

Year	Building Permit Value
1980	4,841,241
1981	1,893,000
1982	2,025,555
1983	468,000
1984	414,000
1985	984,450
1986	704,000
1987	973,500
1988	1,602,900
1989	487,500
1990	857,300
1991	3,775,654
1992	not available
1993	2,076,216
1994	3,191,000
1995	5,102,575

Fundamental Purpose of Port McNeill Official Community Plan

- Provide a Vision for the Community's Future
  - Character and Appearance
  - Quality of Life
- A Vehicle for Directing Management and Growth
- A Blueprint for Growth and Development
  - Zoning
  - Subdivision Control
  - Capital Works Budget
  - Public Works Program
  - Environmental Protection
- Integrate Economic Development and the Land Base
  - Create Investor Confidence
  - Policies of Senior Levels of Government

Port McNeill's Role in the Regional Picture

- Reliance on Primary Industry
- Diversification Opportunities
  - Tourism
  - Service Centre
- Remote Situation Increases Costs
- Distinct Small Town Character
- Affordable Housing
- Oceanfront Setting
- Need for Expansion
  - Harbour (rationalize uses)
  - Residential Areas

Regional Economic Structure

- Forestry
- Commercial Fishing
- Aqua Culture
- Transportation
- Service Industry
- Tourism

} • Trends and Changes
} • Growth Opportunities
} • Market Potential

FIGURE 1

PORT MCNEILL OFFICIAL COMMUNITY PLAN
OPPORTUNITIES AND CONSTRAINTS

PREPARED BY APLIN & MARTIN CONSULTANTS LTD

APPENDIX

TIMBER SUPPLY IMPLICATIONS
FOR
PORT McNEILL COMMUNITY PLAN

Prepared for

Aplin & Martin Consultants Ltd.
Surrey, BC

September 6, 1996

F.L.C. REED & ASSOCIATES LTD.
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1. INTRODUCTION

The primary context for a community plan for Port McNeill is the Coast timber supply outlook and related prospects for curtailment of wood processing. This report provides a general picture of timber availability for the Coast Forest Region and more detailed information on the forest resource on the north half of Vancouver Island and the adjacent mainland.

The next two sections discuss recent changes in forest policy and resulting downward trends in available log supply. Sections 4, 5 and 6 deal with the three Forest Districts (FD's), Port McNeill, Campbell River and Bella Coola, which together account for half the log production on the Coast. Then a summary of manufacturing plants will be noted for the Port McNeill zone. ***The last step is to suggest opportunities for new industrial activity and employment in the area.***

The main sources for timber supply data are Ministry of Forests documents including Timber Supply Reviews, socio-economic assessments, discussion papers and determinations of the Annual Allowable Cut by the Chief Forester. This published information has been supplemented during visits to Ministry offices in Nanaimo, Victoria and Port McNeill, and by numerous contacts in government and industry.

Appendix materials include maps of timber tenure boundaries in the Vancouver Forest Region and the location of manufacturing plants on the Coast. Selected documents and miscellaneous statistical material will complete the package.

2. CHANGES IN FOREST POLICY

The reductions in timber availability result largely from new forest policies and regulations adopted by the NDP government following their election in late 1991. The main items are summarized here.

1. Timber Supply Review (TSR)

A rushed program plans to finish this first set of TSR's in late 1996. These examine new inventory and other relevant information, and project industrial timber supply according to then existing land use designation and management practices. The second round of TSR's will carry the full weight of green-up and other visual quality constraints and could have a negative impact as large or even larger than the first, and should be complete about 2001.

2. Protected Area Strategy (PAS)

The NDP set a goal of 12 per cent of the province's area for parks, wilderness and other uses precluding logging. About 5 per cent was protected prior to this. In some regions the reserved areas are already above 12 per cent and could exceed 15 per cent when reserved status is more or less completed.

3. Commission on Resources and Environment (CORE)

The objective of this now defunct Commission was to deal with land use conflicts in controversial areas such as Vancouver Island and to recommend land classification guidelines for general application across BC. For example, the concept of Low Intensity Areas has been adopted to signify low impact harvesting systems such as selective or helicopter logging, especially on Vancouver Island.

4. Forest Practices Code (FPC)

The government has now implemented the most detailed and rigorous logging and silviculture code of any forest jurisdiction in the world. It involves several subsets of guidelines including:

- Harvesting and Road Building
- Biodiversity
- Forest Ecosystem Networks (FEN's)
- Visual Quality Objectives (VQO's)
- Silviculture Practices

5. Other

Not included in the foregoing are economic marginalization of timber stands forced by the FPC and by major increases in stumpage costs. In addition, Indian Land Claims have not yet been taken into account in TSR's. The cumulative net loss in available log volume of these new policies has been estimated for the Coast region as follows:

TSA's	48 per cent
TFL's	41
Private forest	16
Other tenures	28

The full impact of more severe green-up constraints and of biodiversity guidelines have yet to be felt.

3. TIMBER SUPPLY IN TRANSITION

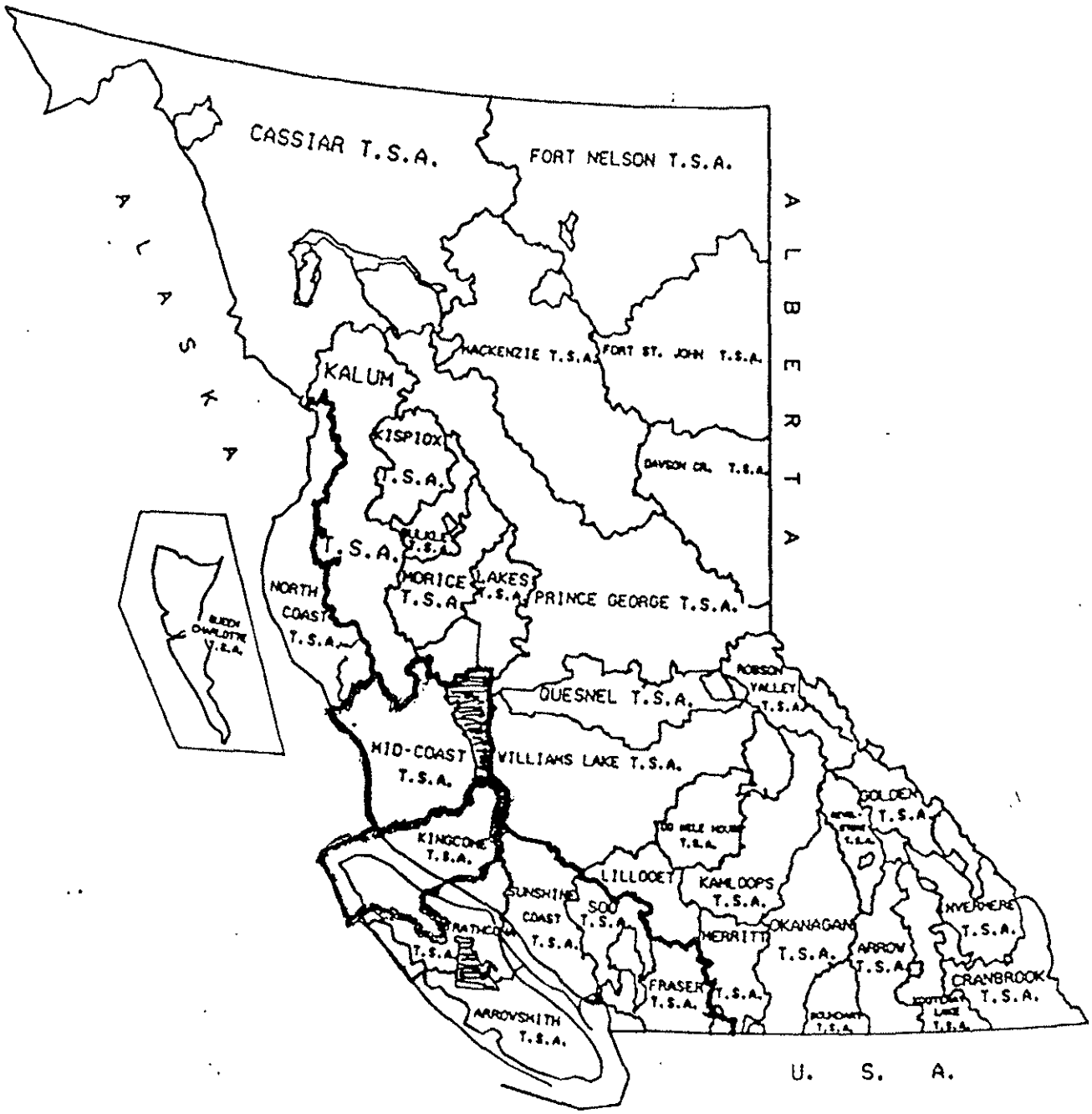
Broad Picture

The approach is to summarize the industrial log supply today and then project it to the year 2025, looking at Timber Supply Areas (TSA's), Tree Farm Licences (TFL's), and other tenures. Information will be given on apportionment of the Annual Allowable Cut (AAC) to major licensees and to the Small Business Forest Enterprise Program (SBFEP). Principal destinations of the timber harvested in the study area will be noted in general terms.

The accompanying map of BC shows the TSA boundaries for the entire province. The area west of the heavy line is known as the Coast Region. Output of

BRITISH COLUMBIA

DELINEATION of COAST and INTERIOR T.S.A.s



logs reached an historic high of 33.8 million m^3 in 1987 and has since fallen by 7.8 m^3 to 26.0 million m^3, or by 23 per cent. See Table 1 for trends in Coast and Interior regions since 1986, with maximum output in 1987 and 1989 respectively.

The Coast log harvest in 1995 was divided up by major types of tenure as follows:

TSA's	34.2	per cent
TFL's	42.5	
Private	22.4	
Indian, Federal	.9	
	100.0	

Area Breakdown

For the purpose of this analysis, attention is directed principally to three Forest Districts and their components.

Port McNeill FD

- Administrative centre is the town of Port McNeill
- South boundary bisects Brooks Peninsula, runs east and then north to Mt. Waddington and the southern tip of Tweedsmuir Park.
- Northern boundary off Cape Scott and then northeast to Tweedsmuir.
- Includes Kingcome TSA and TFL licences.
- See tenure map in appendix.

Table 1

British Columbia

Log Production by Region
1986 - 1995

(million m^3)

	Coast	Interior	Total
1986	26.6	50.9	77.5
87	33.8 max.	56.8	90.6 max.
88	32.8	54.0	86.8
89	29.9	57.5 max.	87.4
1990	25.2	53.1	78.3
91	24.8	48.9	73.7
92	23.5	50.5	74.0
93	25.7	53.5	79.2
1994	25.2	50.4	75.6
95	26.0	50.5	76.5

Source: Ministry of Forests

Campbell River FD

- North boundary is Port McNeill FD.
- South boundary from Nootka Sound to Fanny Bay.
- East boundary takes in Quadra and Sonora Islands, then north through the mouth of Bute Inlet.
- Includes Strathcona TSA and most of Strathcona Park.

Bella Coola FD

- South Boundary is Port McNeill FD.
- North Boundary crosses mainland opposite the south tip of Queen Charlottes, then northeast to embrace all of Tweedsmuir Park.
- Includes Mid Coast TSA and portion of two TFL's.
- Highway 20 from Williams Lake bisects Tweedsmuir Park and reaches tidewater at Bella Coola on North Bentick Arm of Burke Channel.

These three FD's contain the timber resource and licences which might conceivably hold most of the promise for new economic activity at Port McNeill or in neighbouring communities on the North Island. ***This potential for development arises not from possibilities of diverting scarce supply from existing processing plants, in the FD's and elsewhere to the south, but rather from inventive use of timber which is now being ignored by industry and the MoF for various reasons.***

TSA's on the Coast

A breakdown of supply is given in Table 2 for TSA's and in Table 3 for TFL's. In each case the AAC's are shown for the late 1980's, for 1994 and then early August 1996. These are compared to the Long Term Harvest Level (LTHL) as projected in Timber Supply Reviews issued by the MoF.

As noted earlier, the TSA's contributed 34.2 per cent of the Coast harvest in 1995. The negative impact of recent forestry and preservation policies on the AAC is most pronounced in the Coast TSA's. Of the nine TSA's, only the Arrowsmith and the Fraser are awaiting the Chief Forester's final "determination" of the permissable harvest. The Arrowsmith is scheduled for announcement in December of this year.

The Fraser TSA was revised in early March 1995, down from 1.76 million m^3 to 1.55 million m^3, for a reduction of 12 per cent, with the warning that an inventory audit might lead to a further decline. On July 16 of this year it was revealed that the mature timber inventory had been overstated by 23 per cent. Accordingly, the AAC in Table 2, column 3 is anticipated to be reduced to 1.19 million m^3.

The table shows a total volume reduction in Coast TSA's from nearly 10.54 million m^3 in the late 1980's, to 8.21 million m^3 in mid 1996, with an Arrowsmith reduction still to come. ***This is a dramatic loss of 2.32 million m^3 or 22.1 per cent in just a decade. Moreover, as explained in Note 3 to Table 2, the cumulative impact of new forest policies has yet to be realized fully.***

Meanwhile the Ministry of Forests has signalled a further major loss in available timber over succeeding decades. The aggregate LTHL for Coast TSA's is expected to bottom out at 5.60 million m^3, according to Ministry projections, and then to rise slightly in the more distant future. ***The projected trough is 47 per cent below output in the late 1980's.***

Table 2

AAC's for Coast TSA's and Sustainable Long Term Harvest Levels

(m^3)

	AAC			LTHL
	Late 1980's	1994	Aug.1996	
Arrowsmith	498,250	482,250	482,250	346/385
Fraser	1,765,000	1,765,000	(1,550,000) (1)	1,182
			1,190,000	
Kingcome	1,769,500	1,798,270	1,399,000	779/903
Mid Coast	1,515,600	1,000,000	1,000,000	550
Qu.Char.Islands	510,000	514,335	475,000	205/248
Soo	705,000	580,000	506,000	394/442
Strathcona	1,693,745	1,505,745	1,420,000	966/1,116
Sunshine Coast	1,429,580	1,100,000	1,140,000	876/986
North Coast	650,000	600,000	600,000	301
	10,536,675	9,345,600	8,212,250	5,599/6,113
Conventional	10,536,675	9,345,600	7,677,880	
Deciduous			199,370	
Problem F.T.			335,000	

(1) See Note 2 on following page.

Source: Ministry of Forests

Notes to TSA Table 2

1. The Arrowsmith TSA on south Vancouver Island will experience an AAC revision in late 1996, with a substantial reduction expected.

2. The current AAC for the Fraser TSA was set at 1.55 million m^3 on April 1, 1995. The figure in column 3 has been reduced by 23 per cent to 1.19 million m^3 in anticipation of a further major reduction.

3. The AAC's in column 3 do not, for the most part, fully reflect the following:
   a. Biodiversity guidelines
   b. Riparian management guidelines
   c. Land use decisions not made when TSR's were commenced
      - eg. Clayoquot, Vancouver Island Land Use Plant, PAS
   d. Changes in forest practices implemented following a TSR initiation
   e. Green-up constraints

4. Native land claims are expected to disturb existing distribution patterns of roundwood and are likely to result in some net reduction in harvest.

5. The LRSY or Long Run Sustained Yield is now called a Long Term Harvest Level. In some cases two numbers are given, signifying a trough and then a partial recovery.

6. The recent practice of partitioning the allowable harvest is reflected in the schedule at the foot of the table. Problem forest types refer to the share of the AAC assigned to stands below current sawlog utilization standards, to rough terrain requiring helicopter logging, to decadent stands and others considered marginally economic to operate, and to deciduous allocations.

7. Conventional sawlog allocations are shown on a separate line to reflect the above factors. The impact on conventional sawlog AAC is actually 5 per cent greater than the 47 per cent loss referred to earlier, due to partitions of the AAC.

The downward trend in total AAC for Coast TSA's is shown below.

	AAC		Loss	
Late 1980's	10,536,675	m^3		
August 1996	8,212,250			
			2,324,425 (-22.1%)	m^3
LTHL, 2025+	5,599,000		4,937,675 (-46.9%)	

TFL's on the Coast

The combined harvest for Coast TFL's accounted for 42.5 per cent of the total output in 1995. There are 15 of these area based licences with a total AAC today of 12.56 million m^3. ***There has already been a reduction of 11.7 per cent since 1987.*** Moreover, there are still seven TFL's awaiting announcements of revised AAC's by the end of December.

The LTHL's for these 15 licences is estimated to be 11.27 million m^3, which indicates a further loss of about 9 per cent of the 1987 total. ***While the treatment of TFL's has been less harsh than for TSA's, the expected loss is still 20.8 per cent, even before regulations are implemented in full.***

The cumulative downward trend in AAC is shown below.

	AAC		Loss	
Late 1980's	14,225,000	m^3		
August 1996	12,563,000			
			1,662,000 (-11.7%)	m^3
LTHL, 2025+	11,269,000		2,956,000 (-20.8%)	

Table 3

AAC's for Coast TFL's and Sustainable Long Term Harvest Levels

(Thousand m^3)

		TFL No.	AAC 1987	AAC 1994	AAC Aug.1996	LTHL
1.	WFP	6	1,300	1,300	1,288	968
2.	WFP	24	432	115	115	99/187
3.	WFP	25	653	783	783*	678
4.	Pacific	19	978	978	978*	833
5.	Interfor	10	219	171	171*	133
6.	Interfor	38	263	263	263*	233
7.	D.Mission	26	37	41	45	40/48
8.	Canfor	37	1,085	1,068	1,068	884
9.	Scott	43	27	50	44	30
10.	MB	39	3,820	3,818	3,740	3,236
11.	MB	44	2,838	2,450	2,450	1,950
12.	Interfor	45	305	210	210*	224
13.	Interfor	54	-	138	138*	144
14.	Timber West	46	1,178	559	559*	537
15.	Timber West	47	1,090	711	711*	1,280
			14,225	12,655	12,563	11,269/11,365
	Conventional		14,198	12,605	12,223	
	Deciduous		27	50	87	
	Problem F.T.				253	

* New AAC Pending

Source: Ministry of Forests

Notes to TFL Table 2

1. New AAC determinations are pending for WFP-25, Pacific-19, Interfor-10, 38 and 45, and Timber West-46 and 47.

2. As in the case of TSA's, the August 1996 column does not fully reflect the impact of biodiversity guidelines and other items cited in note 3. to Table 2. Native claim settlements are also ignored.

3. Partition cuts are also included at the bottom of the August 1996 column, in the combined amount of 340,000 m^3, as shown in the lower register.

Other Coast Tenures

There is relatively little public information on the outlook for other private forest lands and for the royalty bearing remnants of Old Temporary Tenures which are outside TFL's. In 1995 they made up 22.4 per cent of the total Coast harvest, as shown in the schedule on page 5. It would be prudent to assume that a further reduction in output of at least 10 per cent is likely to be experienced in the next decade.

How much of this private and royalty bearing land is on the northern half of Vancouver Island is not readily available in published form. However, it is possible to piece together a picture along the lines shown in Table 4. Column 1 shows stumpage bearing timber production from Crown land in both TFL's and TSA's. Column 2 is royalty bearing timber, both inside and outside TFL's. The Private and Other column includes large industry fee simple ownerships, smaller private and a minor amount of Indian and federal timber production.

From Table 4 we see that the log harvest from private land was approximately 10 per cent of the total harvest in the region, with the predominant share in the Campbell River FD. The royalty timber, originating from Old Temporary Tenures, has a higher proportion in the Port McNeill FD.

Table 4

BC Coast Timber Production in Three Forest Districts 1994 and 1995

(Thousand m^3)

	Stumpage Bearing	Royalty Bearing	Private & Other	Total
	1995			
Bella Coola	1,267	404	68	1,739
Port McNeill	4,181	1,252	247	5,680
Campbell River	3,918	697	962	5,577
	9,366	2,353	1,277	12,996
	1994			
Bella Coola	1,179	322	85	1,586
Port McNeill	3,801	1,167	151	5,119
Campbell River	3,719	733	892	5,344
	8,699	2,222	1,128	12,049

Source: Ministry of Forests

Indian Lands

No solid information is available on the likely impact of land claim settlements on timber supply. The best judgement we can make today is that Natives will be allocated substantial Coast forest land. They will have a major say in what is done on much of the remainder. ***Their approval process will tend to delay harvesting significantly and may impose additional constraints through land use classification, as well as in harvesting and road building practices.*** They will also influence management of fish and wildlife.

Fragmentation of existing tenures will automatically reduce the aggregate AAC because of changes in age class distribution ratios. ***Natives can be expected to demand prime mature timber in the settlement process so the negative impact will be proportionately higher than the percentage of land conveyed.***

Adding to the uncertainty is the timing of harvest on newly acquired lands. Some will harvest faster than earlier cut controls permitted, while some will harvest more slowly, at least until they develop routines for decision making in complicated matters.

Other unanswered questions remain:

- ***Will they export logs under their control, as was their practice in the past?***
- ***Will they redirect logs away from mills currently using them?***
- ***Will Natives build their own processing capacity in Upper Coast communities?***
- ***What practices will they favour in sustainability terms, in harvesting, regeneration, and later silviculture?***
- ***Will costs rise for timber they own, control or co-manage, and by how much?***

In short, it is only sensible to expect that a reduction of say 5 per cent of timber volume. An increase of costs will follow automatically, quite apart from exports and dislocation of existing distribution patterns.

Implications for Coast Forest Industry

It can be assumed that the Coast forest industry capacity was fully utilized in 1987 when log production reached its peak at 33.8 million m^3. In that year exports were 3.4 million m^3 and imports were negligible. In effect, the industry would have used approximately 30.4 million m^3.

In 1995 the Coast output was 26.0 million m^3, and exports were 0.6 million and at least this much was imported. ***This means that the industry has a shortage of 4.4 million m^3 or approximately 15 per cent excess capacity.*** Some mills have already shut down and many have curtailed. ***The prospect of a further loss of raw material of around 8-10 million m^3 will be a body blow*** to producers of both solid wood and fibre products, since it represents the raw material of 4-5 world scale pulp mills or 15-20 large sawmills.

This means that every company on the Coast is scrambling for raw material and that widespread shut downs will begin shortly. It would take a major re-thinking of provincial forest policy to forestall this magnitude of decline.

4. PORT McNEILL FOREST DISTRICT

Now we turn to a more detailed look at the Kingcome TSA and TFL's in the area adjacent to Port McNeill itself, focusing first on the anticipated shrinkage in supply and then on existing licence apportionments and distribution of logs to manufacturing locations.

Kingcome TSA. The best timber in the area is in TFL's held by Western Forest Products, Canfor, and TimberWest. Within the TSA timber basket, over 80 per cent of the land is on the mainland or adjacent islands. The AAC is roughly 1.4 million m^3 and the LTHL is in the range of 779-903,000 m^3. See Table 2.

Apportionment of the AAC for the Kingcome is currently as follows:

SBFEP	20.3	per cent
Other licences, usually larger and longer term	79.7	
	100.0	

The major licensees in the Kingcome TSA are listed below with approximate allocations.

Interfor	736,000	m^3	53 per cent
Western	85,000		6
MacMillan Bloedel	67,000		
Mill & Timber Products	55,000		
Richmond Plywood	54,000		
Shushartie Log Sales	87,000		
SBFEP	280,000		20
	1,364,000		

Harvest levels since 1992 have averaged about 80 per cent of allocations, partly because the SBFEP has been cutting less than its allotment.

Interfor ships 95 per cent to its Lower Mainland sawmills, with the balance going to Port Alice or Elk Falls as pulp logs. MB distributes to the south in the same ratios to their own sawmills and pulp mills. Mill & Timber Products ship to their mill in Surrey.

Western sends their quota to mills on the Lower Mainland and the Nanaimo, Ladysmith, Cowichan area, except for pulp logs used in Port Alice.

Highland Mills has a small sawmill at Port McNeill. Shushartie Log Sales has processing operations near Port Hardy for lumber, shingle and shake, pole and post, and pulpwood chipping. Two small mills also operate in the Port Hardy area, the R.Pizzy and one at Lukwa. These are the only companies aside from Western's Port Alice pulp mill which process in the North Island area. There are said to be dozens of independent shake salvage contractors in the area as well.

SBFEP timber sales are almost entirely shipped outside the area, including the value added sales which go to the Lower Mainland. Average small business log production in 1994 and 1995 was 315,000 m^3 from the total FD.

TFL's. The *Port McNeill FD* contains all of two licences (6, 37) and parts of five more. They had an estimated combined AAC within the District of 3.4 million m^3 in 1996 and only minor changes have occurred in three of these under the TSR process.

No. 6	Western, Quatsino	1,288	thousand m^3
25	Western, Naka	215	
37	Canfor, Nimkish	1,068	
39	MB, Haida	435	
43	Scott, Fr-Hom-King	8	
45	Interfor, Cordero-Knight	170	
47	TimberWest, Duncan Bay	260	
		3,444	

3.5
1.9
4.5

Most of the harvest from these TFL's is shipped to captive mills to the south, or is traded in Lower Mainland and South Island log markets.

Natives. There are 11 Native territories within the Port McNeill FD, with a combined population of 4,043. Half of these live on 112 reserves. Not all of these have registered their complete land claims with the BC Treaty Commission.

5. CAMPBELL RIVER FOREST DISTRICT

Strathcona TSA. The Campbell River FD contains the Strathcona TSA and portions of several TFL's. The Strathcona consists of the Kyuquot, Sayward, and Loughborough blocks.

Apportionment of the AAC for the TSA is approximately in these ratios.

SBFEP	15.4	per cent
Other licences	84.6	

The major licences in the TSA are listed below.

Pacific Forest	397,000	m^3	28 per cent
Interfor	236,000		17
Canfor	120,000		8
TimberWest	75,000		
MB	103,000		
Hecate Logging	66,000		
Miscellaneous	139,000		
Community Licence	60,000		
SBFEP	224,000		16
	1,420,000		

Pacific Forest ships to its Tahsis sawmill, the Gold River bleached kraft pulp mill, sawmills in Nanaimo and Ladysmith, and the South Coast log market. Interfor ships almost entirely to its South Coast mills and the general log market. Canfor distributes

to Lower Mainland sawmills, a Howe Sound pulp and paper mill and other customers. Doman's sawmill network absorbs most of their quota, while pulp logs go to Port Alice and a bleached kraft pulp mill at Woodfibre near Squamish.

MacMillan Bloedel ships primarily to its Powell River and Nanaimo pulp and paper mills and to sawmills in Chemainus and the Lower Mainland. Hecate Logging is a joint venture between Natives and the Coulson companies, and their logs go to a sawmill in Port Alberni and to the Lower Mainland. Most of the licensees buy, sell and trade in order to match log specifications to manufacturing needs.

In addition to the Avenor pulp mill at Gold River, the Tahsis sawmill and the integrated Fletcher Challenge operation at Campbell River, there are some independent processing operations as noted in this list.

Field Sawmills, Courtenay
Campbell River Sawmills, Campbell River
Ocean Cedar, Campbell River
Chinook Forest Products, Courtenay
Island Pole, Royston
Yeoman's Cedar, Black Creek
Beaver Forest Products, Campbell River
Other: shake and shingle, small sawmills, chip mills

SBFEP operations sell half their output within the Strathcona TSA and the rest further south. Their output tends to vary considerably from year to year and the average in 1994 and 1995 was 350,000 m^3.

An estimated 72 per cent of the total TSA cut is processed further south.

TFL's. The *Campbell River Forest District* contains all of one TFL and parts of four others.

No. 19	Pacific, Tahsis	978,000	m^3
25	Western, Naka	300,000	
39	MB, Haida	1,435,000	
45	Interfor, Cord-Knight	20,000	*
47	TimberWest, Duncan Bay	350,000	*
		3,083,000	

As in the TSA log distribution, possibly 75 per cent flows southward for processing. Exceptions are Pacific which transfer some output to Gold River and Tahsis, while TimberWest consigns some to Fletcher Challenge at Campbell River.

Natives. There are 10 Native groups in the Campbell River Forest district, with an estimated population of 3,163. Reserves number approximately 75 but not all are inhabited.

6. BELLA COOLA FOREST DISTRICT

Mid Coast TSA. This administrative unit comprises the vast majority of the Bella Coola Forest District, the exceptions being three small TFL blocks. The productive forest in this TSA is almost double the combined area in the Strathcona and Kingcome. However, the Mid Coast TSA is in difficult terrain and has only 40 per cent as much operable forest as the other two combined.

The Mid Coast AAC is now 1.0 million m^3, of which 130,000 m^3 are in a partition cut of poorer quality red cedar. Apportionment of the quota is as follows:

SBFEP	8 per cent
Other	92

The remoteness of this area and absence of processing facilities means that most of the logging employment is in camps which draw from Vancouver Island and the Lower Coast.

Major licences include the following:

Interfor	367,000	m^3	37 per cent
Doman	276,000		28
Pacific	196,000		20
SWC Holdings	23,000		
Mill & Timber	20,000		
Miscellaneous	36,000		
SBFEP	82,000		8
	1,000,000		

Output from this TSA is shipped to processors on Vancouver Island and the Lower Mainland. Little Valley Forest Products has a sawmill at Hagensborg near Bella Coola. Its annual capacity is 14 million board feet. The average Small Business harvest from the FD was 144,000 m^3.

TFL's. These have only a minor contribution to the *Bella Coola FD* harvest.

No.	25	Western, Roderick	75,000 m^3
	39	MB, Namu	195,000
			270,000

Natives. Half of the population in the FD is Native, or about 2,000, and these fall into five main tribal groups. The number of reserves is not known but most of the area is within the boundaries of Land Claims.

7. AVAILABLE TIMBER SUPPLY

Private and Other Timber

Apart from Table 4 and related text in section 3, little is known at this time about the volume of timber being cut from private ownerships, royalty bearing Old Temporary Tenures outside TFL's, and other non-provincial forest land. These accounted for 5.57 million m^3 of the harvest on the entire Coast in 1995. Native and federal lands bring this up to 6.0 million m^3. Possibly 50 per cent or more of this is within the three FD's mentioned above.

Undercut of AAC

The discussion so far has been about AAC as though it were equivalent to timber availability. ***However, the AAC's have been undercut consistently by about 10 per cent for a number of years.*** The reasons are mainly as follows:

- Difficulty in finding places to locate cut blocks, given green-up and other constraints.
- Administrative paper choke in government and industry.
- AAC revisions have not kept pace with PAS, FPC constraints and other guidelines, such as Light Intensity Area logging requirements.

Thus, the formally designated AAC's have ceased to be reliable indicators of available supply. Therefore, in practical terms, it is necessary to discount the AAC's, especially in TSA's, before making forward projections.

The undercuts on the regulated AAC licences run heavily to the SBFEP and this pattern is expected to prevail in the future.

Projection

The foregoing discussion of timber supply and outlook focused primarily on the three FD's of immediate interest to Port McNeill, since most of the harvest is conducted within 250 km.

Table 5 summarizes the AAC's and LTHL's, and then translates these into what can be considered as actual timber availability in the period to 2025. ***The area has already lost an estimated 2.5 million m^3 of harvest since the late 1980's and it is expected to lose another 3.5 million m^3 by 2025. The total loss amounts to 39 per cent.***

The rest of the Coast can expect a decline in output of logs which is as bad or worse.

Mitigation

There is a genuine opportunity to lessen the falldown in supply by means of intensive silviculture, and eventually to reclaim lost output. ***Some of the treatments can bring immediate benefits***, for example where commercial thinning is appropriate to over- populated stands and where a hardwood component is mature and needs removal to benefit the residual stand.

Whether the thinnings are hardwood or softwood, they offer incremental supply now. More importantly, commercial thinning can bring the remaining stand to operable sawlog diameters as much as 20-30 years sooner. In many cases fertilizer used in conjunction with thinning, late in the rotation age, will have a synergistic impact on volume available.

Closer utilization of smaller diameters and ***problem forest types***, as well as ***inoperability lines***, are also worth examining for additional supply.

Preliminary

Table 5

Timber Supply in Port McNeill Zone (3 FD's)
Projected to 2025 and Beyond

(Million m^3)

	TSA's	TFL's	Sub-Total Regulated	Private, Other	Total
AAC's					
Late 1980's	5.0	7.5	12.5		
1996	3.8	6.8	10.6		
LTHL	2.3	6.3	8.6		
Approx. Harvest					
Late 1980's	4.6	7.4	12.0	3.5	15.5
1995	3.4	6.6	10.0	3.0	13.0
Timber Availability					
2010	2.6	6.0	8.6	2.4	11.0
2025	2.2	5.5	7.7	1.8	9.5

Note: Mitigation action could improve the supply materially.

8. LOCATION OF MANUFACTURING PLANTS

The entire Bella Coola FD has only one known sawmill, as noted earlier, at Hagensborg. The Port McNeill sawmill capacity is limited to small operations. The Port Alice pulp mill has a substantial inflow of 835,000 m^3 of roundwood.

The Campbell River FD has sawmill capacity, about 300 million bd. ft. combined in Tahsis and Campbell River, a pulp mill at Gold River, and an integrated pulp and paper complex at Campbell River.

See the appendix map of Coast plants and a report listing major operations with capacities.

Before dealing with the final section on strategic planning, ***it is essential to emphasize again that the reductions in timber supply since 1987 mean that there is hardly a mill on the Coast that does not have serious difficulty finding wood supply*** suited to its design, production specifications and raw material needs. ***It is concluded, therefore, that no prospect exists to divert some of the existing harvest to new ventures in Port McNeill without enormous public controversy. Other avenues must be explored.***

9. DEVELOPMENT OPPORTUNITIES

Several possibilities exist which are worth exploring with respect to the Port McNeill strategic planning study. These include incremental log supply, new technology and service sector potential. ***Most of these items are eligible for funding by FRBC. It has been collecting about $12 per m^3 in super stumpage since June 1994, or about $300 million to date. Less than 10 per cent has been returned to these three FD's.***

Inoperable stands

Industrial companies have said that the Forest Service is excessively pessimistic when drawing operability lines on forest cover maps for terrain-related and economic reasons. There are about 1 million ha or 60 per cent of the productive forest now classed as inoperable in the Bella Coola, Port McNeill and Campbell River FD's.

No. 1 ***IT IS RECOMMENDED that operators in the area prepare a documented proposal to access these stands.*** Even a fraction of the area could add 1 million m^3 new supply to the annual pool of raw material.

Problem Forest Types (PFT's)

There is a far larger area of PFT's than currently included in partitioned cuts, much of it in decadent cedar and hemlock stands. Industry should be telling the Ministry what is economic, and not the other way around.

No. 2 ***IT IS RECOMMENDED, as in the case of so-called inoperable sites, that an independent assessment be made by logging contractors and processing companies to determine how much a timber short industry might be willing to cut if permitted to do so.***

Deciduous Stands

Industry experiences increasing difficulty in getting the Ministry to put up deciduous sales on the grounds that it is either non-economic or required to meet riparian management and biodiversity guidelines.

No. 3 ***IT IS RECOMMENDED that an independent review of deciduous harvest possibilities be made immediately.***

Commercial Thinning

In other countries with which we compete, a substantial share of raw material comes from this source. ***This additional wood is available immediately. It should be treated as incremental to existing AAC's. Incentive stumpage ought to be considered. In spite of controversy, a consensus is building in favour of this.***

The gains may extend far beyond providing incremental volumes of lower diameter wood. In those over-populated stands of second growth which would benefit from commercial thinning, ***it is often possible to move them forward in the harvesting queue by 30-40 years.*** In other words, a reduction in the harvest age is possible from 100 years down to 60 years or even less. This gives rise to an Allowable Cut Effect, since the old growth does not have to be stretched over the longer time span.

In addition, commercial thinning of the mature deciduous component has shown elsewhere in the province to provide merchantable raw material while at the same time bringing the coniferous trees to harvest diameter more rapidly.

No. 4 ***IT IS RECOMMENDED that the Ministry revise its policies on wood generated by commercial thinning.***

New Technology

The new ORGANOSOLV pulping process researched by Dr. Laszlo Paszner at UBC is ideally suited to decadent hemlock and cedar as well as under-used hardwood species. A similar alcohol process has already been tested by REPAP in New Brunswick. It is a closed system which produces a high yield, high quality pulp with substantial by-product values, and is virtually pollution free.

No. 5 ***IT IS RECOMMENDED that the major licensees operating in the Port McNeill area be asked to provide estimates of fibre available in decadent forests and follow up immediately with a preliminary feasibility*** for such a specialized pulp mill based on a resource which is now bypassed.

Intensive Silviculture

Port McNeill is in the middle of a large area which could be developed as a skill centre for hundreds of workers doing pre-commercial and commercial thinning as well as planting, juvenile spacing and fertilizing.

No. 6 ***IT IS RECOMMENDED that Port McNeill take the lead in sponsoring a feasibility study to identify the forest area appropriate for silviculture treatments annually and to sketch out a cooperative plan to bring the program to fruition,*** with incentives as necessary.

Native Forestry

Given the large number of Natives in the area, about 10,000, who will be interested in harvesting, processing and forest stewardship, it is obvious that any new schemes will necessarily involve them from the outset. Joint ventures of various kinds are expected to be part of the fuller economic and social development in the region.

No. 7 ***IT IS RECOMMENDED that Port McNeill take the lead in bringing Natives into the planning and implementation process growing out of these suggestions.***

Small Business

The Small Business allocation in the three FD's is 1 million m^3 but only 800,000 are being harvested annually. This program is far from being successful. Something innovative must be done to ensure that the SBFEP apportionment is a fully effective part of the annual harvest. Alternatively, the unused Small Business portion should be incorporated in the allocation to larger licensees.

No. 8 *IT IS RECOMMENDED that a group of small and large operators be brought together to design a solution to problems with the program.*

Policy Review

Several of the foregoing recommendations require a review of MoF policies and supplementary regulations. When the full downside threat is recognized, it should be apparent that several of these call out for revisiting.

No. 9 ***IT IS RECOMMENDED that the municipal councils, on the North Island, compile a specific set of revisions, and seek endorsement of these by the Union of BC Municipalities before submission to the Cabinet.***

Action Mechanism

Nothing of substance will follow in the absence of concerted action by community and industry leaders in Port McNeill and adjacent communities.

No. 10 ***IT IS RECOMMENDED that the municipal government in Port McNeill, and in conjunction with the Regional District, organize a Forest Strategy Expediting Committee. Its first action*** would be to set up a Task Force to flesh out the above recommendations. ***Their mandate would be to follow up immediately with a package of feasibility studies and to provide implementation on an urgent basis.***

Community Forests

It is suggested frequently that various municipalities like Port McNeill should try to get a Community Forest assigned to them by the MoF. However, it is the author's view that forest management is best left to professionals in the companies. They have both the expertise and the financial stability to manage consistently for sustainability objectives. This comment is inserted here to make sure readers do not think something important is missing from the project list.

Local Input

The foregoing recommendations can be added to as local knowledge is recruited into the program. It is taken for granted that mining, fishing, aquaculture, tourism and other sectors should be integrated into an overall scheme.

10. CONCLUDING COMMENTS

The reductions in timber availability have already impacted negatively on Port McNeill and the employment situation will worsen materially as things now stand. Such a course of events is unacceptable and unnecessary.

Fortunately there are means to ameliorate the social and economic losses faced by the community. No time should be wasted. The recommendations put forward in the previous section are intended for consideration on a fast track basis. This will take skill and energy on the part of civic and industry leaders. More importantly, it will require a combination of vision and persistent follow-up.

Funds for studies and seed money for implementation are available in FRBC and elsewhere. Little of the super stumpage has been ploughed back as promised, so there is certainly more than ample money on the table to make a vigorous beginning on corrective action as recommended.

The timing of a strategic plan could not be better, now that timber deficits have been identified in unmistakable terms.

Meanwhile, a renewed effort should be made to inform the public of the timber deficits described above, and to argue persuasively for a rethinking of excessive regulatory constraints on the province's number one generator of income and employment.

Table A.1

Log Production on BC Coast in 1995
by Tenure

(thousand m^3)

TSA's			
• Small Business	1,925		
• Other licences	6,947		
		8,872	34.2%
TFL's			
• Crown land	8,332		
• Royalty bearing land	2,236		
• Private fee simple	469		
		11,037	42.5
Other private	4,444		
Other royalty bearing	1,379		
		5,823	22.4
Indian Reserves	225		
Federal	2		
		227	.9
		25,959	100.0%

Source: Ministry of Forests

Table A.2

British Columbia

Log Exports
1986 - 1995

(million m^3)

1986		2.6
87		3.4
88		3.2
89		1.9
1990		.8
91		.8
92		1.1
93		1.0
1994		.7
95		.6
1995	By destination	
	• US	.430
	• Japan	.134
	• S. Korea	.047
	• Other	.001
		.612

Source: Statistics Canada

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
MID-COAST TSA #19

Effective dates refer to the date that AAC was made effective by Chief Forester

) AAC (Section 7 of the FOREST ACT) Effective: 1995.01.01
Approved: 1994.08.31

Allowable Annual Cut: 1 000 000 m3

Partitioned Components:	m3	%	Expiry
Conventional	1 000 000	100.0	1999.12.31

) Apportionment (Section 8 of the FOREST ACT)

Conventional Effective: 1995.01.01
Expiry: 1999.12.31

	m3	%
Forest Licences, replaceable.....:	869 221	86.9
TSL > 10,000 m3, replaceable.....:	0	0.0
TSL <= 10,000 m3, replaceable.....:	2 552	0.3
SBFEP -any Category (sec 16).....:	31 313	3.1
-Category 1 (sec 16).....:	0	0.0
-Category 2 (sec 16).....:	0	0.0
-Bid Proposals (sec 16.1)...:	51 164	5.1
-Temporary AAC increase.....:	0	0.0
Forest Service Reserve.....:	23 294	2.3
Woodlot Licences.....:	4 912	0.5
Forest Licences nonreplaceable.....:	17 544	1.8
TSL (major), nonreplaceable.....:	0	0.0
Pulpwood Agreements, TSL.....:	0	0.0
Sub Total.....:	1 000 000	100.0

See attached for any Component comments.

See attached for any Timber Supply Area comments.

(Effective date is date of Chief Forester's determination)
REPORT ID: APTR011 RUN DATE: 1996.07.09 RUN TIME: 08:53:56

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
MID-COAST TSA #19

Commitments

Conventional----------

Forest Licences, replaceable

Licence	Licensee	Sec 52	AAC
A16845	Doman Industries Ltd.	0	276 407
A16846	Pacific Forest Products Limited	0	69 100
A16847	Pacific Forest Products Limited	0	126 693
A16848	SWC Holdings Ltd.	0	23 333
A16850	International Forest Products Limited	0	367 435
	Subtotal	0	862 968

TSL <= 10 000 m3, replaceable

Licence	Licensee	Sec 52	AAC
A16868	Mill & Timber Products Ltd.	0	2 552
	Subtotal	0	2 552

Forest Licences, nonreplaceable

Licence	Expiry	Licensee	Sec 52	AAC
A23551	1998.07.14	Mill & Timber Products Ltd.	0	17 544
		Subtotal	0	17 544

ote:

Woodlot Licences are not listed under commitments.
For information on the present commitments and volume available under the Small Business Forest Enterprise Program contact the District Manager. These figures exclude Small Business volumes within Tree Farm Licences area.

Effective date is date of Chief Forester's determination)

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
KINGCOME TSA #33

Effective dates refer to the date that AAC was made effective by Chief Forester

) AAC (Section 7 of the FOREST ACT) Effective: 1991.01.01
Approved: 1992.03.21

Allowable Annual Cut: 1 798 270 m3

Partitioned Components:	m3	%	Expiry
Conventional	1 773 270	98.6	. .
Deciduous	25 000	1.4	. .

) Apportionment (Section 8 of the FOREST ACT)

Conventional Effective: 1991.01.01
Expiry: . .

	m3	%
Forest Licences, replaceable.....:	1 290 363	72.8
TSL > 10,000 m3, replaceable.....:	0	0.0
TSL <= 10,000 m3, replaceable.....:	10 009	0.6
SBFEP -any Category (sec 16).....:	242 985	13.7
-Category 1 (sec 16).....:	0	0.0
-Category 2 (sec 16).....:	0	0.0
-Bid Proposals (sec 16.1)...:	96 587	5.4
-Temporary AAC increase.....:	0	0.0
Forest Service Reserve.....:	18 370	1.0
Woodlot Licences.....:	2 956	0.2
Forest Licences nonreplaceable.....:	112 000	6.3
TSL (major), nonreplaceable.....:	0	0.0
Pulpwood Agreements, TSL.....:	0	0.0
Sub Total.....:	1 773 270	100.0

See attached for any Component comments.

Deciduous Effective: 1991.01.01
Expiry: . .

	m3	%
Forest Licences, replaceable.....:	0	0.0
TSL > 10,000 m3, replaceable.....:	0	0.0
TSL <= 10,000 m3, replaceable.....:	0	0.0
SBFEP -any Category (sec 16).....:	0	0.0
-Category 1 (sec 16).....:	0	0.0
-Category 2 (sec 16).....:	0	0.0
-Bid Proposals (sec 16.1)...:	0	0.0
-Temporary AAC increase.....:	20 000	80.0
Forest Service Reserve.....:	0	0.0
Woodlot Licences.....:	0	0.0
Forest Licences nonreplaceable.....:	5 000	20.0
TSL (major), nonreplaceable.....:	0	0.0
Pulpwood Agreements, TSL.....:	0	0.0
Sub Total.....:	25 000	100.0

See attached for any Component comments.

See attached for any Timber Supply Area comments.
(Effective date is date of Chief Forester's determination)

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
KINGCOME TSA #33

Commitments

Conventional----------

Forest Licences, replaceable

Licence	Licensee	Sec 52	AAC
A19238	International Forest Products Limited	0	943 826
A19240	Western Forest Products Limited	0	108 887
A19242	Mill & Timber Products Ltd.	0	70 395
A19243	Richmond Plywood Corporation Limited	0	69 720
A19244	MacMillan Bloedel Limited	0	86 478
	Subtotal	0	1 279 306

TSL <= 10 000 m3, replaceable

Licence	Licensee	Sec 52	AAC
A20510	Hall Point Logging Ltd.	0	1 345
A20511	442578 B.C. Ltd.	0	8 664
	Subtotal	0	10 009

Forest Licences, nonreplaceable

Licence	Expiry	Licensee	Sec 52	AAC
A32687	2004.04.02	Shushartie Logs Sales Ltd.	0	112 000
		Subtotal	0	112 000

Deciduous----------

Forest Licences, nonreplaceable

Licence	Expiry	Licensee	Sec 52	AAC
A34862	2004.03.31	Scott Paper Limited	0	5 000
		Subtotal	0	5 000

te:

Woodlot Licences are not listed under commitments.
For information on the present commitments and volume available under the Small Business Forest Enterprise Program contact the District Manager. These figures exclude Small Business volumes within Tree Farm Licences area.

ffective date is date of Chief Forester's determination)

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
STRATHCONA TSA #37

Effective dates refer to the date that AAC was made effective by Chief Forester

) AAC (Section 7 of the FOREST ACT) Effective: 1996.01.01
Approved: 1995.12.11

Allowable Annual Cut: 1 420 000 m3

Partitioned Components:	m3	%	Expiry
Conventional	1 404 000	98.9	. .
Deciduous	16 000	1.1	. .

) Apportionment (Section 8 of the FOREST ACT)

Conventional Effective: 1996.01.01
Expiry: . .

	m3	%
Forest Licences, replaceable.....:	1 214 052	81.5
TSL > 10,000 m3, replaceable.....:	12 965	0.9
TSL <= 10,000 m3, replaceable.....:	6 140	0.4
SBFEP -any Category (sec 16).....:	106 587	7.2
-Category 1 (sec 16).....:	0	0.0
-Category 2 (sec 16).....:	0	0.0
-Bid Proposals (sec 16.1)...:	122 788	8.2
-Temporary AAC increase.....:	0	0.0
Forest Service Reserve.....:	14 598	1.0
Woodlot Licences.....:	12 615	0.8
Forest Licences nonreplaceable.....:	0	0.0
TSL (major), nonreplaceable.....:	0	0.0
Pulpwood Agreements, TSL.....:	0	0.0
Sub Total.....:	1 489 745	100.0

See attached for any Component comments.

Deciduous Effective: 1996.01.01
Expiry: . .

	m3	%
Forest Licences, replaceable.....:	0	0.0
TSL > 10,000 m3, replaceable.....:	0	0.0
TSL <= 10,000 m3, replaceable.....:	0	0.0
SBFEP -any Category (sec 16).....:	0	0.0
-Category 1 (sec 16).....:	0	0.0
-Category 2 (sec 16).....:	0	0.0
-Bid Proposals (sec 16.1)...:	0	0.0
-Temporary AAC increase.....:	0	0.0
Forest Service Reserve.....:	0	0.0
Woodlot Licences.....:	0	0.0
Forest Licences nonreplaceable.....:	0	0.0
TSL (major), nonreplaceable.....:	16 000	100.0
Pulpwood Agreements, TSL.....:	0	0.0
Sub Total.....:	16 000	100.0

See attached for any Component comments.

See attached for any Timber Supply Area comments.
(Effective date is date of Chief Forester's determination)

MINISTRY OF FORESTS

AAC, APPORTIONMENT AND COMMITMENT LISTING
STRATHCONA TSA #37

Commitments

Conventional----------

Forest Licences, replaceable

MODIFIED 1996

Licence	Licensee	Sec 52	AAC
A19225	MacMillan Bloedel Limited	0	109 080
A19231	Pacific Forest Products Limited	0	422 235
A19232	International Forest Products Limited	0	288 336
A19233	Canadian Forest Products Ltd.	0	127 308
A19236	Hecate Logging Ltd.	0	69 550
A19237	Doman Industries Ltd. X	0	115 910
A20913	TimberWest Forest Limited	0	31 698
A29159	TimberWest Forest Limited	0	47 920
	Subtotal	0	1 212 037

TSL > 10 000 m3, replaceable

Licence	Licensee	Sec 52	AAC
A20504	Raven Industries Ltd.	0	12 965
	Subtotal	0	12 965

TSL <= 10 000 m3, replaceable

Licence	Licensee	Sec 52	AAC
A20486	Chinook Forest Products Ltd.	0	1 873
A20498	Larson, Allen David	0	506
A20500	W.A. McKay Logging Ltd.	0	717
A20501	P & G Logging Ltd.	0	2 361
A20502	Robertson Logging Ltd.	0	683
	Subtotal	0	6 140

te:

Woodlot Licences are not listed under commitments.
For information on the present commitments and volume available under the Small Business Forest Enterprise Program contact the District Manager. These figures exclude Small Business volumes within Tree Farm Licences area.

ffective date is date of Chief Forester's determination)
PORT ID: APTR011 RUN DATE: 1996.07.09 RUN TIME: 08:57:41

Facsimile Cover Sheet

To: Les Reid
Company:
Phone:
Fax: 275-1490

From: Fred Amos
Company: Ministry of Forests, Nanaimo
Phone: 751-7066
Fax: 751-7197

Date: 96/08/21
Pages including this cover page: 3

Comments:

Good morning Les !

Here are summaries of stumpage and royalty billing for the calendar years 1994 and 1995 for Vancouver Forest Region by forest district.

Please call me if you require further information.

Fred

REPORT NO. 01
PROGRAM NAME: FDREV

MINISTRY OF FORESTS ... VALUATION BRANCH
STUMPAGE AND ROYALTY BILLING FROM 01JAN95 TO 31DEC95

REGION: 01 - VANCOUVER

1995

FOREST DISTRICT	VOLUME BILLED FULL ROYALTY MARKS	VOLUME BILLED ROYALTY FREE MARKS	VALUE BILLED ROYALTY MARKS	VOLUME BILLED STUMPAGE MARKS	VALUE BILLED STUMPAGE MARKS
1A - MID COAST	404,266.60	67,906.50	5,971,737.09	1,266,993.40	24,889,993.78
1B - QUEEN CHARLOTTES	232,561.50	144,881.10	3,636,559.87	1,257,399.10	36,894,894.74
11 - CHILLIWACK	83,406.20	371,349.70	1,476,634.07	1,484,879.30	35,130,029.94
13 - SQUAMISH	85,141.80	51,080.30	1,140,285.35	818,212.30	20,448,214.31
15 - SUNSHINE COAST	29,126.30	353,327.20	556,783.78	1,680,519.80	35,053,041.40
16 - DUNCAN	106,718.80	1,696,136.10	2,229,252.54	568,991.50	21,659,200.50
17 - PORT ALBERNI	689,518.50	1,114,240.60	12,547,305.06	1,597,215.70	57,342,323.81
18 - CAMPBELL RIVER	696,512.30	961,821.60	12,750,112.29	3,918,068.30	119,673,045.58
19 - PORT MCNEILL	1,252,199.60	247,382.30	22,593,000.65	4,181,042.50	124,332,880.55
TOTALS FOR REGION 01:	3,579,451.60	5,008,125.40	62,881,670.70	16,773,321.90	475,423,624.61

Shoreline Habitat Assessment, Port McNeill, B.C.

Prepared for

Ray Parfitt, MCIP
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September, 1996

INTRODUCTION

The Town of Port McNeill has retained Aplin and Martin Consultants to prepare an updated Official Community Plan (OCP). Since the Town of Port McNeill has a strong waterfront focus, G.L. Williams & Associates Ltd. was included as part of the planning team to conduct a preliminary shoreline habitat assessment and provide environmental input to the planning update study.

This report provides the results of the preliminary shoreline habitat assessment and includes environmental planning considerations related to waterfront development. The assessment was based on site visits in late April and mid June, 1996, review of pertinent habitat information and interviews with municipal, regional and federal contacts to obtain specific information and concerns related to waterfront issues. The primary objectives of the assessment were to identify the critical habitat areas and issues, and provide recommendations for waterfront planning and development based on the natural site features and discussions with local Port McNeill residents concerning planning options.

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ENVIRONMENTAL OVERVIEW

The Town of Port McNeill is located on the northeastern shoreline of Vancouver Island (Figure 1). The town site is located along the southern shore of an embayment opening to the east into Broughton Strait. Malcolm Island is situated to the north and offers protection from the more open waters of Queen Charlotte Strait.

Port McNeill has a tidal range of approximately 5.6 m on large tides and 4.6 m for mean tides. Normal maximum current velocities in Broughton Strait are about 3 knots (Canadian Hydrographic Service 1982). Northwest Hydraulics analyzed wind and wave exposure for Port McNeill Harbour and measured the maximum fetch to be 6.9 km from the east-northeast, with estimated maximum wind speeds of about 75 km/h occurring about 1h/year (Anon. 1983). These conditions would generate maximum occasional approaching waves of about 1.4 m in height. Waves generated from northwest winds were about 0.6 m in height. The MacMillan Bloedel breakwater caused wave diffraction and increased wind induced wave heights in the harbour from the east and northeast-east directions. Winds from the northwest and north-northwest have direct entry into the harbour area.

The Town of Port McNeill is located within the Suquash Basin section of the Nahwitti Lowland, a triangular area typified by gently rolling hills below 1000 ft elevation. The basin also encompasses Port Hardy, Malcolm and Cormorant Islands. The Nahwitti Lowland forms part of the Hecate Depression physiographic region, which extends from Dixon Entrance in the north to Johnstone Strait in the south and forms the northern part of the coastal trough between the mainland and insular mountains of the Queen Charlotte and Vancouver Island mountains. Shorelines within the lowland unit are usually rocky and wave energy is moderate to high. Sand and gravel beaches exist close to rivers where fluvial inputs are high or where eroded materials are deposited.

The current ecoregion classification for the Port McNeill area is based on the humid temperate climate and low lying coastal topography. The classification categories are:

ecodomain - Humid Temperate
ecodivision - Humid Maritime and Highlands
ecoprovince - Coast and Mountains
ecoregion - Western Vancouver Island
eosection - Nahwitti Lowland

Of more relevance to planning processes is the biogeoclimatic classification. The Town of Port McNeill lies within the submontane very wet maritime variant of the Coast Western Hemlock biogeoclimatic zone of the Vancouver Forest Region, one of the most productive forestry zones in the province. Climate is wet, humid with cool summers and mild winters with relatively little snow. Growing seasons are long. Forests are

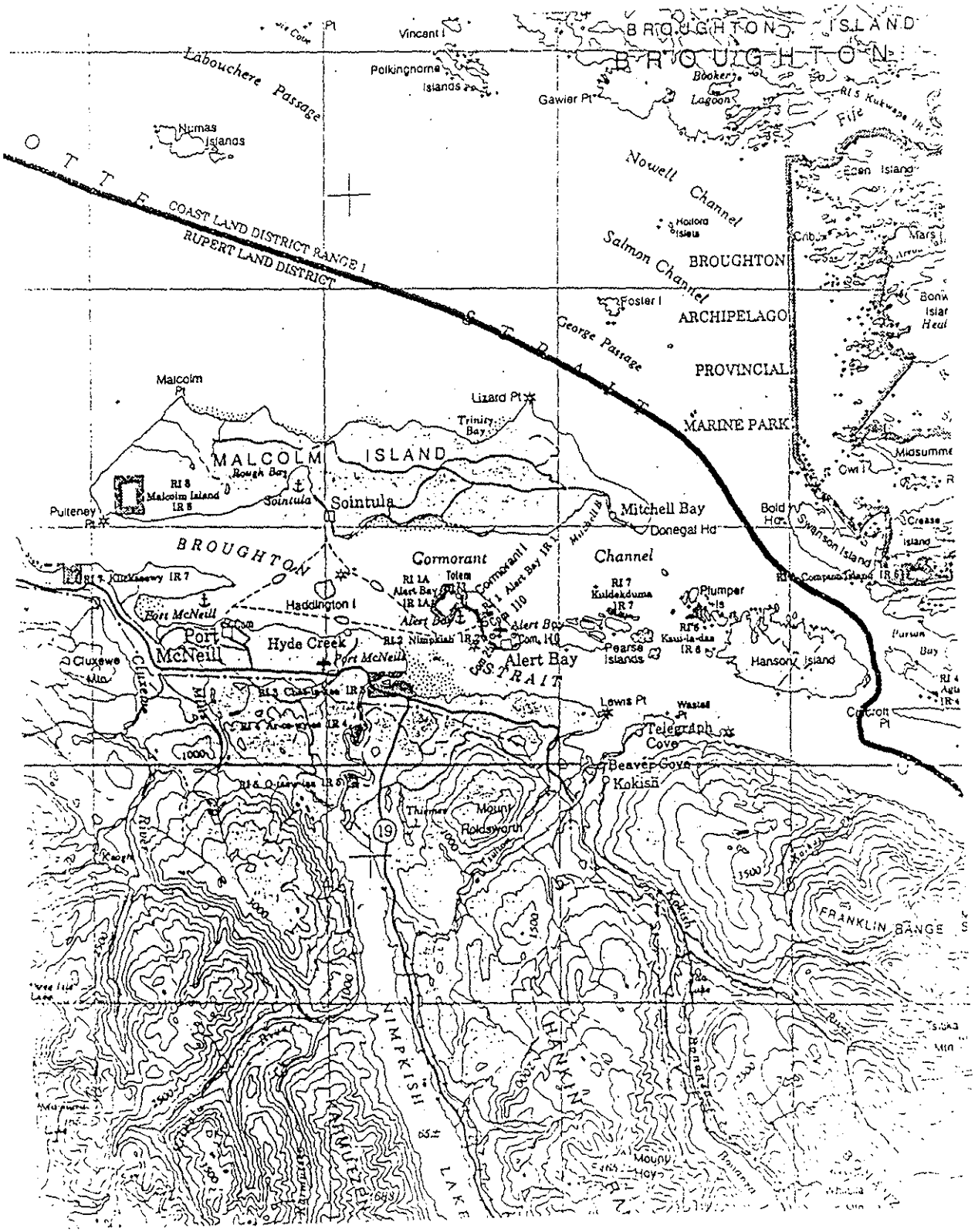

Figure 1. Location of Port McNeill.

dominated by western hemlock and western red cedar, and Sitka spruce forms a narrow band along the coast. Red alder and black cottonwood are common deciduous trees. The understorey is well-developed shrub layer dominated by red huckleberry and Alaskan blueberry, salmonberry and salal on older sites. There is a well-developed moss layer but herbs are sparse and include minor amounts of deer fern, fine bramble and bunchberry and queen's cup.

SHORELINE HABITAT ASSESSMENT

Of particular interest to the OCP update study are the natural features and development potential of the marine waterfront. The total length of shoreline within the Town of Port McNeill boundaries is approximately 5.8 km. In April and June, 1996, shoreline observations were made to identify the main shoreline habitats. Based on this reconnaissance, supplemented with information from selected reports and discussions with resource contacts, six shoreline units were identified and habitat features summarized (Figure 2).

Shore Unit 1 - Mills Creek delta and adjacent intertidal flats

The western most third of the embayment is a broad intertidal flat fed by sediments from Mills Creek, known locally as Bear Creek (Plate 1). The entire intertidal area is approximately 132 ha at lower low water and includes the Mills Creek estuary. The substrates have been described as a mixture of sand and organics colonized by large areas of eelgrass (Anon 1984). The large mudflat and Mills Creek delta provide important nursery and rearing habitat for numerous species of aquatic animals, including economically important species such as Dungeness crabs, juvenile salmonids, and several species of clams. The intertidal flats and eelgrass beds are also be used by migratory birds, including several species of shorebirds and waterfowl.

Approximately 480 m of the Mills Creek delta is located within the Town of Port McNeill municipal boundary. Mills Creek is salmon spawning stream known to be utilized by coho, pink and chum (J. Day, DFO pers. comm.). The recorded spawning escapement is 350 coho and pink and 1000 chum. The stream is under active enhancement and escapement targets are 1500 for coho and chum and 10,000 for pink. A fishway is located at the highway crossing approximately 3.8 km upstream and the Bear Creek Enhancement Group has an incubation box about 0.6 km from the mouth. Cutthroat trout are also reported to use the stream and Dolly Varden char are caught in the area by anglers but their use of Mills Creek is not known (Anon. 1984). The upland within the shoreline unit supports forestry operations. Western Forest Products has an active forestry operation in the area.

The shoreline unit supports highly productive habitat and should be conserved for fish and waterfowl. Any proposed development for this area would require extensive mitigation and/or habitat compensation to ensure that there was no net loss of habitat, and it is unlikely that any waterfront development would be approved in this shore unit. The prime agency contact would be the Department of Fisheries and Oceans (DFO).

Shore Unit 2 - Log Handling Operations

Along the shoreline between the Port McNeill harbour and Mills Creek (Plate 2) are log handling and sorting operations operated by Western Forest Products (to the west) and

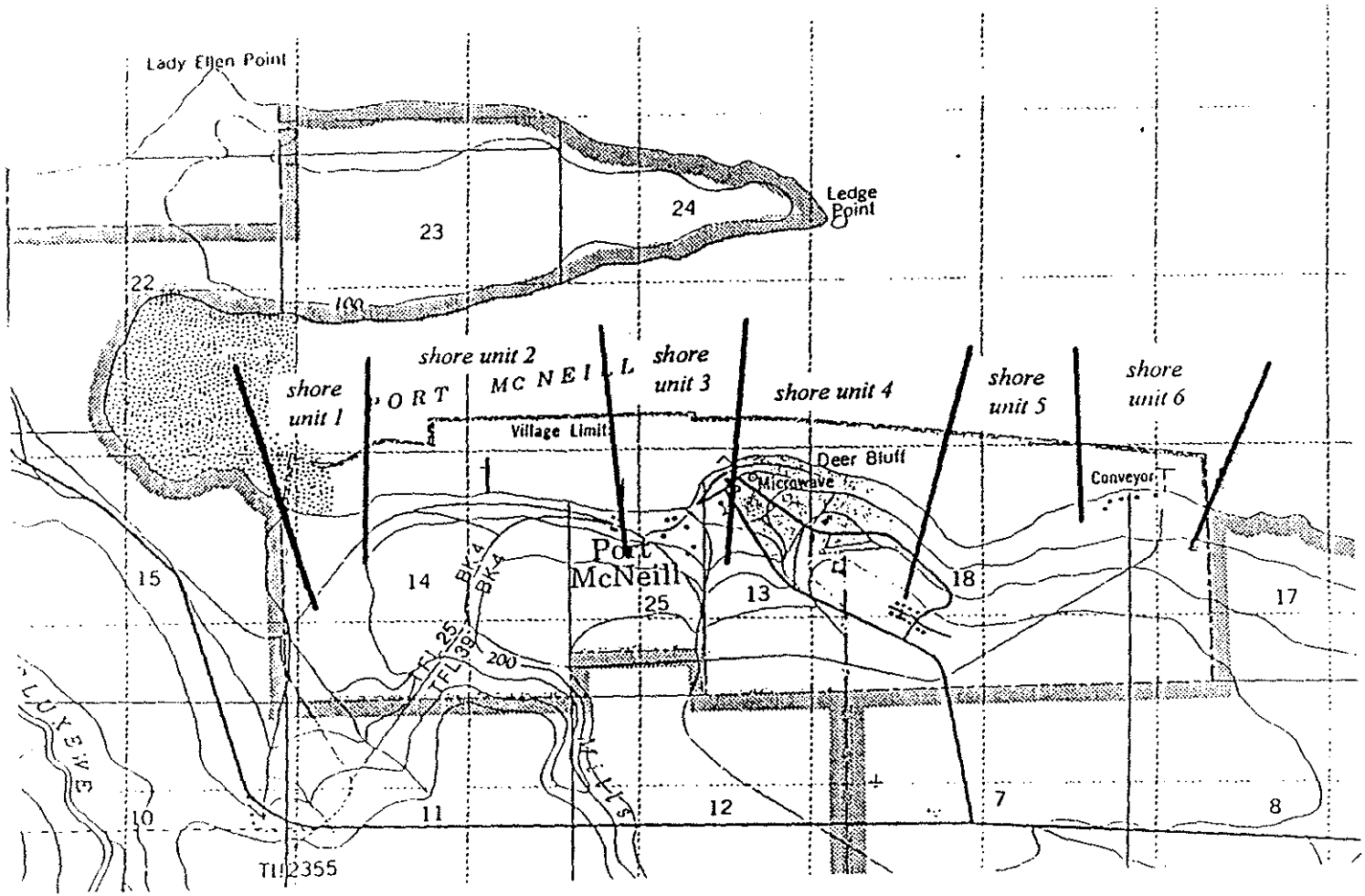

Figure 2. Location of shoreline units used in Port McNeill 1996 habitat assessment.

Plate 1. Mills Creek delta, in shore unit 1, observed in April 1996.

Plate 2. Causeways and log handling operations in shore unit 2.

MacMillan Bloedel (to the east). The shoreline development includes two causeways and facilities for dumping, handling and sorting logs. The length of this industrialized shoreline unit is 1,870 m.

The intertidal shoreline (Plate 3) supports a narrow fringe of brackish marsh dominated by sedge (*Carex lyngbyei*) and arrowgrass (*Triglochin maritimum*). Below the marsh fringe, the substrates are rocky and provide attachments sites for seaweed such as *Enteromorpha* spp. and rockweed (*Fucus distichus*). Grasses such as dunegrass (*Elymus mollis*) grow in patches above the high tide line. The shoreline is forested, supporting red alder mixed with conifers.

The intertidal brackish marshes and seaweed vegetation provide productive rearing and feeding areas for juvenile salmonids, waterfowl and other waterbirds. The shoreline around the Western Forest Products log dump was sampled for fish presence using beach seine and juveniles from all five species of Pacific Salmon were captured, as well as rainbow trout, stripped seaperch, three-spined stickleback and sculpins (Anon. 1984).

The shoreline unit has been heavily utilized for log sort and booming operations since the 1940's. Therefore, shoreline alterations have been substantial. However, productive shoreline habitat exists between the causeways and should be retained. There may be opportunities in the immediate area to improve habitat quality which should be assessed to identify possible mitigation options for future development. For example, fish movements along the shore to the productive feeding areas at the head of the embayment have been restricted by the causeways. Consideration of ways of improving access along the shore (e.g. strategic breaches in the causeway) would improve juvenile salmon rearing and could be used as a restoration project or mitigation measure to reduce habitat impacts for future development.

Shore Unit 3 - Port McNeill Harbour

The Port McNeill harbour includes the area between the MacMillan Bloedel causeway and the ferry causeway (total shoreline length approximately 530 m). A float plane landing operation and moorage dock is located in the western section of the harbour. The section west of the float plane dock includes a large (approximately 4.5 ha at lower low water) intertidal flat fed by a small stream (Plate 4). The stream provides habitat for small numbers of coho and chum (J. Chambers, DFO pers. comm). The water appeared quite turbid during spring observations made at mouth (Plate 5). It would appear that upland tree clearing may have contributed to the condition of the water. Fluvial deposits from the stream would contribute to the expansion of the stream delta and enlarge the intertidal habitat over time.

The eastern section of the harbour provides docking facilities for small craft moorage, including fishing and recreational boats. The upland has been developed for commercial uses and provides supporting facilities for the marina including parking, offices, etc. In summer the facilities are inadequate and expansion is needed to provide sufficient space for the added vessel moorage requirements (H. Binner, Harbour Manager, pers. comm.).

Plate 3. Intertidal zone in shore unit 2, west of MacMillan Bloedel causeway.

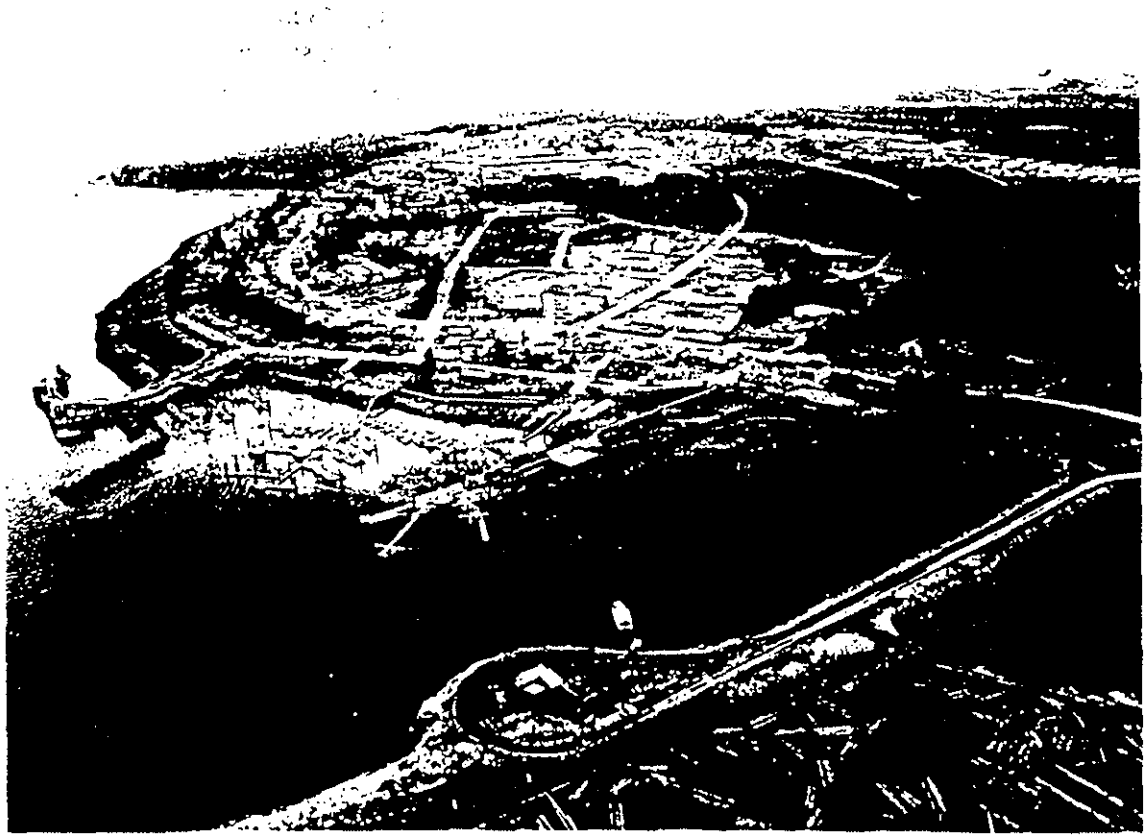

Plate 4 - Port McNeill harbour, shore unit 3.

The intertidal habitat along the eastern harbour shoreline has been developed and consists of moderately sloping rock (boulder and cobble) and gravel substrates (Plate 5). Small patches of rockweed colonize the rocky substrates below the mid-tide level. This section of the harbour has low habitat value and shoreline improvements (e.g. walkway or wharves) would have little or no habitat impacts.

Salt tolerant wetland vegetation colonizes the intertidal zone between the float plane dock and the MacMillan Bloedel causeway. The vegetation colonizing the sandy gravel areas along the high tide line includes grasses such as dunegrass (Plate 6) and sea purslane (*Honkenya peploides*). Below high water emergents such as sedge (*Carex lyngbyei*), arrowgrass *(Triglochin maritimum*), plantain (*Plantago maritima*) were observed (Plate 7). These species are typical of marsh plants that colonize fine sediments which accumulate in estuarine areas. They have high productivity and support a detritus based food chain which includes several types of invertebrate prey organisms for juvenile salmon and water birds. During submergence at high tide, the vegetation also provides refuge from predators (e.g. larger fish and fish eating birds) for juvenile salmonids.

The lower intertidal zone (Plate 8), below the brackish marsh, supports non-vascular plants including seaweeds such as *Enteromorpha*, sea lettuce (*Ulva* spp.) and rockweed (*Fucus distichus*). This zone also provides productive feeding areas for fish and waterfowl, and refuge for juvenile fish such as young salmon.

The large intertidal flat in the western section of the harbour supports highly productive habitat for fish and water birds, and is actually the delta of the small salmon stream. The intertidal area will continue to aggrade into the harbour as the stream continues to deposit bedload materials during periods of high flows.

Expansion of the inner harbour, which would encroach on fish habitat, is one of the development options under consideration. One mitigation option for future port development is to contain the intertidal flat by constructing a breakwater along the float plane dock and preserving the western area as fish and water bird habitat. This will ensure that the eastern harbour area will not be impacted, but will prevent useage of the western portion for vessel moorage. Opening up the causeways and breakwater to permit fish passage at critical tidal levels would also improve habitat functions and could be used for restoration or mitigation for future port development. This option could be incorporated into a major harbour upgrading that might include construction of a wooden boardwalk and tourist/education facilities that would promote the forestry operations and provide signage explaining the shoreline ecology of the western habitat area. Alternately, port expansion could be orientated in an offshore direction by extending the eastern breakwater, or constructing another port facility, possibly at Beach Camp. The two areas could also be designated for separate industrial and recreational vessel uses.

Plate 5. Moderately sloping rocky harbour intertidal showing sparse seaweed growth.

Plate 6. Dunegrass colonizing gravelly substrate above high tide line.

Plate 7. Sedge colonizing upper intertidal area in western harbour, shore unit 3.

Plate 8. Thick growth of seaweed on intertidal in western harbour area during April.

Shore Unit 4 - Beach Drive Shoreline

East of the ferry causeway, the shoreline curves along Beach Drive into Hoy Bay. Virtually all the upland is developed for residential use to the end of Beach Drive, approximately 1300 m in length, behind which is a steep bluff (Plate 9). The intertidal substrate consists of rounded boulders, with a high tide beach composed of peasize gravel at the eastern section this shore unit. Several large conifers occur along the shoreline and bald eagles were feeding on dead fish during June.

The seaweed colonization was sparse in April and June, probably indicating high wave exposure. There was evidence of uprooted eelgrass (*Zostera marina*) plants along the beach, suggesting that the subtidal zone supports eelgrass beds. However, without making direct observations of the beds (e.g. by SCUBA diving), it is not known how extensive the beds are. Herring spawning areas are not recorded in Port McNeill area (Hay et al. 1989), suggesting the that the macroalgae coverage is quite patchy.

The shoreline habitat values appear limited in this shore unit due to high wave exposure. The boulder habitat does not support extensive macroalgae growth and the upper gravel beaches are not known to support surf smelt spawning. The residential shorelines are susceptible to erosion and several properties have installed erosion protection measures (Plate 10). One planning option to install a seawall would probably not reduce habitat productivity provided a coastal engineering assessment was made to ensure any changes in the physical processes would not cause erosion of adjacent sections of the shoreline.

Shore Unit 5 - Hoy Bay

Hoy Bay is characterized by a sandy gravel upper intertidal beach, below which lies boulders (Plate 11). Some scattered seaweed patches were observed and uprooted eelgrass shoots, but the vegetation colonization of the intertidal zone was sparse. Above the high tide line, there were patches of dunegrass but these were small and isolated.

The upland is undeveloped but is owned by MacMillan Bloedel and scheduled for tree harvesting in the near future. Several small freshwater drainages feed the beach but they appear to have very low flows which may not be sufficient to support salmon. An eagles nest is located in one of the large trees within the upland parcel. There is no road access at present and the shoreline has been suggested as a linear park with residential development behind.

The shore unit offers prime recreational opportunities for passive uses such as walking, beachcombing and other activities that require little alteration of the shoreline features. Marina development may be complicated by the presence of eelgrass and limited upland area and road access.

Plate 9. Shore unit 4, showing residential development along Beach Drive.

Plate 10. Rocky intertidal with sparse seaweed and log shoreline protection.

Plate 11. Hoy Bay beach and undeveloped shoreline.

Plate 12. Hoy Bay upper gravelly beach and treed shoreline.

Shore Unit 6 - Beach Camp

East of Hoy Bay is the Beach Camp area, location of the Shell Oil terminal and tank farm (Plate 12). The intertidal zone is rocky, composed of boulder and gravel. To the west of the terminal the intertidal is wider and there are several shallow depressions or bars possibly resulting from exposure to the waves driven by the east to northeast winds. The intertidal habitat did not support marsh or extensive macroalgae beds and appeared to have low productivity. Eelgrass beds are reported in the general area (R. Russell, DFO, pers. comm.) but the exact location and density should be confirmed should port development occur.

There is a small stream entering the shore unit just east of the terminal which looks to have been enhanced (e.g. weir installed for water flows for salmon. The stream probably only supports low numbers of coho. There was an eagles nest noted about a kilometer from the shoreline, just east of Mine Road.

The upland has been cleared and the remainder is located within the MacMillan Bloedel lands which are scheduled to be harvested shortly. One planning option is to upgrade the port facilities at the site, which has advantages of existing road access, sufficient upland for constructing staging and supporting facilities, and existing terminal facilities.

Plate13. Existing terminal operations at Beach camp as observed from the east.

Plate 14. Intertidal zone along the western section of Beach Camp, shore unit 6.

ENVIRONMENTAL CONSIDERATIONS FOR WATERFRONT PLANNING AND DEVELOPMENT

Any waterfront development will require approval by DFO. It is recommended that the Town of Port McNeill, Regional District, and Harbour Commission meet with the appropriate Fisheries Officer and Habitat Biologist to review options and obtain comments and advice once preliminary concepts have been identified. This should be conducted in a very early phase of the planning process.

In past development projects, DFO has been quite helpful in ensuring that development protects fish habitat. The basic requirements are that the development is justified and all efforts have been made to minimize impacts through site selection, appropriate design or mitigation. The last option is habitat compensation. Habitat compensation has been complicated by the fact that the Canadian Environment Assessment Act (CEAA) has now been created and DFO may trigger the CEAA process if habitat compensation is required (or ministerial authorization is required for a habitat compensation project). It is recommended that a cooperative approach be used with DFO to formulate mitigation measures which minimize habitat impacts and reduce the likelihood of triggering a CEAA review.

Information on the subtidal habitat, specifically the location and extent of eelgrass beds will be required for any port or marina development. Two main approaches would be to inventory the entire shoreline to determine the location or pre-select areas which offer the best development potential from engineering or other criteria. The first approach provides the broadest geographical information but would require more time and expense. The latter approach would be more efficient in terms of effort and expense, provided that the final development site(s) were selected and there was little likelihood of further sites being selected.

Port or marina development will require some form of mitigation and/or compensation depending on the local habitats present and the type of proposed development activities. By having a comprehensive waterfront development plan, it would be easier to construct facilities which reinforce and complement each other. It is recommended that the Town of Port McNeill establish priorities for waterfront development which are based on site specific criteria that indicate the "best use or uses". The shot gun approach to development will lead to a unattractive shoreline development and reduce the opportunities for maximizing waterfront potential.

Should a development cause fish habitat impacts, appropriate mitigation and/or compensation is required by DFO to ensure there is no net loss in the productive capacity of the habitats to support fish and invertebrates. Generally, small habitat impacts can be dealt with on-site by using construction scheduling, minor design changes or siting modifications to reduce impacts to an acceptable level or eliminate them entirely.

For more substantial development where habitat impacts remain after all mitigation

on-site mitigation options have been implemented, habitat compensation is required off-site. Depending on the specific nature of the impacts, mitigation may also be conducted off-site as well. As a rule, mitigation tends to be dealt with directly with DFO, while compensation requires more involved work and usually requires CEAA approval.

Constructing habitat for mitigation or compensation purposes usually requires meeting specific guidelines and follow-up monitoring. General DFO guidelines include preference for like habitat replacement (e.g. marsh for marsh) but habitats can be interchanged if the productive capacity is maintained or increased. For example, it may be possible to construct a marsh on top of unvegetated intertidal areas because the resulting productivity of the new habitat is higher than the existing state. The general DFO habitat replacement ratios used in determining mitigation and compensation are:

1. unvegetated intertidal - 1:1 replacement ratio (e.g. 1 m^2 for each 1 m^2 existing impacted)
2. macroalgae - 1:1 replacement
3. eelgrass - 2:1 replacement
4. marsh - 2:1 replacement (e.g. 2 m^2 for each 1 m^2 destroyed)
4. riparian (tree and shrubs) - 1:1 linear replacement

Generally habitat mitigation/compensation is required to be in close proximity to the impacted site to ensure that the habitat replacement benefits the local stocks.

It should be remembered that these guidelines are general and may be modified if site conditions are limited. Each site requires consideration of the specific functions and particular species utilizing the habitat.

The habitat mitigation and compensation are determined by determining a habitat balance sheet which quantifies the habitat value before and after development. The resulting difference is the amount of habitat mitigation/compensation required. It may also be possible to use relative habitat values to determine a mitigation/compensation package based on the habitat functions. For example, improving fish access to nursery, rearing or spawning habitat may be used instead of strict areal criteria. The final mitigation and/or compensation package is developed through negotiation with the DFO habitat biologist and is based on the site specific conditions and opportunities at the site.

Once the habitat mitigation/compensation is agreed to, a habitat mitigation/compensation agreement is required. This is a contract between to developer and DFO to ensure the work is carried out. It generally stipulates the work to be conducted, monitoring requirements to show the habitat is functioning as intended and requires remedial work to be undertaken if the monitoring shows the works require it. Usually the monitoring is required for 3-5 years depending on the type of work undertaken.

The Town of Port McNeill should also be aware that any development impacting fish habitat w require DFO approval prior to beginning construction. This is required under Section 35(2) of the Fisheries Act which requires ministerial approval for any works that affect fish habitat. Therefore, it is important to ensure that any mitigation and/or compensation measures are identified and implemented to avoid possible legal action. It also emphasizes the importance o taking a cooperative approach with DFO early in the process.

With proper site selection and ecological design, it should be able to modify or redevelop the harbour and provide more functional and aesthetically pleasing development. It is recommend that this redevelopment seriously address existing needs and the potential for creating tourist and/or educational opportunities to provide a more varied use of the shoreline. In particular, permitted uses should consider water dependency, public access and enjoyment, and water relatedness. To reduce construction costs it may be possible to initiate multi-use of some facilities and permit a wider range of development opportunities.

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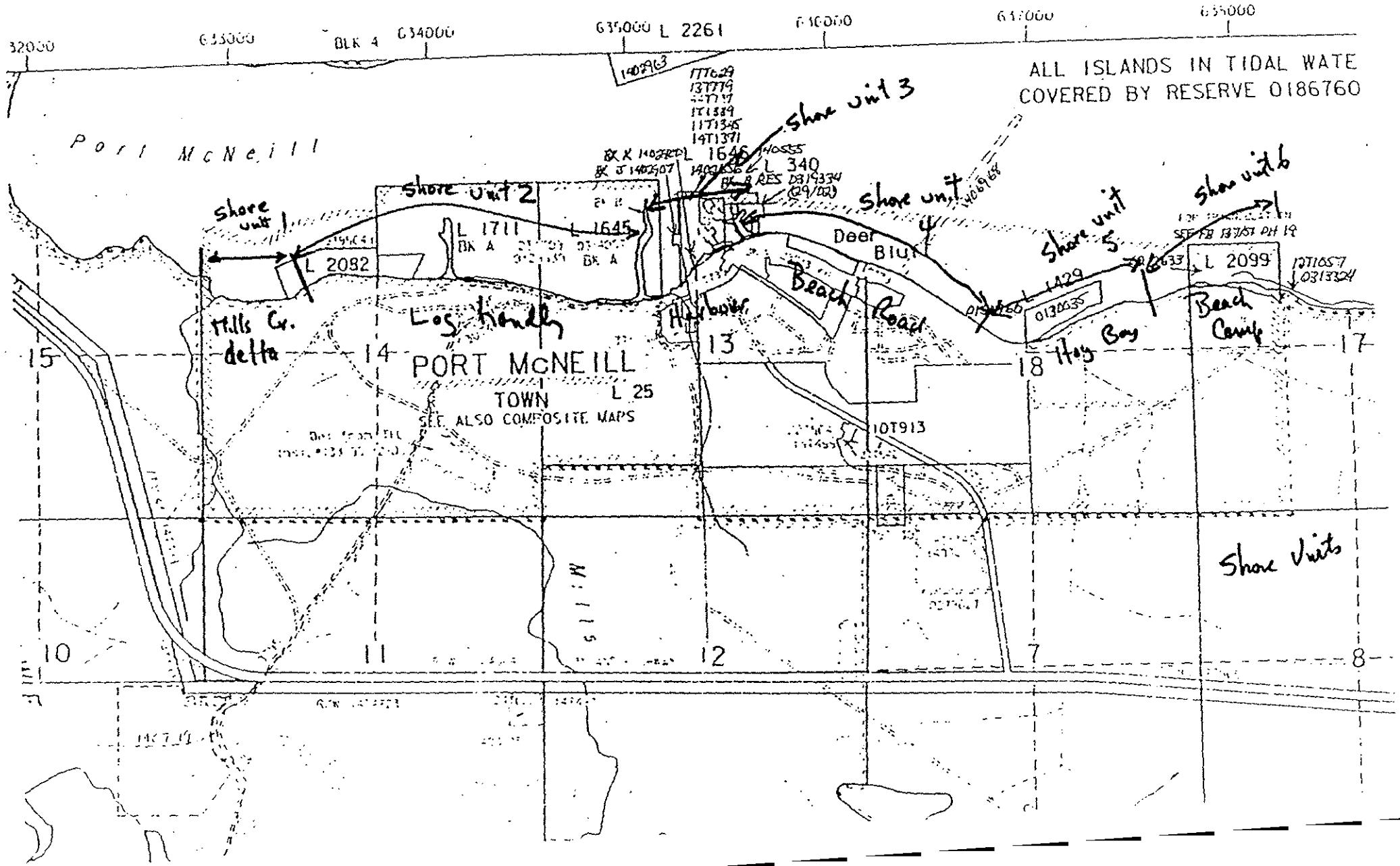
ALL ISLANDS IN TIDAL WATE
COVERED BY RESERVE 0186760
Port McNeill
Shore unit 1
Shore unit 2
Shore unit 3
Shore unit 4
Shore unit 5
Shore unit 6
Mills Cr. delta
Log handling
Harbour
Deer Blut
Beach Road
Hog Bay
Beach Camp
PORT McNEILL
TOWN
SEE ALSO COMPOSITE MAPS
L 2261
L 2082
L 1711
L 1645
L 1646
L 340
L 1429
L 2099
L 25
10T913
Shore Units