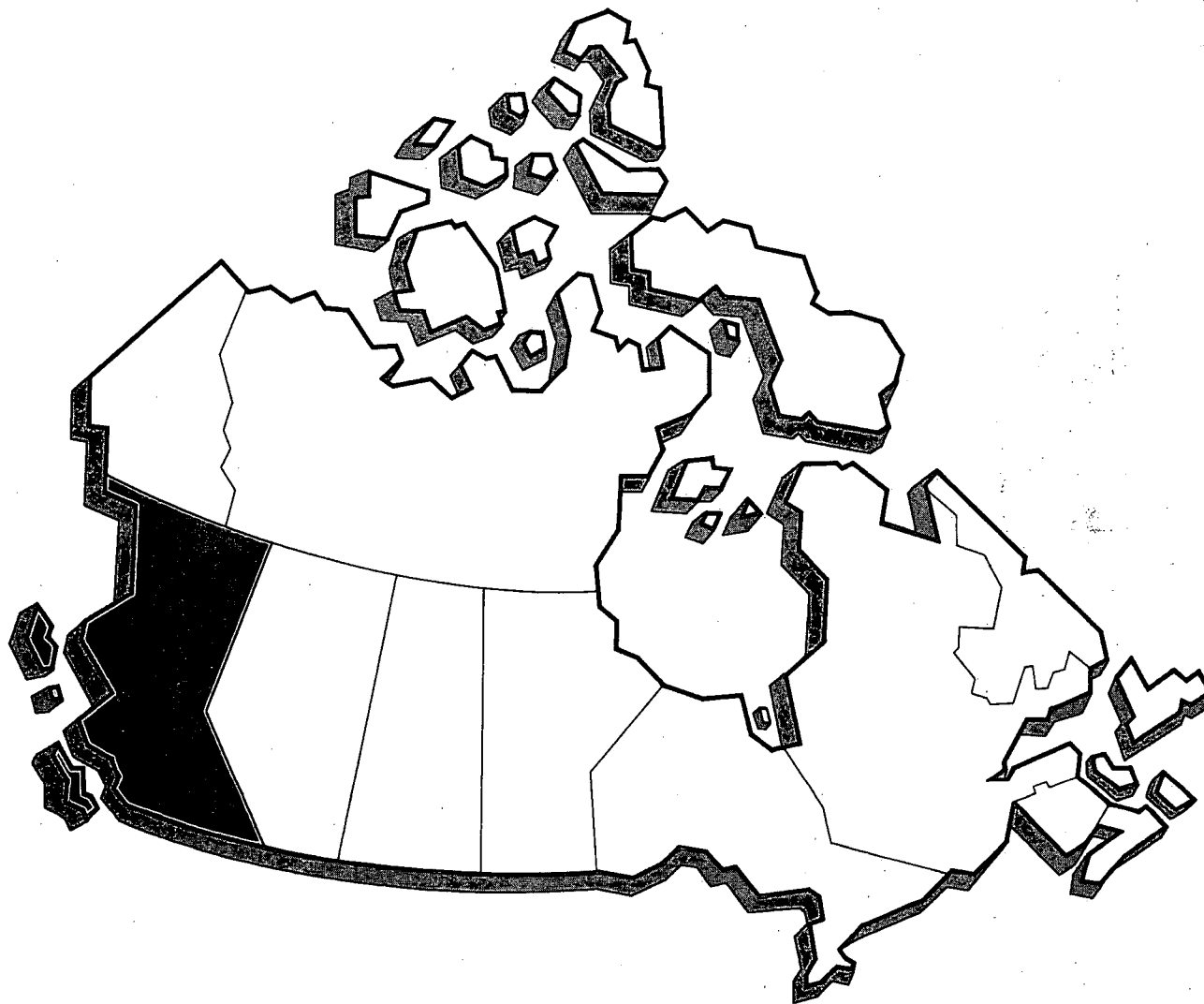


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LAND USE PROGRAMS IN CANADA



BRITISH COLUMBIA



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LAND USE PROGRAMS IN CANADA

BRITISH COLUMBIA

JULY, 1976

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LIST OF ABBREVIATIONS

ALR(s)	- Agricultural Land Reserve(s)
ASAB	- Archaeological Sites Advisory Board
BCAA	- B.C. Assessment Authority
BCDA	- Department of Agriculture
BCDC	- B.C. Development Corporation
BCDED	- Department of Economic Development
BCDF	- Department of Forests
BCDHe	- Department of Health
BCDH	- Department of Highways
BCDHg	- Department of Housing
BCDMA	- Department of Municipal Affairs
BCDMPR	- Department of Mines and Petroleum Resources
BCDOE	- Department of Environment
BCDRTI	- Department of Recreation and Travel Industry
BCDTC	- Department of Transport and Communications
BCEC	- B.C. Energy Commission
BCHPA	- B.C. Hydro and Power Authority
BCLC	- B.C. Land Commission
BCLS	- B.C. Lands Service
BCPPB	- B.C. Provincial Parks Branch
BCWRS	- B.C. Water Resources Service
ELUC	- Environment and Land Use Committee
ELUCS	- Environment and Land Use Committee Secretariat

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I wish to express my sincere appreciation to the British Columbia government officials with whom I corresponded. Their comments combined with published information form the basis of this report.

INTRODUCTION

In Canada, land use planning is a complex process to which many government departments and agencies contribute. This report on British Columbia is one of a series that outlines land use planning in each of the provinces and the territories. When completed, the series will present an overview of the land use planning processes in Canada at the provincial and territorial levels.

In this report, the roles of the provincial departments engaged in land use planning and/or land management are outlined and the pertinent legislation identified. Also, provincial concerns regarding land use and land ownership are discussed. Data are presented in both metric and non-metric forms.

The format of this report is as follows. Chapter II provides a historical look at land uses in British Columbia. Chapter III is an overview chapter that outlines provincial land policy and planning. Chapters IV to XI provide discussions of current provincial government programs, relevant legislation, and trends within various land use sectors. Sectors examined are: urban settlement; agriculture; forestry; recreation; fish and wildlife; energy resources, mining, and quarrying; transportation; and water. Chapter XII provides conclusions.

The information presented in this study is based on discussions with provincial authorities and on reports that were made available to the author. Since the land use planning process is in a continuous state of flux and refinement, the description of its state in British Columbia in this study can be considered accurate only to July, 1976. It is expected that the reports will be updated at regular intervals through continued contact with provincial and territorial officials.

II

HISTORICAL CONTEXT

British Columbia (B.C.), the third largest Canadian province, covers a total of 366,255 sq. mi. (952,263 sq. km.) of which 359,279 sq. mi. (934,125 sq. km.) are land. Table 1 identifies the surface land uses in B.C. The rugged terrain of the province is marked by several mountain ranges, high rolling plateaux, and deep valleys. Consequently, a very small area, 9,099 sq. mi. (23,657 sq. km.), is suitable for agriculture. Productive forest land, however, covers a large area, 198,438 sq. mi. (515,939 sq. km.).

A description of the physiography of B.C. is outlined. Brief historical sketches are provided of the settlement of B.C. and of the agricultural, forestry, and mining land uses as they evolved and contributed to the economy of the province. Forestry, mining, agriculture, and fishing - the four major industries in the present B.C. economy, in terms of value of production - and the tourist industry, one of the fastest growing since 1961, are discussed. Land ownership is also discussed in this chapter.

PHYSIOGRAPHY¹

B.C. has a very diverse physiography composed of the Cordillera and Great Plains regions. The Cordillera consists of three broad units - the Western System, the Interior System of scattered plateaux and mountains, and the Rocky Mountain System in the east. The physiographic features that characterize each of these three units are as follows.

¹ Department of Economic Development, British Columbia, Manual of Resources and Development, p. 12.

TABLE 1
SURFACE LAND USES IN BRITISH COLUMBIA

LAND USE					PER CENT TOTAL
	<u>Sq. Mi.</u>	<u>Sq. Km.</u>	<u>Ac. (x10³)</u>	<u>Ha. (x10³)</u>	
Total Area	366,255	952,263	234,403	93,761	100.0
Land Area ¹	359,279	934,125	229,938	91,975	98.0
Water Area	6,976	18,138	4,465	1,786	2.0
Agricultural Land Uses ²					
Improved Farmland	2,743	7,132	1,756	702	0.8
Unimproved Farmland	6,356	16,526	4,068	1,627	1.8
Rangeland ³	28,125	73,125	18,000	7,200	8.2
Productive Forest Land ⁴	198,438	515,939	127,000	50,800	57.5
Parks					
Provincial ⁵	13,355	34,723	8,547	3,419	3.9
National ⁶	1,821	4,735	1,165	466	0.5
Other land	108,441	281,945	69,402	27,761	27.3

- Sources:
1. Statistics Canada, 1971 Census, Catalogue No. 96-701, Vol. IV- Part 1.
 2. Statistics Canada, 1971 Census, Catalogue No. 96-701, Table 30.
 3. "Rangeland Management" in Forestalk, Spring 1974, p. 13
 4. B.C. Forest Service, Management of British Columbia's Forest Lands, p.6.
 5. B.C. Parks Branch, Provincial Parks List.
 6. Canada Year Book 1972, p.56.

The Western System consists of:

- the Insular Mountains of the Queen Charlotte Islands and Vancouver Island, and the St. Elias Mountains in the northwest corner of B.C. where Mt. Fairweather (15,300 ft., 4,590 m.), the highest peak, is found;
- the Coastal trough that forms the east coastal plain of Vancouver Island and the delta plain of the Fraser River;
- the Coast Mountains, which extend northwesterly and average 100 mi. (160 km.) wide;
- the Cascade Mountains, which rise to the east and south of the Fraser River in the southeast corner of the Western System.

The Interior System is composed of an extensive interior plateau. The Interior Plateau runs 500 mi. (800 km.) in a northwesterly direction and is bounded on the east by the Columbia mountains, which extend to the Rocky Mountain Trench. This trench is 2 to 15 mi. (3 to 24 km.) wide and contains a series of rivers as well as the Peace River reservoir (Lake Williston).

The Rocky Mountain System forms the eastern wall of the trench and separates B.C. from Alberta, northwest to the 54th parallel of latitude. Mount Robson, 12,972 ft. (3,892 m.) is the highest peak in the B.C. portion of the 'Rockies'.

The northeast corner of B.C., situated between the Rocky Mountains and the 20th meridian of longitude, is relatively flat and is part of the Great Central Plains of North America.

Many rivers in B.C. drain the interior regions and rise in the glacier-covered and snowcapped mountains. The major rivers are the Fraser, Columbia, Skeena, Peace, and Liard. Lakes Babine, Kootenay, Atlin, Stuart, and Okanagan are the largest natural lakes. Williston Lake, behind Bennett Dam, is the largest in B.C.

SETTLEMENT²

A British colony was founded on Vancouver Island on January 13, 1849. Land was granted to the Hudson's Bay Company with the proviso that settlements of British subjects be established within five years and 90 per cent of the returns from land and mineral sales be applied to public improvement. The colony was a fur-trade settlement clustered around Fort Victoria. The economy was based on the fur trade, especially the sea otter. By 1854, there were 450 settlers and 500 ac. (200 ha.) of colonized land.

The great gold rush of the Fraser River occurred in 1858. The resultant influx of people led to the creation of the mainland colony of B.C., proclaimed in November, 1858, and presided over by Governor James Douglas. Between 25,000 and 30,000 men, mainly Americans, occupied the valley of the lower Fraser River. Many of these initial settlers became farmers and sold food to miners. In 1866, the colonies of Vancouver Island and the mainland were united and the province joined confederation in 1871.

The Canadian Pacific Railway (CPR) was completed in the lower Fraser Valley in 1885. The proximity of the CPR to the Fraser River and the subsequent completion of the Canadian National Railway (CNR) reinforced the concentration of settlement in the river valley.

Between 1901 and 1911, the provincial population rose from 179,000 to 394,000. Vancouver, founded in 1886, attracted 44 per cent of this increase. An additional 15 per cent occupied the remainder of the Lower Mainland.

In 1975, over one-half of the provincial population of about 2.2 million lived in Vancouver and in the Lower Fraser Valley, within 90 mi. (144 km.) of the City of Vancouver. The other area of population concentration occurs on Vancouver Island, mainly on the southeastern coastal plain between Nanaimo and Victoria. Seven out of every ten people in B.C. live on the extreme south coast of the Mainland and southeastern Vancouver Island.³

² Martin Robin, The Rush for Spoils - The Company Province 1871-1933.

³ Department of LFWR, The Disposition of Crown Lands In British Columbia, pp. 5,6.

The rugged coast north of Vancouver is very sparsely populated; the main population centres are Powell River, Ocean Falls, Kitimat, and Prince Rupert. The northern one-third of B.C. has few inhabitants because of climate; thus large areas are accessible only by airplane.

The Okanagan Valley contains about 115,000 people (1971 census) and is the most heavily populated region of interior B.C. The valleys of the Kootenay and Columbia rivers in southeastern B.C. and the valleys and uplands of the Interior Plateau from Princeton to Prince George have local concentrations of population. Approximately 55,000 people inhabit the Peace River region, east of the Rocky Mountains.

Table 2 lists the provincial population between 1871 and 1971, as well as ten-year increases in number and percentage.

AGRICULTURE⁴

Farming activities began in the mid-nineteenth century as an ancillary activity to the trading forts of the Hudson's Bay and North West companies. Horticulture plus cattle, sheep, and horse grazing were the predominant types of farming at the time. The demand for agricultural supplies increased with the Fraser Valley and Cariboo gold rushes of the 1850s.

The CPR and CNR railways stimulated agricultural development by connecting arable areas to markets, contributing to population growth, and opening new areas for settlement adjacent to the railroads. The Fraser Valley and Vancouver Island experienced increases in mixed, vegetable, and dairy farming and in the early 1890s, fruit and vegetable production was established in the Okanagan Valley. Beef ranching in the Cariboo and grain development in the Peace River area also expanded during this period.

However, agriculture in B.C. developed slowly and with difficulty and the province imported large quantities of food to meet local demands. Excessively

⁴Martin Robin, op. cit., p. 36.

TABLE 2
PROVINCIAL POPULATION 1871-1971 PLUS 10-YEAR
INCREASES IN NUMBER AND PERCENTAGE

<u>YEAR</u>	<u>POPULATION</u>	<u>INCREASE IN NUMBER</u>	<u>% INCREASE</u>
1871	36,247	-	-
1881	49,459	13,212	36.4
1891	98,173	48,714	49.6
1901	178,657	80,484	82.0
1911	392,480	213,823	119.7
1921	524,582	132,102	33.7
1931	694,263	169,681	32.3
1941	817,861	123,598	17.8
1951	1,165,210	347,349	42.5
1961	1,629,082	463,872	39.8
1971	2,184,621	555,539	34.1

Source: Census of Canada

wet areas in river valleys required extensive drainage and reclamation and dry areas of the southern plateau, near Princeton, required extensive irrigation. Land clearing costs were high, money was scarce, and labour was in short supply as high-wage industries, such as mining and forestry, attracted the workers. The occupation and development of arable land was hindered by land settlement practices. Settlements were scattered over wide areas and alienated land was often located in remote areas, void of railway or road connections. Railway companies and speculators acquired land, held onto it until the value rose, and sold it at inflated prices.

By 1915, maps prepared by the B.C. Department of Lands as an aid to settlers showed that almost every section of surveyed land in B.C. had been sold primarily to syndicates. The railways and other syndicates purchased Crown land at very low prices, often 40 cents per acre, and their taxes and credit payments were deferred. On January 26, 1915, \$15 million was owed to the B.C. government in land purchase arrears. Thus, the B.C. agricultural sector remained undeveloped as syndicates barred settlers from serviceable land near railways and markets. In 1901, B.C. accounted for less than 2 per cent of Canada's aggregate value of agricultural production. Since 1891, B.C. agriculture has provided direct gainful employment for less than 20 per cent of persons employed and even today, less than 4 per cent of the employed males in B.C. work in the agricultural sector.

Agriculture is third in value of production among the major industries. There are 24,700 farms which contain approximately 4.5 million ac. (1.8 million ha.) of land. Additionally, there are 2 million ac. (0.8 million ha.) of open grassland range and 15.5 million ac. (6.2 million ha.) of grazing land under tree cover.⁵

Crop cultivation is limited to arable lands along river valleys, which are separated by mountain ranges. Rangeland for livestock occurs in extensive

⁵Dept. of LFWR, The Disposition of Crown Lands in British Columbia, pp. 7-8.

upland areas. Wide variations in provincial physiography, soil, and climate have resulted in product specialization by region. The Okanagan Valley, prior to irrigation, was cattle rangeland but now produces over 90 per cent of the tree fruit crops. Grape growing is also gaining importance. The Peace River - Liard region accounts for 90 per cent of the total grain harvested. The Lower Mainland - Vancouver Island area yields the majority of dairy products, berry crops, vegetables, poultry, and eggs. The southern and central interior region is the beef industry centre.

FORESTRY

Commercial logging in B.C. began in the 1840s with European settlement on Vancouver Island. There was a very small demand for timber and sawn lumber outside of Fort Victoria and since the initial settlers were agriculture-oriented, heavy forest growth was considered a nuisance. Logging became significant to the colonial economy in the 1850s when trade links from Victoria to overseas markets were developed. Logging operations on Vancouver Island expanded towards the southwestern tip of the island and northward along the east coast. No commercial use of the mainland forest resources was made at this time.

The discovery of gold in the lower Fraser River in 1858 and the subsequent creation of the mainland colony resulted in a demand for timber on the mainland. In the 1860s, commercial logging on the mainland was concentrated along the shores of Burrard Inlet, north of New Westminster.

Completion of the CPR line to Vancouver in 1886 and the resultant integration of external land and sea trade connections resulted in major forest resource exploitation. In 1887, the British Crown established a financial interest in timber and levied royalties and other charges on all timber cut. Commencing in 1896, B.C. retained title to any timbered land and therefore, selling such land was prohibited. However, timbered lands were loosely defined and effective prohibition of timber sales did not occur until the creation of the B.C. Forest Service in 1912.

A new special licence system was adopted in 1905 whereby timber licences were made renewable annually, for a period of 21 years, and transferable. Formerly, such licences had been renewable after five years at the discretion of the Minister of Public Works. The result of this new licencing system, initiated to increase forest revenue, was a great rush by the syndicates to acquire licenced land. By December 24, 1907, when an Order-in-Council closed the forests and reserved all unalienated timber, approximately 9.6 million ac. (3.8 million ha.) had been licenced - over 10 times the licenced area of 1904. Large corporations acquired most of the newly-licenced land through dummy representatives, power of attorney, and ease of transfer at \$2 per transfer of ownership. In 1911, the B.C. Forestry Commission, which was appointed in 1910, reported that approximately 80 per cent of the B.C. government timber land had been alienated from the Crown. Thus the B.C. government controlled only 3.8 million ac. (1.5 million ha.) of the poorest scrub timber, located in remote areas.

By the late 1930s, most of the coastal forest was being harvested or was reserved for future expansion. There was concern by both government and non-government personnel that the forest resources were being depleted too rapidly. However, it was not until after World War II that the B.C. government enforced controlled cutting under sustained-yield management licences.

Prince George and Quesnel are centrally located in the largest area of continuous forest cover of the Interior Plateau. Good stands of commercial forest exist in most of the valleys and all of the lower slopes to an elevation of about 5,000 ft. (1,500 m.) above sea level. Between 1919 and 1946, forestry in the central interior of B.C. expanded and logging increased along the railways. Mills were dispersed in a few small towns.

Following World War II, forest operations were integrated by large corporations, such as MacMillan-Bloedel Limited. Logging, transportation of logs, processing, and manufacturing of wood products are closely connected in corporate organization. Forest operations in central and southern interior B.C. are now approaching the efficiency of the south coasts.

Until 1947, the selling of timbered land and land that would best be utilized under a forest crop was not prohibited. Today, the Crown retains title to 95 per cent of B.C.'s 127 million ac. (51 million ha.) of productive forest land. This represents over 50 per cent of the commercially available timber reserves in Canada. An explanation of how the B.C. government gained control of most of the productive forest land is found in chapter VI of this report.

Today, B.C. produces 70 per cent of Canada's sawn lumber, most of the plywood and over 25 per cent of the chemical pulp. This industry accounts for approximately 40 per cent of the net value of all commodity production and directly employs 14 per cent of the provincial labour force. Forestry also provides part-time employment for many farmers. Sustained-yield management is employed to reserve large, economically-suited areas for forest land use.

MINING

Mining activity in B.C. began in 1858 with the Fraser River gold rush. The gold frontier expanded throughout the 19th century. In the early 1860s, gold was discovered on the Fraser River and in the Cariboo between Stanley and Barkerville. The peak of the northern gold rush occurred in 1898 in the Klondike River area.

Between 1890 and 1905, the development of the Kootenay region of southeast B.C., one of the most important mining areas of Canada, resulted in the establishment of the first large permanent population in the area. Transportation facilities were introduced and associated forestry and water power developments occurred. Rossland and Nelson, each with a population of about 6,000 by 1901, were the major urban supply centres for the region and a large smelter refinery was established at Trail. The majority of mines produced silver and lead. Fernie was the coal-mining centre and several copper-gold mines existed. The completion of the Crowsnest route of the CPR in the late 1890s resulted in development of the immense coal resources of the Crowsnest Pass. Kootenay forests supplied railway ties and mining timbers.

The north-south mountain ranges, the Purcell, the Selkirk, and the Monashee, hampered the development of east-west transportation routes. The Kootenay River valley formed a major transportation route between Kootenay Lake settlements and the Columbia River valley. The exploration of large ore bodies necessitated transportation to external markets. Eventually, branch lines were built and linked to the Great Northern Railway of the U.S.A. to transport copper, lead, zinc, and silver.

A fear of American economic and political domination in southeastern B.C. led to the construction of a southern line of the CPR just north of the U.S. border. This line, completed during World War I, facilitated the transfer of ore west to Vancouver and wood products east to the prairie markets.

Between World War I and II, mining ventures in the Kootenays were consolidated into corporations. In this period, the Consolidated Mining and Smelting Company accelerated production from the silver-lead-zinc Sullivan Mine at Kimberley and developed Canada's largest lead-zinc smelter and refinery, and associated fertilizer plant at Trail.

The Japanese market stimulated exploration for copper, molybdenum and high-grade iron, and the development of coking coal deposits in the Crowsnest and Peace River coal fields. In this period, provincial production changed from one dominated by lead and zinc to one dominated by copper and coal.

Following World War II, the mining industry of B.C. expanded rapidly in response to demands from Japan and the U.S.A. The bituminous coal production of the Fernie-Michel-Crow's Nest area has increased because of accelerated Japanese demands and a Canadian government subsidy for transportation costs to Vancouver. Examples of other minerals brought into production in response to Japanese market demands are as follows: copper is produced near Merritt and Ashcroft; molybdenum mines have been established at Endako, Boss Mountain, and Rossland; long-fibre asbestos is produced at Cassiar near the Yukon boundary.

Thus, the future of mining in B.C. will probably continue to depend on economic and corporate decisions made outside of the province. However, the provincial government is encouraging a mineral resource management policy based on increasing the importance of mine development and secondary processing within the province.

Mining and mineral processing employ about 3 per cent of the labour force, but yield about 20 per cent of the value of production of the four major industries. In 1975, the markets for copper and molybdenum, two of B.C.'s major minerals, were depressed and thus reflected the continuing world recession. However, other minerals, such as coal and zinc, showed considerable increases over 1974. The estimated value of mineral production in 1975 was \$1,233 million, a new record and slightly above the 1974 value of \$1,197 million. Six minerals represent over 80 per cent of the total value and in order of importance are: coal, copper, crude oil, zinc, natural gas, and molybdenum. Coal and copper account for 54 per cent of the total.

COMMERCIAL FISHING⁶

The B.C. fishing industry experienced a difficult year in 1975 because of a labour-management dispute and a cyclical reduction in salmon runs. The 1975 estimated landed value of the fishing fleet catch was \$66.2 million, down from \$101 million in 1974.

Salmon are the most important species of fish in B.C.'s commercial fishery and account for 60 to 70 per cent of the total landed value of all fish. Other major commercial fish are halibut, herring, crabs, shrimps, oysters, and clams.

⁶Department of Economic Development, British Columbia Summary of Economic Activity 1975, pp. 23-26.

TOURISM⁷

Tourism is one of B.C.'s fastest-growing industries. Tourist revenue rose from \$115 million in 1961 to \$660 million in 1973, an increase of almost 600 per cent. A breakdown of spending by an average automobile visitor is 29 per cent for food, 23 per cent for travel, 20 per cent for lodging, 17 per cent for shopping, 6 per cent for recreation and entertainment, and 5 per cent for personal services.

The rapid growth of the travel industry can largely be attributed to more leisure time and an increase in motor vehicle travel. Vancouver and Victoria attract many visitors as do the Okanagan centres of Penticton, Kelowna, and Vernon. The remainder of B.C. has many scenic and recreational attractions as well as historic sites. Hydro and dam developments also attract visitors.

In terms of land use, recreation demands are rapidly increasing in national and provincial parks. The number of provincial parks increased from 319 in 1974 to 345 in 1975. Recreation is discussed in detail in chapter VII.

LAND OWNERSHIP

The total land and water area expressed in acres, square miles, and square kilometers, plus respective public and private ownership figures, are indicated in table 3. Public (Crown) and private ownership represent 94 per cent and 6 per cent of the total area, respectively.

TABLE 3
LAND OWNERSHIP IN B.C.

	Total Land and Water Area	Ownership Public (Crown)	Private
ACRES	234,403,200	198,940,349	35,462,851
SQUARE MILES	366,255	329,630	36,625
SQUARE KILOMETERS	952,263	770,828	181,435

⁷Ibid., pp. 27-30.

FOREIGN LAND OWNERSHIP

For privately-owned land, there are no legal restrictions on foreign or non-resident ownership. However, the disposition of Crown lands is restricted to Canadian citizens or landed immigrants. Presently, commercial, industrial, and waterfront Crown lands are only disposed by leasehold tenure but the B.C. government is considering a policy of leasehold tenure for all Crown lands. The Land Act prohibits any person who is not a Canadian citizen from obtaining a Crown grant. This provision applies only to individuals as distinct from corporations. However, B.C. government policy is such that Crown grants are not made to companies who are not either incorporated or registered in B.C. The Land Commission Act, 1973, does not deal directly with land ownership but restricts the development of agricultural land for other than agricultural purposes.

Amendments to the Land Registry Act, given royal assent in June, 1974, require that every person applying to be a registered owner or holder of land must supply a statutory declaration stating his citizenship. For corporations, the statutory declaration must state the number of directors, whether each is a Canadian citizen or a landed immigrant; and for any that are not, their name, address, and citizenship. If any facts change following the initial declaration, the Registrar of Titles must be informed.

III

LAND POLICY AND PLANNING IN B.C.⁸

The dynamics of land use planning are governed to a large extent by a complex network of provincial jurisdictions, policies, and programs. The agencies and groups involved include provincial departments, Crown boards, corporations and commissions, municipalities, regional districts, regional resource management committees and, at the top, the Environment and Land Use Committee and its Secretariat. Figure 1 is a flow diagram of provincial land use planning from the Cabinet level to the municipal level.

In recent years, B.C. has adopted several approaches to improve resource and land use decision-making. These approaches have emphasized the fostering of greater co-operation and more efficient relationships among agencies, and the generation of more extensive and comprehensive data related to specific resource and land use problems. Initiatives taken by the B.C. government to integrate land use planning are discussed under the headings institutional, regional resource planning and special Crown regulatory agencies. "Institutional" includes the Environment and Land Use Committee (ELUC), the Committee's Secretariat (ELUCS), the ELUC-ELUCS decision-making process, and the impact of this process. The discussion of regional resource planning focuses on the Regional Resource Management Committees (RRMC). The special Crown regulatory agencies are the B.C. Land Commission (BCLC) and the B.C. Assessment Authority (BCAA).

As previously mentioned, regional districts and municipalities are also involved in the land use planning processes. The regional planning process, regional district concept, and urban land use planning are discussed in chapter IV.

⁸Much of the information contained in this chapter is taken from R.L. Crook, Towards a Land Management Philosophy in British Columbia, 34 pp.

LAND USE PLANNING IN BRITISH COLUMBIA



Source: Adopted from Perry, J. Inventory of Regional Planning Administration in Canada, p. 8.

Provincial resource departments administer a multitude of land use policies and programs. There are many resource agency jurisdictions and tenure systems that are superimposed on Crown lands in unincorporated areas. A brief discussion is provided of the current resource management approaches within the following departments:

- Agriculture
- Environment
 - Lands Service
 - Water Resources Branch
- Forests
- Mines and Petroleum Resources
- Recreation and Travel Industry
 - Provincial Parks Branch
 - Fish and Wildlife Branch.

Other departments administering programs that influence provincial environment and land use decisions are:

- Economic Development
- Health
- Highways
- Housing
- Municipal Affairs
- Provincial Secretary.

Finally, reference is made to Appendix I, which is a checklist of B.C. land use and resource jurisdictions.

INSTITUTIONAL APPROACHES

ENVIRONMENT AND LAND USE COMMITTEE (ELUC)

During the 1960s, a conflict related to overlapping jurisdictions and vested interests was growing. The resolution of resource conflicts at the working

level was difficult among resource agencies in B.C. and problems were more often referred to the Deputy Ministerial and Ministerial levels. Even at this level, solutions were difficult to achieve because of the lack of good information and a problem-solving forum.

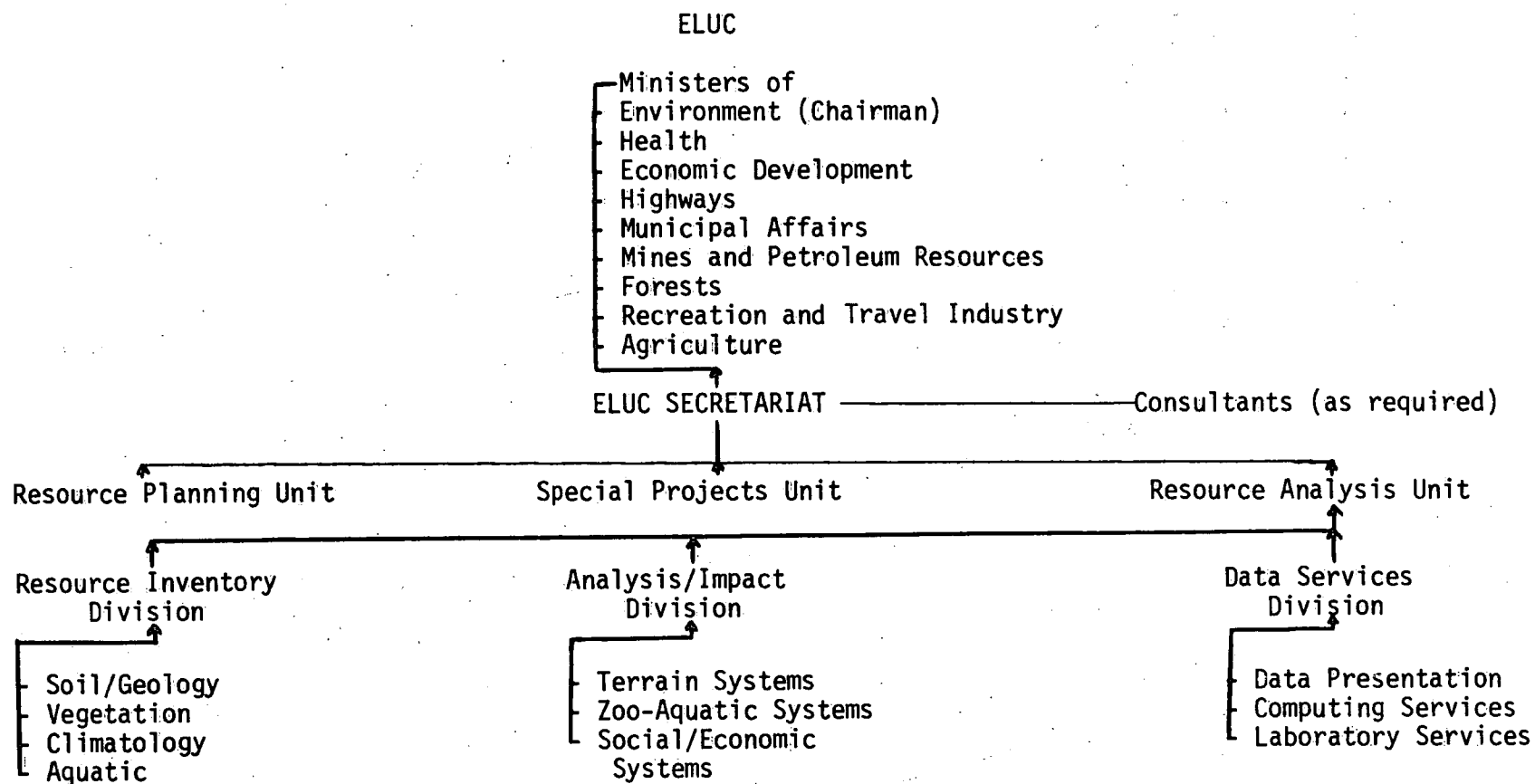
Thus, in 1969, an informal committee of five Cabinet Ministers was established to help resolve resource conflicts. The group was known as the Land Use Committee and included Ministers of the departments of Agriculture; Lands, Forests, and Water Resources; Mines and Petroleum Resources; Municipal Affairs; and Industry Development, Trade, and Commerce. Two resource conflicts in 1969 prompted the formation of this Committee. These conflicts were: (i) the competition for forage between ungulates and domestic cattle around the margins of the Libby Reservoir, and (ii) the loss of forest lands to urban uses in the Vanderhoof area, where lands had been cleared for agricultural use.

The Committee resolved many resource conflicts between 1969 and 1971. The process was formalized when the Environment and Land Use (ELU) Act was given assent on April 2, 1971, and the ELUC became a formal Cabinet committee. Today, the Committee includes the Ministers from nine departments (see figure 2).

The duties of the ELUC, under Section 3 of the ELU Act, are:

- to establish and recommend programs designed to foster increased public concern about, and awareness of, the environment;
- to ensure that all the aspects of preservation and maintenance of the natural environment are fully considered in the administration of land use and resource development commensurate with a maximum beneficial land use, and to minimize and prevent waste of such resources, and despoliation of the environment occasioned thereby;
- if considered advisable, to make recommendation to the Lieutenant-Governor in Council respecting any matter relating to the environment and the development and use of land and other natural resources;
- to inquire into and study any matter pertaining to the environment, or land use; and

FIGURE 2
ENVIRONMENT AND LAND USE COMMITTEE (ELUC)



Source: ELUC Secretariat, April, 1976.

- to prepare reports and, if advisable, make recommendations for submission to the Lieutenant-Governor in Council.

The ELU Act is one of the most powerful pieces of B.C. legislation because it supersedes all previous acts and regulations. The Lieutenant-Governor in Council, upon recommendation of the ELUC, may make Orders-In-Council, respecting the environment or land use, which he considers necessary or advisable.

With the powers of the ELU Act, the ELUC is making important land use and resource decisions, such as the establishment of Agricultural Land Reserves in 1973 and the development of an integrated approach to planning development in North West B.C.

ENVIRONMENT AND LAND USE COMMITTEE SECRETARIAT (ELUCS)

Initially, in 1971, the ELUC was assisted by a secretary/co-ordinator who utilized a technical committee of Deputy Ministers of the same departments comprising the ELUC. However, the Deputy Ministers found it increasingly difficult to arrange technical committee meetings since most of their time was occupied with departmental administration. As an alternative to the technical committee, the ELUC established the ELUCS by Order-In-Council pursuant to the ELU Act, as a full-time continuing staff arm of the Committee.

The ELUCS is composed of three units - Resource Analysis, Resource Planning, and Special Projects (see figure 2). Most of the ELUCS staff were transferred from the former B.C. Land Inventory to the Resource Analysis Unit. The roles of this unit are to co-ordinate the collection and analysis of resource data; to provide long-term inventories of base data that are suitable for a broad range of interpretations; to provide short-term resource inventories for specific project requirements; to develop a biophysical land use planning inventory program; and to provide technical, mapping, and drafting services to the ELUCS.

The Resource Planning Unit was created to prepare regional resource and land allocation plans, to provide the ELUC with professional advice on resource development within regional contexts, and to examine issues involving competing resource users in a particular region.

The Special Projects Unit formulates guidelines and procedures for preliminary environmental and socio-economic assessments of development projects. In co-ordination with inter-agency groups, this unit is responsible for major project planning and resource allocation issues, such as energy generation and transmission, utility corridors, ferry services, reservoir use, and coastal development.

THE ELUC-ELUCS DECISION-MAKING PROCESS⁹

Following is an outline of 10 steps by which the ELUC receives and treats land use and resource problems:

1. An inter-agency environment and/or land use problem is perceived at the departmental working level. It may be that several agencies are affected but that no one agency has clear jurisdiction or that such jurisdiction as exists has been questioned. At the perception source, no solution may be available or, if available, may involve possible changes in agency policy, which must be approved by more senior officials.
2. No equitable agreement is reached between the involved agencies at the step one level, and the problem is referred upwards through the departmental hierarchy. The problem will reach the Deputy Minister if no solution is found at an intervening level.
3. The Deputy Minister reviews the problem. If he decides that the problem cannot be resolved by approaching directly the equivalent senior officials of other involved agencies, he may elect to employ the ELUC machinery. The problem may go first to the Environment and Land Use Technical Committee (ELUTC), a committee of Deputy Ministers.

⁹Ibid., pp. 23-24.

4. The ELUTC deliberates on the problem. One of the primary functions of the Deputy Ministers in committee is to collect and analyze possible agenda items for the ELUC. The ELUTC provides about one-half of the agenda items. The rest are provided by the Ministers themselves. If the ELUTC cannot recommend solutions, and if it does not refer the problem back to individual agencies for further information or clarification, the problem is referred to the ELUC. Deputy Ministers will, at the same time, presumably brief their respective Ministers on their views of the problem.
5. The ELUC deliberates on the problem. Often disputes are settled promptly by this forum.
6. Where research and analysis may be required that is interdepartmental in scope, the ELUC refers the problem to the ELUCS. The ELUC may ask the ELUCS to research the problem itself or to direct research by other agencies or by consultants. The ELUCS staff deliberates on the organization of a research program.
7. A task group (inhouse or inter-agency) is formed, consisting of personnel with special expertise in the problem area. Task force membership may be modified as necessary while the study is in progress. An ELUCS representative may not necessarily direct the task force but is expected to judge the various inputs for their holistic, integrative merits. After the task force members have submitted the various reports that are required, an ELUCS staff member will often produce a summary report and recommendations.
8. These are then submitted to the ELUC. It is possible that interim reports may also be received by the ELUC, which may then choose to issue new directives for the study.
9. Based on the task force submissions, the ELUC reaches a solution to the planning or resource allocation problem. The ELUC review may be assisted by further inputs from the individual departments as necessary.

10. The conflict resolution formula is reported to senior agency officials (Deputy Ministers, etc.) who are then responsible for transmitting the decision downwards through the hierarchy to the working level, from whence the problem came.

This process is the initial provincial mechanism for formal decision-making related to the resolution of resource conflicts. It replaces the relatively ad hoc inter-agency liaison of the past. The emphasis of this process is on the inter-agency study of resource problems at both the Ministerial level (ELUC) and the working level (through the ELUCS task forces).

COMMITTEES REPORTING TO THE ELUCS

These committees, as shown in figure 1, are the Land Resources Steering Committee, and the Environment and Land Use Technical Committee, plus functional sub-committees.

LAND RESOURCES STEERING COMMITTEE (LRSC)

Members of the LRSC represent the Department of Soil Science, U.B.C. (chairman); the ELUCS; Department of Forests; the Water Service of the Department of Environment; Department of Recreation and Travel Industry; Agriculture Canada; and the Lands Directorate and Forest Service of Environment Canada. It is structured so as to co-ordinate and foster resource inventories, developmental research, and user recommendations.

Objectives of the LRSC are:

- To co-ordinate in a co-operative manner the collection of soil and land resource information in accordance with the maintenance of professional standards, capabilities, responsibilities, expertise, and policies of federal, provincial, and university agencies.
- To continually assess and re-examine current problems, programs, and organizational framework.

- To investigate user needs and requirements as deemed necessary to meet these requirements by existing agencies or special funding.
- To promote within the inherent confines of capability and policy the necessary development research congruent with user needs, and to encourage the integration of research programs among the co-operating agencies.
- To act as an advisory body regarding programs, policies, alternatives, and problems in anticipation of demands and priorities.
- To ensure that the information collected is reliable and presented at a time and in a manner that will meet user requirements.
- To promote the adequate training of personnel so that program requirements can be adequately and efficiently met.¹⁰

The LRSC (an advisory body with no executive power) reports to the Director of the ELUCS, who in turn reports to the ELUC (figure 1).

Environment and Land Use Technical Committee (ELUTC)

The ELUTC, referred to as the Technical Committee in figure 1, is chaired by a co-ordinator appointed by the LRSC and is composed of the chairmen of the functional sub-committees. The purpose of the ELUTC is to provide a forum for the sub-committee chairmen to consider mutual problems, integrate activities where necessary, and generally to communicate on programs.

Functional Sub-Committees

The functional sub-committees were formed for land-oriented resource fields. There are nine sub-committees: namely, agriculture and forestry, climate, data handling, education, engineering, urban-industrial transportation, fish-wildlife recreation, soils and landforms, vegetation, and water. Representatives of provincial and federal governments and universities form the sub-committees. General terms of reference of the sub-committees relate to matters of inventory, developmental research, and use interpretations. Activities

¹⁰ LRSC, The B.C. Land Resources Committee, 3 pp.

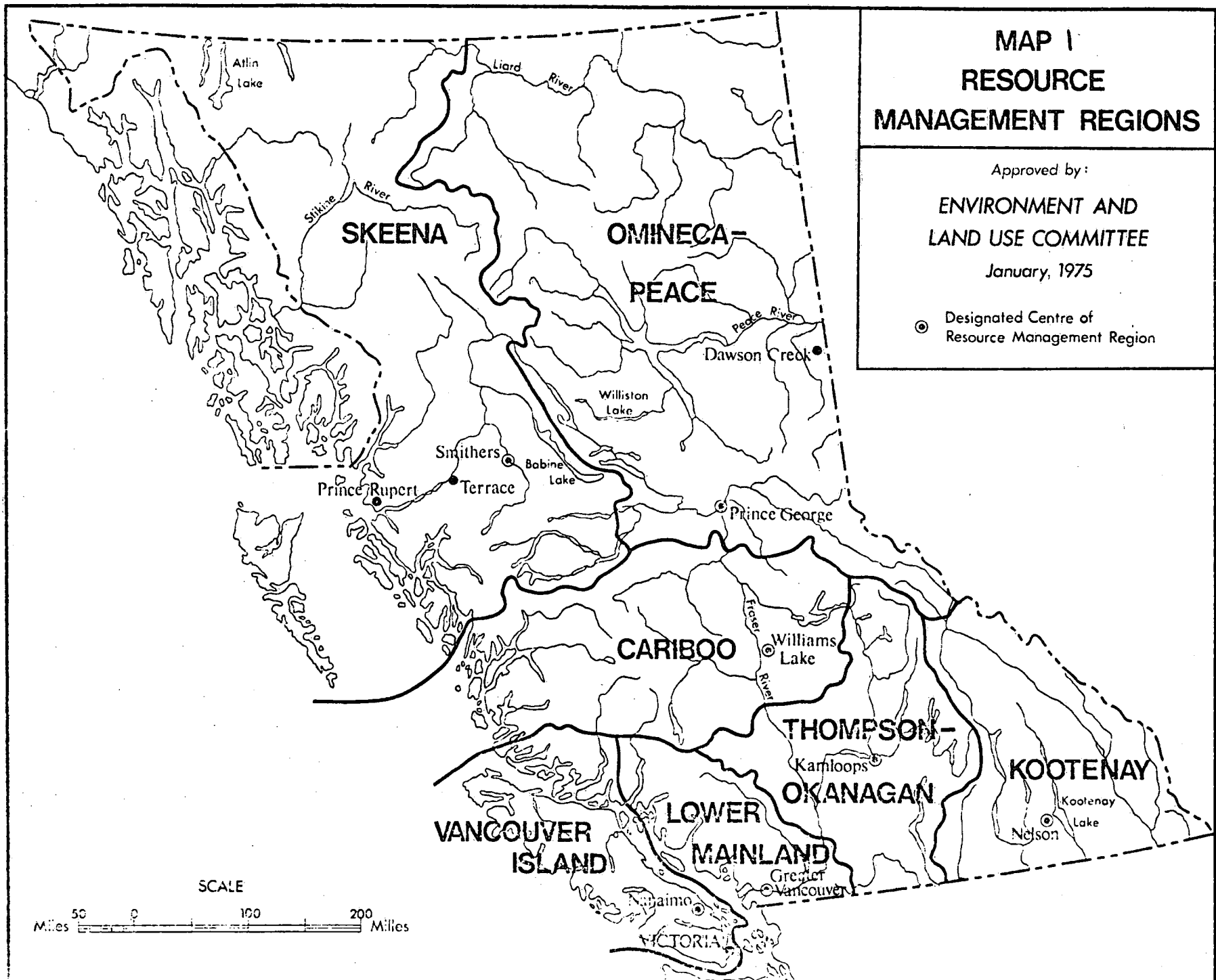
MAP 1 RESOURCE MANAGEMENT REGIONS

Approved by:

ENVIRONMENT AND
LAND USE COMMITTEE

January, 1975

⊙ Designated Centre of
Resource Management Region



include;

- assessing the availability of base data,
- assessing the kinds of use interpretations made from this data,
- providing liaison with user agencies to assess the quality and usefulness of the base data and related interpretations,
- identifying information gaps in base data and research, and
- recommending needed programs.

Ad hoc working groups are established to study specific problems related to the above activities. Working group members may be obtained from resource agencies, such as government personnel in regional districts, and do not have to involve sub-committee members. Once a task is completed, the working group can be dissolved.

REGIONAL RESOURCE PLANNING

REGIONAL RESOURCE MANAGEMENT COMMITTEES (RRMC)

The RRMCs (or Inter Sector Groups), composed of senior regional resource agency officials, have been established in seven locations throughout B.C. These committees address themselves to resource conflicts of overlapping resource management jurisdictions and interests as they relate to Crown lands.

The first Inter Sector Group was formed in Prince George during the late 1960s. Members included such regional officials as the district forester, regional highway engineer, and regional land inspector. Another group was soon formed in Nelson, followed by five others.

Regional boundaries and regional administrative centres of resource departments were standardized by the province (see map 1). In January, 1975, Order-In-Council 205-75 (pursuant to the Environment and Land Use Act) created seven Resource Management Regions. Government departments with representatives on the RRMC are Environment, Agriculture, Mines and Petroleum Resources, and Re-

creation and Travel Industry. The other departments with members on the ELUC, namely, Health, Economic Development, Highways, Municipal Affairs, and Forests, will have representatives in the Resource Management Region centres in the future. Each RRMC will consist of senior regional managers.

RRMCs work on the basis of assignment from the ELUCS, Lands Service of the Department of Environment, and the Deputy Minister's Committee of ELUC. The RRMCs do not have authority and responsibilities of their own related to the regions.

Therefore, the objectives of the RRMCs are:

- To increase and improve the regional decision-making capability. Land use decisions will be made in the regions using local knowledge and capability to the maximum extent feasible.
- To improve communication between B.C. government departments and branches responsible for the management of a single resource; for example, forestry, agriculture, fish and wildlife, etc. Prior to the establishment of the Resource Management Regions, each government resource department administered its regional activities from a centre of its own choice. Therefore, it was a matter of chance that two departments would have their regional staff located in the same administrative centre. Meetings between resource department representatives were very difficult to arrange. A common administrative centre for each Resource Management Region will help to rectify such communication difficulties.
- To devolve to the resource regions the responsibility for the preparation of regional land use management plans. Approaches to the development of such plans will probably vary greatly between regions because of regional differences in geography, stage and state of development, and social characteristics.

SPECIAL CROWN REGULATORY AGENCIES

Two of these agencies are the B.C. Land Commission and the B.C. Assessment Authority.

B.C. LAND COMMISSION (BCLC)

The commission, consisting of five members, was appointed by the Lieutenant-Governor in Council in May, 1973, under Section 2 of the Land Commission Act. The Land Commission reports to the B.C. Legislature through the Minister of Environment.

The objects and powers of the BCLC as defined in Section 7 of the Land Commission Act are to:

- Preserve agricultural land for farm use;
- Encourage the establishment and maintenance of family farms, and land in an agricultural land reserve, for a use compatible with the preservation of family farms and farm use of the land;
- Preserve green belt land in and around urban areas;
- Encourage the establishment and maintenance of land in a green belt land reserve for a use compatible with the preservation of a green belt;
- Preserve land bank land having desirable qualities for urban or industrial development and to restrict subdivision or use of the land for other purposes;
- Encourage the establishment and maintenance of land in a land bank land reserve for a use compatible with an ultimate use for industrial and urban development;
- Preserve park land for recreational use;
- Encourage the establishment and maintenance of land in a park land reserve for a use compatible with an ultimate use for recreation; and
- Advise and assist municipalities and regional districts in the preparation and production of the land reserve plans required for the purpose of the Land Commission Act.

The commission, as defined in Section 7 of the Land Commission Act, has the power and capacity of itself; or in co-operation with the Government of Canada, or any of its agencies or corporations; or with any B.C. department of government, or with a municipality or regional district to:

- purchase or acquire land, except by expropriation, on such terms and conditions as may be negotiated, and hold such land for the purposes of the Act;
- dispose of, by sale, lease, or otherwise, commission land and Crown land that is in an agricultural land reserve, a green belt land reserve, a land bank land reserve, or a park land reserve, subject to such terms and conditions as the Commission may determine;
- accept gifts of land subject to such terms and conditions as the Commission may determine;
- acquire and hold personal property and dispose of personal property so acquired by sale, lease, or otherwise; and
- if authorized by any other Act, purchase or otherwise acquire, hold, administer and dispose of land, including Crown land, for the purposes of that other Act.

As to the above-outlined powers, the Commission may:

- purchase or acquire land, except by expropriation, including Crown land, the present condition or future potential of which merits preservation by reason of its aesthetic quality or its location in or around urban areas, such as green belt land;
- purchase or acquire land, except by expropriation, including Crown land, having desirable qualities for urban or industrial development or redevelopment, such as land bank land; and
- purchase or acquire land, except by expropriation, including Crown land, having desirable qualities for, or future potential for, recreational use, such as park land;

and upon being purchased or acquired, the green belt land, land bank land, or park land is established as:

- a green belt land reserve; or
- a land bank land reserve; or
- a park land reserve.

The BCLC has no powers to designate reserves other than on lands which it owns.

Only three aspects of provincial decision-making have precedence over a Land Commission decision; namely, decisions of the ELUC, Orders-In-Council, and Cabinet decisions.

The primary function of the BCLC is to regulate the use of agricultural lands that are in Agricultural Land Reserves (ALRs). The ALRs were designated by a process that involved inputs from the regional districts and municipalities (initially), the BCLC, the ELUCS, and the RRMCS. During the ALR designation process, there were some public and internal government concerns and disagreements. However, the ALR zoning is now widely supported as a necessary regulatory device for the protection of agricultural lands.

THE BCLC AND URBAN DEVELOPMENT

Prior to the Land Commission Act of 1973, it is estimated that 15,000 ac. (6,000 ha.) of farmland were lost to urban development each year. Most of this land loss occurred in the lower Fraser Valley and the Okanagan Valley - areas of prime agricultural capability. Thus, the Land Commission Act was passed primarily to inhibit urban sprawl and to protect agricultural lands.

As previously outlined, the Land Commission Act provides for the preservation of four types of land - agricultural, greenbelt, landbank, and parkland. A discussion of each of these land types as related to urban development follows.¹¹

The Preservation of Agricultural Land

The BCLC can preserve agricultural land by establishing a protective zone called an Agricultural Land Reserve (ALR). Such zones shown on a map are called ALR Plans. Within an ALR, regulations define the land use activities that may occur. With the establishment of the Land Commission Act and the ALRs, it is possible for the BCLC to review all applications for future urban development on farmland, and to decide whether to contain, direct, or en-

¹¹B.C. Land Commission, Keeping the Options Open, 14 pp.

courage growth in the urban centres of B.C. A more detailed discussion of ALRs may be found in chapter V.

The Preservation of Greenbelt Land

A "greenbelt" is an area of permanent open space within or surrounding a municipality. Its major purpose is to provide a natural landscape for urban residents. The Greenbelt Fund is administered by the Lands Service, Department of Environment. In co-operation with the regional districts and their municipalities, the BCLC will purchase, or help local authorities purchase, greenbelt and parkland in and around urban centres. An initial fund of \$5 million was established for purchases by the BCLC upon recommendation by a regional district. The fund is spent on a regional district per capita basis. Any type of natural area or park will be considered for purchase by the BCLC.

Past purchases of greenbelt land by the B.C. government have been given to the BCLC for stewardship. These lands plus properties acquired by the BCLC are managed by local governments or an appropriate provincial government department.

The Preservation of Landbank Land

Certain lands have desirable qualities for urban or industrial development. The BCLC, under the Land Commission Act, can purchase such lands either by itself or in co-operation with local and regional governments. "Landbanking" will probably increase in importance as a means of prohibiting urban development of farmlands and of maintaining agricultural use of agricultural lands.

The Preservation of Parkland

The BCLC encourages the establishment of parkland reserves for recreational purposes. As mentioned above concerning greenbelt lands, a fund has been established whereby the BCLC may purchase parkland. Such purchases complement the activities of provincial and municipal park authorities. As with

greenbelt and urban landbank land, the BCLC cannot designate parkland unless the land has been purchased or received as a gift.

B.C. ASSESSMENT AUTHORITY (BCAA)

The BCAA was established in 1974 to control provincial land assessment responsibilities. An objective of the Authority is to establish all assessments at 100 per cent of real market values by enforcing more uniform and rigorous assessment standards.

When operational, the BCAA will provide valid land value data on a province-wide basis for land use planning purposes.

PROVINCIAL RESOURCE DEPARTMENTS

DEPARTMENT OF AGRICULTURE (BCDA)

The BCDA has no executive power to directly control land use. It has an indirect influence on land use and resource management through public education programs and its connection to ARDA land management programs.

DEPARTMENT OF ENVIRONMENT (BCDOE)

Lands Service (BCLS)

The BCLS administers the disposition of Crown land for public and private uses pursuant to the Land Act. Under the Land Act, the BCLS has jurisdiction over 30 to 40 per cent of the provincial Crown lands, those lands that are considered "vacant" or have been Crown-leased. Other agencies that have jurisdiction over Crown land are the Department of Forests and the Provincial Parks Branch.

The aim of the BCLS is to achieve a land disposal mechanism that utilizes a comprehensive land management process. This process would include natural

resources management, environmental and socio-economic concerns, local and regional land use planning objectives, and local community aspirations. Success of this objective depends largely on inter-agency co-operation; the BCLS is currently sponsoring local planning studies and resource data base folios with inter-agency input. However, the application of this objective to land use allocation decisions on a local scale will probably not occur for many years.

Water Resources Service (BCWRS)

The BCWRS has jurisdiction over all provincial water resources pursuant to the Water Act and the Pollution Control Act, 1967.

It is difficult for the BCWRS to provide a comprehensive provincial water management program. The legislation does not contain water management provisions. The Water Act regulates the granting of water rights but does not require that decisions be made within a broad water management framework. The Water Control Act, 1967, regulates the licencing of waste discharges but does not set maximum acceptable waste discharge levels for site specific environments. Pollution control standards are applied broadly.

The BCWRS is involved in floodplain management programs, which emphasize the construction of protection works prior to development.

Department of Forests (BCDF)

The BCDF has sole responsibility for the administration of Crown timber resources pursuant to the Forest Act and has legal jurisdiction over more than 50 per cent of the province's area. All BCDF forest management programs are based on a detailed forest inventory mapping program. The department utilizes resource overlay folios as a major tool for resolving resource conflicts. The folios are used to determine the location of logging operations that will maximize the multi-resource potential of the forested lands.

Department of Mines and Petroleum Resources (BCMPPR)

The major function of the BCMPPR is to regulate the mineral industry. It shares the responsibility of regulating the petroleum industry with the B.C. Petroleum Corporation, the B.C. Energy Commission, and the Department of Transportation and Communications.

Recent amendments to the Mineral Act and other mining legislation require that mining operators receive approval of a reclamation and restoration plan prior to the issue of new mining permits.

Department of Recreation and Travel Industry (BCDRTI)

Provincial Parks Branch (BCPPB)

The BCPPB, formerly with the Department of Recreation and Conservation, manages all aspects of provincial park development and use pursuant to the Park Act. Since 1973, the BCPPB has assumed complete statutory responsibility for resource management in parks. However, the Branch has no legal status to create new park areas, even on Crown land. A recreational land bank is administered by the BCLS.

Fish and Wildlife Branch (BCFWB)

The BCFWB is responsible for the maintenance, protection, and enhancement of fish and wildlife resources pursuant to the Wildlife Act. However, the Branch is not empowered to set aside land for wildlife management. It enforces protective legislation designed to control levels of hunting and fishing.

Department of Economic Development (BCDED)

Related to land use, the BCDED has programs designed to assist and influence the location and development of industries. The BCDED is interested in the

development of regional economic policies and thus sponsors regional economic studies.

Department of Health (BCDHe)

The Health Branch, pursuant to the Health Act, regulates public health hazards that are related to urban development, such as drainage, water supply, and waste disposal systems. Such regulations influence the density and servicing of urban developments. The interests of the Health Branch are now site specific but could broaden to future regional land management issues related to urban development.

Department of Highways (BCDH)

The BCDH plans, builds, and maintains the provincial highway system pursuant to the Department of Highways Act and the Highway Act. The BCDH plays an important role as a development agency in the processes of local and regional development. It relies heavily on referrals to resource and planning agencies in order to identify critical values and major requirements. Future BCDH development will probably adhere more strictly to environmental values, land management requirements, and community needs than it has in the past.

Department of Housing (BCDHg)

The BCDHg was established in 1973 in response to a severe provincial housing shortage. It supervises, acquires, develops, maintains, improves, and disposes of housing. The development process of the BCDHg involves an evaluation of proposed developments related to local environmental values, community planning objectives, and land management policies. These evaluations are based primarily on provincial or municipal subdivision approval procedures. However, because of the large number of development applications, especially in unorganized areas, the BCDHg cannot always thoroughly examine local planning and environmental implications of development proposals.

Departments of Municipal Affairs (BCMPA)

The BCMPA liaises between provincial and local levels of government, pursuant to the Municipal Act. The land use planning machinery established under this Act is administered locally by individual municipalities and regional districts. There are 139 municipalities organized into 29 regional districts. Many of these units are too small to be viable planning units.

Department of the Provincial Secretary (BCDPS)

The BCDPS is responsible for the preservation of objects and places of archaeological and historical value. Two advisory boards implement these functions; namely, the Historic Sites Advisory Board and the Archaeological Sites Advisory Board.

LAND USE AND RESOURCE JURISDICTIONS

A checklist of these jurisdictions is provided in Appendix I. The jurisdictions are federal, municipal, regional district, resource department, regulatory departmental, special development agency, and special regulatory agency.

IV

URBAN SETTLEMENTS

Because of the rugged terrain of B.C., people have established communities primarily in valley locations. Municipalities located in these valleys comprise just over one-half of 1 per cent, about 733 sq. mi. (1,906 sq. km.) of the provincial land area but contain 80 per cent of the population.¹²

Topics discussed in this chapter are;

- the history of land use in urban areas,
- population growth rates,
- population distribution,
- land use planning in the Lower Mainland,
- provincial government departments, and
- legislation related to urban settlements.

Under "the history of land use in urban areas", the regional planning process and the regional district concept are outlined. Following a discussion of population growth rates and population distribution, land use planning in the Lower Mainland, including planning in the Greater Vancouver Regional District (GVRD), is outlined.

The last section of this chapter deals with provincial government departments and legislation. The purpose of this section is to outline land use planning programs related to urban settlements that are administered by government departments.

¹²Department of Municipal Affairs, Statistics Relating to Regional and Municipal Governments in British Columbia, p. 7.

THE HISTORY OF LAND USE IN URBAN AREAS¹³

The Town Planning Act of 1925 was the initial legislation that empowered municipalities to prepare official town plans and to zone land. However, town planning became equated with the static process of zoning and remains so within many municipalities even today. It was not until 1946 that the provincial government recognized problems within built-up areas situated outside municipal boundaries. An amendment to the Town Planning Act in 1946 empowered the Cabinet to regulate land subdivision in unorganized areas by creating "regulated areas". The purpose of this amendment was to prevent the further development of unplanned land use patterns on the rural-urban fringe.

THE REGIONAL PLANNING PROCESS

In 1948, amendments to the Town Planning Act provided for the designation of regional planning areas for planning purposes. This amendment was formulated in response to public pressure in the Lower Mainland, where land use problems were becoming serious. The first regional planning board was established in the Lower Mainland in 1949. A detailed discussion of land use planning in the Lower Mainland is provided later in this chapter. By 1965, approximately 65 per cent of B.C.'s population dwelt within regional planning areas. These areas centred on the larger urban concentrations and extended into the adjacent unorganized territories. Thus, regional planning boards addressed themselves to interactions between urban centres and rural hinterlands. However, these boards performed only an advisory role.

The Town Planning Act was repealed in 1957 and its municipal planning provisions were transferred to the Municipal Act. A new provision stated that planning resolutions of a regional planning board became binding on all local government authorities if two-thirds of a board's members supported the resolutions. The Local Services Act of 1957 replaced the provisions of the Town Planning Act with respect to unincorporated areas. Thus, the Minister of Mu-

¹³R.L. Crook, op. cit., pp. 2-4.

municipal Affairs was empowered to establish zoning regulations, subdivision and construction standards, and organize local services in unorganized areas.

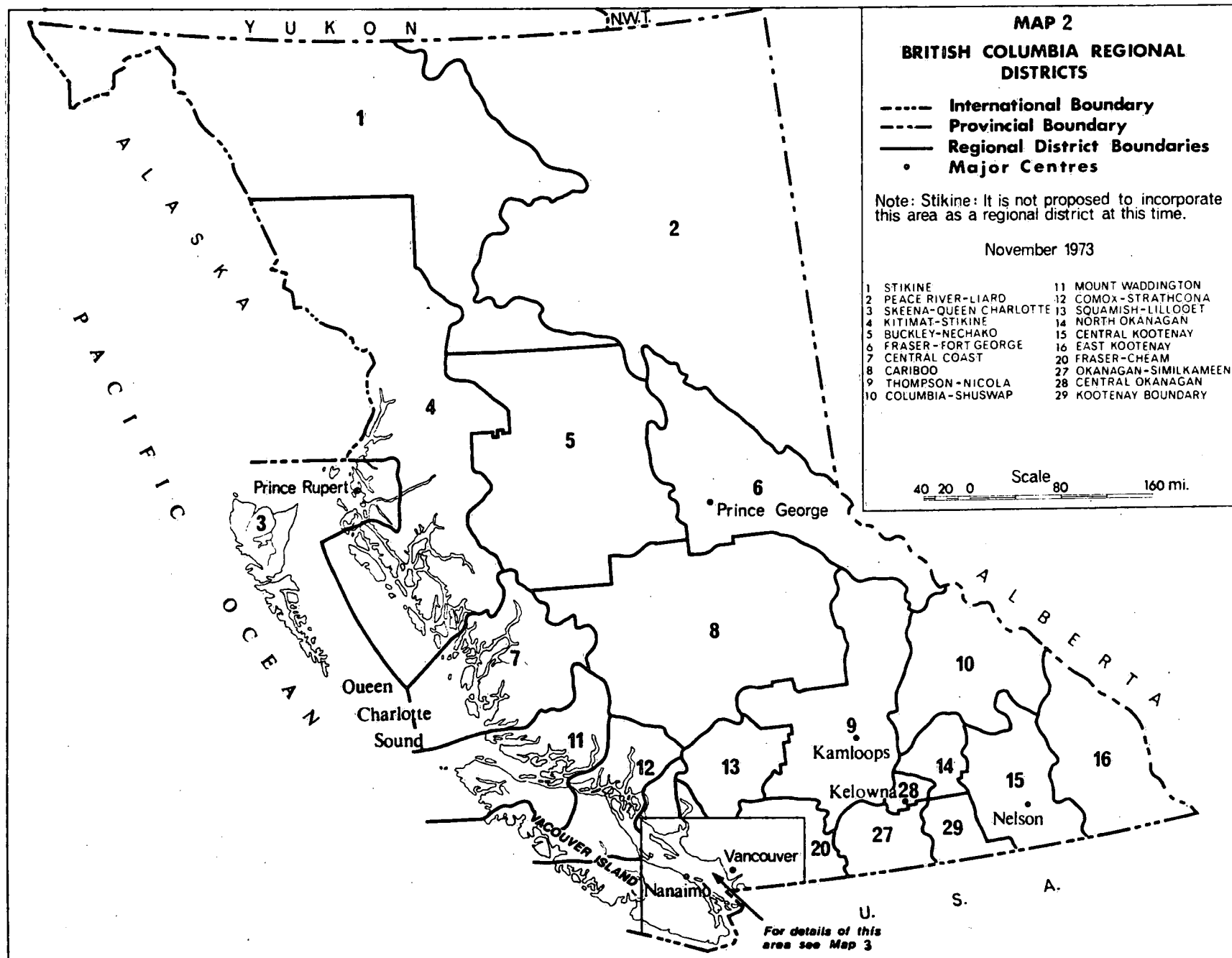
REGIONAL DISTRICTS

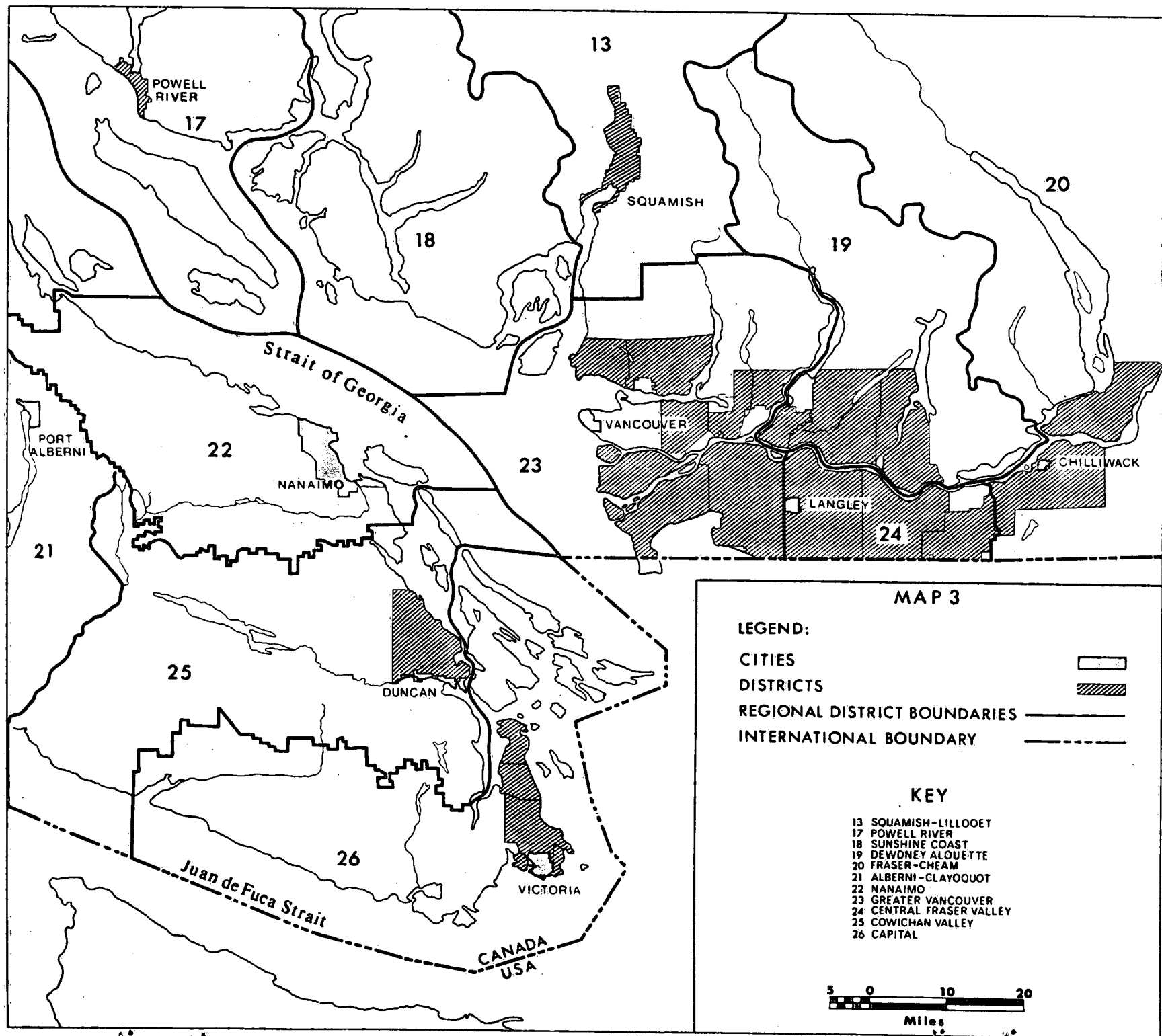
There was widespread concern among B.C. residents over the lack of local input into the decisions of the Minister of Municipal Affairs. In 1965, the Minister's functions were decentralized by an amendment to the Municipal Act whereby 29 regional districts were created - 28 incorporated and the non-incorporated regional district of Stikine. These districts provide local government services to and have regulatory control over several municipalities and/or unincorporated areas. (See Maps 2 and 3.)

Regional district boards include appointed municipal council representatives and elected members from unincorporated areas. Board members administer the Minister's regulatory functions in unincorporated areas (zoning, subdivision, and construction regulation) and develop regional plans. Individual municipal councils have considerable autonomy. However, regional plans and other land use resolutions may become land use allocation by-laws that bind all parties, if board members representing two-thirds of the population of a regional district support such by-laws.

The Regional Board is the planning board for the purposes of the Municipal Act. Section 798B of the Municipal Act requires that a Technical Planning Committee (TPC) be established by the Regional Board to review and advise on all planning matters referred to it by the Board. The TPC also provides a liaison between the technical staffs of the Regional Districts and the respective government departments and municipalities. Members of a TPC are:

- The regional planning director, or where the regional district does not employ a director, a regional district employee, who acts as chairperson.
- The medical health officer.
- One municipal employee appointed by each municipality.





- One representative from each of the following provincial departments;
 - Municipal Affairs,
 - Environment (BCDOE),
 - Forests,
 - Water Resources Service, BCDOE,
 - Parks Branch, Recreation and Travel Industry,
 - Agriculture,
 - Highways, and
 - Mines and Petroleum Resources.
- Such Crown agencies, other departments or branches as may be designated by the Minister of Municipal Affairs.
- One School Board employee.
- One employee of such departments or Crown agencies of the Government of Canada as designated by the Minister of Municipal Affairs.

For electoral areas - areas not included within the boundaries of a city, district, town, or village municipality - a Regional Board shall appoint one or more Advisory Planning Commissions (APC) under Section 798C of the Municipal Act. An APC is composed of residents of respective areas who advise a Regional Board on matters of localized planning, such as building regulations.

Regional districts discharge many local functions such as health and sanitation, recreation, water supply, sewage disposal, fire protection, and garbage disposal. However, regional districts have difficulties in undertaking land use planning. The main difficulty lies in the fact that many government agencies exercise environment and land use jurisdictions that are independent of regional district control. All Crown lands fall under some form of centralized provincial jurisdiction and, since 93 per cent of the area of B.C. is Crown land, regional districts have very little uncontested jurisdiction. Most of the permanently alienated 7 per cent of B.C.'s lands are located within municipalities on Vancouver Island and in the Lower Mainland.

Thus, few regional districts, especially in other parts of B.C., have primary jurisdiction over more than 3 or 4 per cent of their areas. Maps 2 and 3 show the locations of the regional districts in B.C.

All regional districts receive an annual grant to assist in meeting general administrative costs. In 1975, this grant was \$10,000 per regional district. Also, an annual grant of 20 cents per capita, with a minimum of \$7,000 and a maximum of \$33,000, is made to each district to assist in the development of a planning program. A 10 cent per capita grant (maximum of \$50,000) was also provided in 1974 and 1975 to those regional districts that had adopted official regional plans.

POPULATION GROWTH RATES

Table 4 lists the 1971 census populations of the largest centres in Coastal and Interior B.C. As indicated in table 5, the population of B.C. grew by 34.1 per cent between 1961 and 1971, slightly less than the 39.8 per cent change between 1951 and 1961. A little over three-quarters of the 1961-1971 growth occurred in urban centres. Greater Vancouver received the largest proportion of the 1961 to 1971 increase; namely, 42.8 per cent, followed by the Capital and Fraser-Fort George regional districts.

Examples of land use and environmental impacts associated with population growth are a shortage of available, high-quality agricultural land, increasing water and air pollution; a severe housing shortage; a lack of accessible recreational land; and crowded transportation facilities. The creation of Agricultural Land Reserves has greatly reduced the loss of agricultural lands to urban and industrial development.

POPULATION DISTRIBUTION

The population of B.C. is concentrated in the two urban regions of Greater Vancouver and the Capital region. Land use planning is particularly important in the Lower Mainland, which is composed of the regional districts of Greater Vancouver, Central Fraser Valley, Dewdney-Alouette, and Fraser-Cheam. Table 5 indicates that in 1971 the Lower Mainland contained 53.7 per cent of the population, Greater Vancouver Region 47.1 per cent, and the Capital Region 9.4 per cent of the provincial population. Of critical concern to re-

TABLE 4
CENSUS POPULATIONS OF THE LARGEST CENTRES IN B.C., 1971, AND
POPULATION ESTIMATES, DECEMBER 31, 1975
COASTAL BRITISH COLUMBIA

<u>Centre</u>	<u>Population</u>	
	<u>1971</u>	<u>1975</u>
Vancouver (metropolitan)	1,071,000	1,155,000
Victoria (metropolitan)	194,000	224,900
Port Alberni	20,100	21,300
Prince Rupert	15,800	18,000
Nanaimo	15,000	44,400
Powell River	13,800	14,800
Kitimat	11,800	13,000
Campbell River	10,000	14,500
Terrace	10,000	12,000
Chilliwack	9,100	9,500
Squamish	6,100	10,000

INTERIOR BRITISH COLUMBIA

<u>Centre</u>	<u>1971</u>	<u>1975</u>
Kamloops	47,147*	59,500
Kelowna	40,000*	52,000
Prince George	33,100	64,800
Penticton	18,200	22,500
Vernon	13,300	18,300
Cranbrook	12,000	14,800
Dawson Creek	11,900	12,150
Trail	11,200	12,000
Nelson	9,400	9,600
Fort St. John	8,300	10,000

* 1973 population estimates after substantial boundary extensions.

Sources: Dept. of LFWR, The Disposition of Crown Lands in British Columbia, p. 6.

Dept. of Municipal Affairs, Estimates.

TABLE 5

POPULATION DISTRIBUTION AND CHANGE IN B.C.
REGIONAL DISTRICTS, 1951-1971*

REGIONAL DISTRICT	1951		1961		1971	
	% OF B.C. POP.	NUMBER	% OF B.C. POP.	NUMBER	% OF B.C. POP.	NUMBER
1. Stikine	.07	804	0.08	1,224	0.07	1,470
2. Peace River-Liard	1.26	14,625	1.92	31,352	2.01	43,996
3. Skeena-Queen Charlotte	1.14	13,295	1.08	17,592	1.02	22,299
4. Kitimat-Stikine	0.83	9,669	1.41	23,031	1.71	37,326
5. Bulkley-Nechlako	1.04	12,075	1.07	17,437	1.24	27,145
6. Fraser-Fort George	1.27	14,801	1.95	31,726	2.95	64,364
7. Central Coast	0.45	5,209	0.38	6,260	0.19	4,215
8. Cariboo	1.12	13,086	1.66	27,103	1.80	39,357
9. Thompson-Nicola	2.33	27,196	2.75	44,876	3.47	75,752
10. Columbia-Shuswap	1.26	14,669	1.23	20,067	1.40	30,641
11. Mount Waddington	0.73	8,523	0.56	9,131	0.48	10,408
12. Comox-Strathcona	1.78	20,721	1.90	30,876	2.17	47,345
13. Squamish-Lillooet	0.72	8,416	0.61	9,960	0.60	13,081
14. North Okanagan	1.80	20,955	1.58	25,694	1.56	34,039
15. Central Kootenay	2.86	33,375	2.54	41,349	2.05	44,791
16. East Kootenay	2.14	24,897	1.83	29,739	1.82	39,720
17. Powell River	0.93	10,822	0.87	14,099	0.85	18,536
18. Sunshine Coast	0.55	6,451	0.45	7,325	0.44	9,655
19. Dewdney-Alouette	1.75	20,430	1.83	29,835	1.84	40,096
20. Fraser-Cheam	2.43	28,320	2.33	38,016	2.11	46,097
21. Alberni-Clayoquot	1.52	17,681	1.59	25,921	1.45	31,747
22. Nanaimo	2.07	24,099	2.03	33,076	2.20	48,006
23. Greater Vancouver	48.27	562,462	48.54	790,741	47.07	1,028,334
24. Central Fraser Valley	2.38	27,706	2.31	37,601	2.66	58,085
25. Cowichan Valley	2.11	24,535	1.89	30,749	1.78	38,988
26. Capital	10.43	121,546	9.94	161,947	-9.37	204,803
27. Okanagan-Similkameen	2.44	28,481	2.06	33,486	1.96	42,752
28. Central Okanagan	1.82	21,265	1.69	27,460	2.30	50,177
29. Kootenay Boundary	2.50	29,096	1.93	31,409	1.44	31,396
British Columbia	100.00	1,165,210	100.00	1,629,082	100.00	2,184,621

* Census Division and Regional District Boundaries are identical.

Source: Statistics Canada, Census of Canada.

TABLE 5 (continued)

REGIONAL DISTRICT	1951-1961			1961-1971		
	TOTAL CHANGE	% CHANGE	% OF B.C. INCREASE	TOTAL CHANGE	% CHANGE	% OF B.C. INCREASE
1. Stikine	420	52.2	0.09	246	20.1	0.04
2. Peace River-Liard	16,727	114.4	3.61	12,644	40.3	2.28
3. Skeena-Queen Charlotte	4,297	32.3	0.93	4,707	26.8	0.85
4. Kitimat-Stikine	13,362	138.2	2.88	14,295	62.1	2.57
5. Bulkley-Nechlako	5,362	44.4	1.16	9,708	55.7	1.75
6. Fraser-Fort George	16,925	114.4	3.65	32,638	102.9	5.88
7. Central Coast	1,051	20.2	0.23	-2,045	-32.7	-0.37
8. Cariboo	14,017	107.1	3.02	12,254	45.2	2.21
9. Thompson-Nicola	17,680	65.0	3.81	30,876	68.8	5.56
10. Columbia-Shuswap	5,398	36.8	1.16	10,574	52.7	1.90
11. Mount Waddington	608	7.1	0.13	1,277	14.0	.23
12. Comox-Strathcona	10,155	49.0	2.19	16,469	53.3	2.96
13. Squamish-Lillooet	1,544	18.3	0.33	3,121	31.3	.56
14. North Okanagan	4,739	22.6	1.02	8,345	32.5	1.50
15. Central Kootenay	7,974	23.9	1.72	3,442	8.3	.62
16. East Kootenay	4,842	19.4	1.04	9,981	33.6	1.80
17. Powell River	3,277	30.3	0.71	4,437	31.5	0.80
18. Sunshine Coast	874	13.5	0.19	2,330	31.8	0.42
19. Dewdney-Alouette	9,405	46.0	2.03	10,261	34.4	1.85
20. Fraser-Cheam	9,696	34.2	2.09	8,081	21.3	1.45
21. Alberni-Clayoquot	8,240	46.6	1.78	5,826	22.5	1.05
22. Nanaimo	8,977	37.3	1.94	14,930	45.1	2.69
23. Greater Vancouver	228,279	40.6	49.21	237,593	30.0	42.77
24. Central Fraser Valley	9,895	35.7	2.13	20,484	54.5	3.69
25. Cowichan Valley	6,214	25.3	1.34	8,239	26.8	1.48
26. Capital	40,401	33.2	8.71	42,856	26.5	7.71
27. Okanagan-Similkameen	5,005	17.6	1.08	9,266	27.7	1.67
28. Central Okanagan	6,195	29.1	1.34	22,717	82.7	4.09
29. Kootenay Boundary	2,313	7.9	0.50	-13	-	-
British Columbia	463,872	39.8	100.00	555,539	34.1	100.00

gional planners in the Lower Mainland is the provision of high-quality urban lifestyles in the face of increasing pressures on land resources. Following is a discussion of planning in the Lower Mainland in general and in the Greater Vancouver Regional District (GVRD) in particular. The plan for the GVRD is called the Liveable Region 1976/1986.

LAND USE PLANNING IN THE LOWER MAINLAND¹⁴

The first comprehensive plan for the Lower Mainland was adopted as an official regional plan by the Lower Mainland Regional Planning Board (LMRPB) in August, 1966. The LMRPB was abolished by the provincial government in 1969 and replaced by four regional districts; namely, Greater Vancouver, Dewdney-Alouette, Fraser-Cheam, and Central Fraser Valley. Today, most of the land use planning decisions in the area from Vancouver to Hope are made by the four regional district boards and 26 municipal councils.

The 1966 official regional plan was intended to designate the main urban areas for long-range population growth in the Lower Mainland, while preserving farmland and reserving areas for regional park and industrial development purposes. It is still in force and any changes to it must be approved by the appropriate Regional District Board. A Lower Mainland Review Panel, comprising representatives from each of the four Regional Development Boards, reviews and makes recommendations on every proposed planning amendment, but the Panel's decisions are advisory only.

THE GREATER VANCOUVER REGIONAL DISTRICT (GVRD)¹⁵

The GVRD acquired its planning function in 1969 when the LMRPB was dissolved. It is the largest, in terms of population, of the 28 incorporated regional

¹⁴Community Planning Association of Canada, B.C. Division and the Real Estate Board of Greater Vancouver, The Green Urban Land Policy (GULP), 28 pp., and Bernard, Léveillé and Lord, Profile: Vancouver.

¹⁵GVRD, Greater Vancouver Regional District 1975, 15 pp.

districts in B.C. with 1.1 million people, and covers an area of 1,005 sq. mi. (2,613 sq. km.)

The GVRD is a public body composed of elected representatives from 17 communities in metropolitan Vancouver - six cities, seven district municipalities, one village, and three electoral areas. The member communities are:

- City of Vancouver
- City of New Westminster
- City of White Rock
- City of Port Coquitlam
- City of North Vancouver
- City of Port Moody
- District of Burnaby
- District of Coquitlam
- District of North Vancouver
- District of Surrey
- District of Richmond
- District of Delta
- District of West Vancouver
- Village of Lions Bay
- Electoral Area "A" (University Endowment Lands)
- Electoral Area "B" (loco-Buntzen)
- Electoral Area "C" (Bowen Island)

The GVRD is composed of representatives of the above-listed communities. Each community has one vote for every 20,000 population. Those with less than 20,000 have one vote. Under provincial legislation, candidates in the 14 municipalities must be elected to their local council in order to sit on the GVRD Board. Representatives from the three electoral areas are elected directly by the voters.

The GVRD is responsible for regional planning, regional hospital planning and capital financing, regional parks, water supply and distribution, solid waste

disposal, air pollution control, sewage disposal, housing, labour relations, and mosquito control. It also assumes a role in transportation planning and in noise pollution control.

The GVRD and the Liveable Region Program

The GVRD has a Department of Planning and a Technical Planning Committee.

The Department of Planning has two main functions;

- responsibility for the official regional plans; and the
- organization of all planning with the GVRD.

Following is an outline of the Department of Planning's contribution to land use planning, the function of the Technical Planning Committee (TPC), and the Liveable Region Program.

The official regional plan has four classifications of land use; namely, urban, rural, industrial, and recreational. Each classification is subdivided into categories that permit multiple land use in less urbanized areas but have little effect in the most urbanized and developed areas. In these latter areas, land use control is most efficiently accomplished through municipal zoning by-laws. The official regional plan applies to Greater Vancouver and the entire Lower Mainland. Amendments to the plan require a two-thirds majority of the GVRD board for approval. Applications for amendments usually come from municipal councils who must first endorse the proposed change. Amendments may also be initiated by the regional board or the provincial government. The Lower Mainland Review Panel, which is composed of the Technical Planning Committee and representatives from all four regional districts in the Lower Mainland, must advise on any regional plan amendment before the GVRD Board can implement it. A major updating of the policies in the official regional plan, which was adopted in 1966, has been proposed by the Review Panel.

The TPC considers amendment proposals to the official regional plan and col-

districts in B.C. with 1.1 million people, and covers an area of 1,005 sq. mi. (2,613 sq. km.)

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The TPC considers amendment proposals to the official regional plan and col-

laborates on an ad hoc basis in elaboration of the Liveable Region Program.

The Liveable Region Program evolved from sector studies conducted by the GVRD Department of Planning. These sectors were considered critical to the development of the Region and included public transit, public housing, flood dangers, and information systems. From these studies, it became evident that in an area where growth rates are high (the population doubles every 25 years) and where land suitable for urban uses is severely constrained, policies must be implemented to ensure that the Region remains liveable. Thus, in 1971, the GVRD Board established the Liveable Region Program to establish a means of managing growth and change in order to maintain and enhance "liveability" in the Region. In late 1972, the Board endorsed 30 policy statements, which dealt with population growth and urban expansion, conservation and recreation, residential settlement, pollution, transportation, and government.

Since the GVRD is the region of B.C. with the largest annual population growth, land pressures exist for the multiple planning of urban, rural, industrial, and recreational development. Following are brief discussions of ALRs, parkland housing, and transportation programs of the GVRD.

Under the Land Commission Act, regional districts recommend to the Land Commission those lands that should be placed in ALRs. The GVRD proposed that 77,000 ac. (30,800 ha.) be placed in ALRs. This proposal was approved by the Lands Commission in 1974.

A more detailed discussion of agriculture in the Lower Mainland is contained in chapter V of this report.

The GVRD owns 3,500 ac. (1,400 ha.) of regional parkland at nine different sites. These sites represent 0.6 per cent of the land area of the Lower Fraser Valley. The regional parks system includes beaches, fishing sand bars, stream fishing sites, picnic sites, and hiking trails. The Lower Fraser Valley is a narrow corridor bounded by mountain slopes, the U.S. border, and the sea, and contains

about 900 sq. mi. (2,340 sq. km.) of land, of which 640 sq. mi. (1,664 sq. km.) lie within 35 mi. (56 km.) of Vancouver's central business district. In comparison, there are over 1,500 sq. mi. (3,900 sq. km.) and 3,000 sq. mi. (7,800 sq. km.) of land within 35 mi. (56 km.) of Toronto and Montréal, respectively.

To provide alternatives to high-rise and single-family homes, the GVRD is conducting a compact housing program. The aim of this program is to design and produce compact residential accommodation ranging from single-family homes on small lots to attached cluster housing. The program is co-sponsored by the GVRD housing department, the provincial government, and the housing industry. The Greater Vancouver Housing Corporation was established under amendments to the National Housing Act, which permits municipal non-profit housing corporations. Housing for B.C. is discussed later in this chapter under the Department of Housing.

Future transportation policies will effect the decentralization of jobs, the creation of regional town centres, the provision of recreation facilities, and a more equal distribution of population throughout the region. In the Liveable Region Program, proposed transportation improvements would reinforce desired growth patterns. The GVRD released a position paper on the proposed third runway at the Vancouver International Airport. A final decision is still pending as to whether this runway will be constructed.

PROVINCIAL GOVERNMENT DEPARTMENTS AND LEGISLATION RELATED TO URBAN SETTLEMENTS

The provincial departments of Municipal Affairs; Housing; the Lands Service of Environment; and Highways have programs and policies related to urban settlements in B.C.

The Department of Municipal Affairs, under the Municipal Act, is responsible for community and regional planning.

The programs and enabling legislation of the Department of Housing are outlined. Housing is an important land use issue in B.C. Housing funds and construction programs are discussed. The B.C. government's construction firm of Dunhill Development Corporation Limited has programs to help provide residential accommodation. Federal-provincial housing projects are identified.

The Lands Service of the Department of Environment manages B.C.'s Crown lands. The Lot Development Unit of the Lands Service is responsible for initiating subdivision projects and developing home sites on Crown land. Crown land grants are made to the B.C. Housing Management Commission.

The Department of Highways has the powers of approval related to subdivisions and transportation networks.

DEPARTMENT OF MUNICIPAL AFFAIRS (BCDMA)

The regional planning process and the division of B.C. into regional districts were discussed previously in this chapter. The BCDMA is responsible for the following Acts;

- Municipal Act,
- Municipalities Enabling and Validating Act,
- Resort Municipality of Whistler Act,
- Sewage Facilities Assistance Act,
- Islands Trust Act,
- Municipal Finance Authority of British Columbia Act,
- Mobile Home Tax Act, and the
- Provincial Rapid Transit Act.

The Planning Services Division of the BCDMA supports and advances the community and regional planning process as it relates to local government and to provincial planning responsibilities. This role is part of the BCDMA's re-

sponsibility to link the provincial government and the municipalities and regional districts throughout B.C.

The major functions of this division's program are:

- to co-ordinate provincial policies and programs as they affect urban and rural areas;
- to investigate the need for provincial policies respecting urban settlement patterns;
- to identify the implications of local planning issues for provincial interests;
- to assist regional districts and municipalities in meeting special planning needs, including the establishment of local planning programs; and
- to maintain a continuing review of the planning and development tools provided for under the Municipal Act and companion legislation.¹⁶

The division has three main programs:

- urban plans co-ordination, which includes liaison and co-ordination activities between Vancouver and Victoria as well as other key urban centres;
- regional plans co-ordination, which involves liaison and co-ordination activities between regional districts and municipalities outside Greater Vancouver and Victoria; and
- policy and program planning related to research activities, inter-departmental liaison and co-ordination, and data collection and mapping services.

Islands Trust Act (ITA)

This Act was assented to on June 5, 1974, and applies to the Gulf Islands, which are situated between mainland B.C. and Vancouver Island. All of the islands from the southern Gulf of Georgia to Denman, Hornby and Lasqueti on the north and Howe Sound on the east are included. The ITA formally recognizes the special nature and character of the islands.

¹⁶BCDMA, Draft 1975 Annual Report, Planning Services Division, 6 pp.

The Islands Trust consists of three general trustees who are appointed by the Lieutenant-Governor in Council for a term of two years; reappointments are possible. Two local trustees are elected from each designated island. The object of the trust is to preserve and protect, in co-operation with the Gulf Islands' municipalities and the B.C. government, the amenities and environment of the trust area for the benefit of the trust area residents and all residents of B.C.

Section 6 of the ITA deals with land use in the trust area. The Lieutenant-Governor in Council under the ITA, or the Municipal Act, and the appropriate local trust committee must approve any community plan, regional plan, zoning by-law, or land use contract regulating the use or subdivision of land within the trust area. The appropriate local trust committee must approve subdivision applications pursuant to the Land Registry Act, Real Estate Act, or Strata Titles Act.

Additional details concerning the Islands Trust are contained in Trust publications, which are listed in the selected bibliography of this report.

DEPARTMENT OF HOUSING (BCDHg)

The BCDHg administers the following acts and funds;

- Elderly Citizens' Housing Aid Act,
- Housing Act,
- Housing Fund,
- Leasehold and Conversion Mortgage Loan Act,
- Provincial Home Acquisition Act,
- Provincial Home Acquisition Fund,
- Provincial Homeowner Grant Act,
- Renters Resource Act,
- School Tax Removal and Resource Grant Fund,
- Strata Titles Act.

On November 15, 1973, Canada's first provincial department of housing was established by proclamation of the B.C. Department of Housing Act. The functions of the DHg are "to supervise, acquire, develop, maintain, improve, and dispose of housing in the province" and to perform other duties assigned by the Cabinet. The existing programs of the BCDHg have been consolidated from the provincial departments of Municipal Affairs, Provincial Secretary, and Finance. District offices will be established in Cranbrook, Kelowna, Prince George, Vancouver, and Victoria.

A policy of the BCDHg is to quickly implement new and expanding housing programs. To aid in expediting such programs, Dunhill Development Corporation Limited was acquired by the DHg on January 10, 1974. Dunhill, on behalf of the BCDHg, investigates and acquires land in urban areas where housing needs are greatest. Where possible, land acquisitions are made by Dunhill, in conjunction with a municipality, so as to assist in the implementation of a municipal development program or to benefit from land-serving funds made available under the Municipal Act. Dunhill is described in more detail later in this chapter.

The B.C. Housing Management Commission (HMC), the agency that manages provincial government-owned rental units, was given a new mandate under the BCDHg. The new foci of the HMC include the implementation of a rent supplement program proposed by the BCDHg and shared with the federal government on a 50-50 basis, plus an increasing emphasis on improved communication with tenants and increased maintenance capability. As of December 31, 1974, the HMC was responsible for 4,215 federal-provincial and 601 provincial rental units, comprising family and senior citizen dwelling units.¹⁷ Municipal councils can apply for such housing by submitting a resolution to the Minister of Housing.

Money for Housing

The BCDHg budget increased from \$13.4 million in 1973-1974 to \$115.6 million

¹⁷ Department of Housing, First Annual Report, January 1, 1975, p. 9.

in 1974-1975. The Housing Fund, which replaced the Housing Incentive Fund, was established for land assembly and servicing; neighbourhood improvement; and co-operative and family rental. As of December 31, 1974, the amount of land assembled was approximately 5,510 ac. (2,204 ha.). In 1973-1974, the Housing Fund was \$20 million; it was increased to \$50 million in 1974-1975.

The \$220 million Provincial Home Acquisition Fund was increased by \$40 million in 1974. This fund helps provide first leasehold mortgages, home conversion loans, home acquisition grants, and second mortgage loans.

The \$15 million School Tax Removal and Resource Grant Fund was established in 1974 as an initial step by the B.C. government to remove school taxes from owner-occupied residences and family farms. The fund provides a minimum of \$30, a maximum of \$40, to all homeowners.

To encourage municipalities to support senior citizens' housing, the Municipal Act was amended to remove municipal tax exemptions for new developments, effective April 1, 1974. Thus, municipalities can now collect real property taxes on senior citizens' developments. In 1974, \$10 million, a doubling of the previous year's budget, was allocated for senior citizens' self-contained and hostel accommodation, plus \$2 million for personal and intermediate care facilities.

In 1973-1974, the province allocated \$72.2 million for family and senior citizen rental housing and land assembly. This was more than triple the amount in any previous year and represented about two-thirds of the total funds allocated in the entire previous decade.

Dunhill Development Corporation Limited¹⁸

As previously stated, this company was purchased by the B.C. government on January 10, 1974. Following is a discussion of the housing construction prob-

¹⁸Dunhill Development Corporation Limited, 74 Dunhill Annual Report, 28 pp., and 75 Dunhill Annual Report, 24 pp.

lems that faced Dunhill in 1974 and the solutions adopted to help remedy these problems.

Three main factors influence the housing market: population pressures, costs, and construction limitations.

The baby boom of the 1950s created the school shortage of the 1960s, and is contributing to the housing shortage of the 1970s. Pressures on the B.C. housing market stem from the flow of people to urban areas and a trend of interprovincial and foreign migration to B.C. It is estimated by B.C. government officials that 20,000 people migrate to the Lower Mainland each year.

The cost of housing is rising because of increased demand plus skyrocketing component costs. In 1964, the cost of land represented 20 per cent of the cost of a home; in 1974, it represented over 50 per cent. High land costs affect both the individual buyer and the small home builder, who constructs over 90 per cent of the single-family detached dwellings in B.C. Marginal building operations are forced out of business but those remaining, like the individual buyer, face exorbitant interest rates plus shortages of mortgage money.

The Multiple Listing Service reports that the average price for a home in Metropolitan Vancouver has risen from \$12,518 in 1962 to \$52,850 in August, 1974, an increase of over 400 per cent.¹⁹ The income required for a \$50,000 mortgage at 10 per cent per annum, with a 20 per cent down payment, is about \$1,500 per month. Only 2 per cent of the wage earners of B.C. now qualify for the "average" house on today's market. The Real Estate Board of Greater Vancouver estimates a present shortage of 20,000 dwelling units in the GVRD. This shortage is increasing at the rate of 5,000 per year.

The shortage of serviced land in B.C. is a principal underlying cause of inflated land prices. A description follows of the programs now being implemented by Dunhill to increase the supply of serviced land. These programs are land lease, Proposal Call Housing Program (PCHP), and land development. The aim of these programs is to stabilize land prices.

¹⁹ Ibid., p. 5.

The provincial land lease program was introduced in 1974. Land has been assembled in 50 different locations. Servicing has been completed and Dunhill is marketing these lots to individuals and buyers. Under the Leasehold and Conversion Loan Act, these lots are leased at below-market value for the construction of moderately-priced homes. There are two leasing schemes for serviced lots. A purchaser may pay the provincial government's price, not necessarily the market value, in return for a 99-year lease, or he may pay a low-interest rate on the lot for 60 years. The interest rate changes only if the lot is sold, whereby a new lease is assigned to the new owner. As a further aid to average income people, the B.C. government offers, under the Land Lease Program, leasehold mortgage loans up to a maximum of \$30,000, repayable in 35 years and below market rates.

Through the Proposal Call Housing Program, Dunhill asks builders to submit proposals for ground-oriented, rather than high-rise, family accommodation to be constructed on land controlled by the builders. Dunhill aids builders with interim financing and in obtaining municipal approval, where necessary. Upon completion, Dunhill purchases the dwellings, which are rented by the B.C. Housing Commission.

Land development is the third program used to help solve B.C.'s housing shortages. Land is acquired for co-operative housing, senior citizens' housing, rental projects, general land banking, and the Land Lease Program. In 1975, 61 parcels of land containing 507 ac. (203 ha.) were purchased by Dunhill. Once land has been acquired by Dunhill, preliminary planning and engineering studies are prepared and negotiations begin with municipalities for rezoning and/or land use contracts. Following municipal approval, Dunhill prepares detailed land use plans, including housing densities. Small subdivisions, mobile home parks, and new towns in urban centres are planned by this method. Because of rising land costs and limited quantities of serviced land, the zero-lot-line concept has been adopted by Dunhill. This concept permits a home to be built on either side of a lot, at the back, or directly at the front. Thus homes are staggered, clustered, and grouped to avoid wastage of

space and permit a more aesthetically-pleasing use of land.

Provincial-Federal Projects

BCDHg projects, such as land acquisition and servicing, new subdivisions, family rental units, and senior citizens' housing involve CMHC funding under the National Housing Act. Provincial programs, such as remote area housing, neighbourhood improvement, and joint management of rental units through the B.C. Housing Management Commission are partially financed by CMHC.

DEPARTMENT OF ENVIRONMENT (BCDOE)

The Lands Service of BCDOE manages the Crown land resources of B.C. On November 25, 1974, the Minister of Lands, Forests, and Water Resources (this department name was dissolved in December, 1975) announced a major program to develop lots for rural, semi-rural, and suburban living. The goal of the department is to develop 5,000 lots in 1975 to help meet the demand for building sites in B.C. As outlined in chapter III, B.C. has established seven resource management regions. Regional managers will work with the regional officers of other resource departments to select areas with minimal environmental and resource conflicts for the development of residential lots, either individual or clustered subdivision sites. The Lot Development Unit of the Lands Service reviews potential residential lot sites with regional Lands managers and then designs and develops, as well as services, the sites to be marketed.

Beginning in 1974, grants of Crown land to municipalities, regional districts, and school boards for municipal and school purposes were established on a leasehold rather than free grant basis. However, free Crown grants continue to be made to the B.C. Housing Management Commission, where such land is required for the Commission's public housing development program. Up to December 31, 1974, the Lands Service has turned over 251 ac. (100 ha.) of raw land and 285 surveyed lots to the HMC.²⁰

²⁰ Department of LFWR, Report of the Lands Service to the Year Ended December 31, 1974, p. 5.

DEPARTMENT OF HIGHWAYS (BCDH)

With respect to subdivisions, the department has the approving authority in all non-municipal areas that adjoin highway rights-of-way except for the Gulf Islands that lie in the Capital Regional District, where the Regional District approves jointly with the BCDH. The interests of the BCDH are limited to the road system. The BCDH also has a large role in transportation planning and works in co-operation with the Bureau of Transit, municipalities, and regional districts. Much planning at the strategic level is done jointly by affected agencies, under the auspices of the appropriate regional district.

V

AGRICULTURE

An excellent review of the B.C. Land Commission Act was prepared for the Canadian Council on Urban and Regional Research by David Baxter.²¹ Baxter identified and discussed four concerns that influenced the B.C. government in the establishment of the agricultural land preservation program; namely, food production, land availability, the effects of urban development on farming and farmlands, and open space and greenbelts. A discussion of each of these concerns follows. The sequence of events leading to the assent of the Land Commission Act is outlined, and the objects and powers of the Act are identified.

The B.C. Land Commission was proclaimed on May 18, 1973, under Section 2 of the Land Commission Act. The major duties of the Commission are described; namely, to designate Agricultural Land Reserve (ALR) plans for each Regional District, to review applications for exclusion of land from ALRs, and to review applications for inclusion of land in an ALR. The Commission is also involved in purchasing land that is made available to young farm families under a career farm leasing program. This program is discussed. Finally, future activities of the Commission are outlined.

B.C. government departmental programs and policies related to agriculture are discussed and relevant legislation identified. Federal-provincial agricultural programs are discussed.

AGRICULTURAL LAND PRESERVATION - CONCERNS

FOOD PRODUCTION

B.C. is very dependent on the importation of food to meet local demands. Net

²¹Baxter, David, The British Columbia Land Commission Act - A Review, 27 pp.

food imports required to satisfy provincial food consumption rose from 3 per cent in 1946 to 29 per cent in 1955. Such imports have remained above the 1955 level for each subsequent year. B.C. is very vulnerable both to the availability of imported agricultural products and external, out-of-province food prices.

LAND AVAILABILITY

Tables 6 and 6A provide a comparison of farmland among the Canadian provinces in 1971. In terms of farmland as a percentage of the total provincial area, the figure for B.C. is 2.6 per cent, second lowest in Canada behind Newfoundland. For the acres of farmland per capita, B.C. ranks fifth among the provinces with a figure of 2.7 ac. (1 ha.) per person. Only 4 per cent, 8,827,316 ac. (3,530,926 ha.), of the province's land area of 220,682,880 ac. (88,273,152 ha.) is arable - 3 per cent of it is situated west of the Rocky mountains. CLI class one land suitable for agriculture totals only one-half of 1 per cent or 1,103,415 ac. (441,366 ha.). Land with a soil-climate combination suitable for growing grapes and tree fruits is one one-hundredth of 1 per cent or 22,068 ac. (8,827 ha.). However, B.C. produces 5 per cent of Canada's total value of agricultural products on less than 2 per cent of the country's farms, by area. These farms earn between 4 and 5 per cent of the cash receipts from farming operations in Canada.²²

Tables 7 and 7A provide statistics on the use of farmland in B.C. between 1921 and 1971, and in Canada in 1971.

Table 8 indicates that between 1921 and 1971 the area of agricultural land in B.C. has remained relatively constant. Land clearing in the past 20 years has offset the loss of farmland to other uses. Thus, the total acreage remains approximately constant. However, the loss of prime agricultural land by region, as estimated by B.C. Department of Agriculture soil scientists, has averaged 9,750 ac. (3,900 ha.) per annum between 1953 and 1973.²³ The figures for these losses are contained in table 9.

²²Ibid., p. 1.

²³Department of Agriculture, Bill 42, unpublished report, p. 1.

TABLE 6
FARMLAND IN CANADA, BY PROVINCE, 1971

	Total Land Area (x 10 ³ Acres)	Total Area: Farms (x 10 ³ Acres)	Farm Area Total Area	Total Population (x 10 ³)	Acres of Farmland Per Person	Value of Agricultural Products Sold (\$ x 1000)
Canada	2,278,552.3	169,668.6	7.4%	21,568.3	7.9	4,147,550.7
Newfoundland	91,833.6	62.7	0.1%	522.1	0.1	8,100.5
Prince Edward Island	1,399.0	774.6	55.4%	111.6	6.9	39,286.5
Nova Scotia	13,057.3	1,328.9	10.2%	789.0	1.7	50,222.2
New Brunswick	17,685.1	1,339.1	7.6%	634.6	2.1	46,886.2
Québec	355,521.9	10,801.1	3.0%	6,027.8	1.8	531,864.5
Ontario	266,702.7	15,963.1	6.0%	7,703.1	2.1	1,376,567.2
Manitoba	135,340.8	19,008.3	14.0%	988.2	19.2	338,059.6
Saskatchewan	140,878.1	65,056.9	46.2%	926.2	70.2	707,728.8
Alberta	157,710.7	49,506.3	31.4%	1,627.9	30.4	832,558.3
British Columbia	220,682.9	5,823.2	2.6%	2,184.6	2.7	209,598.0

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Source: 1971 Census of Canada; 96-701 Vol: IV - Part: 1

TABLE 6A

FARMLAND IN CANADA, BY PROVINCE, 1971

	Total Land Area (x 10 ³ Ha.)	Total Area: Farms (x 10 ³ Ha.)	Farm Area Total Area	Total Population (x 10 ³)	Ha. of Farmland Per Person	Value of Agricultural Products Sold (\$ x 1000)
Canada	911,420.9	67,867.4	7.4%	21,568.3	3.1	4,147,550.7
Newfoundland	36,733.4	25.1	0.1%	522.1	0.1	8,100.5
Prince Edward Island	559.6	309.8	55.4%	111.6	2.8	39,286.5
Nova Scotia	5,222.9	531.6	10.2%	789.0	0.7	50,222.2
New Brunswick	7,074.0	535.6	7.6%	634.6	0.8	46,886.2
Québec	142,208.8	4,320.4	3.0%	6,027.8	0.7	531,864.5
Ontario	106,681.1	6,385.2	6.0%	7,703.1	0.8	1,376,567.2
Manitoba	54,136.3	7,603.3	14.0%	988.2	7.7	338,059.6
Saskatchewan	56,351.2	26,022.8	46.2%	926.2	28.1	707,728.8
Alberta	63,084.3	19,802.5	31.4%	1,627.9	12.2	832,558.3
British Columbia	88,273.2	2,329.3	2.6%	2,184.6	1.1	209,598.0

Source: 1971 Census of Canada: 96-701 Vol: IV - Part: 1

TABLE 7

SOURCES: 1971 Census USE OF FARMLAND IN BRITISH COLUMBIA, 1921 TO 1971, AND IN CANADA, 1971

USE (ACRES)	1921	1931	1941	1951	1961	1971	1971 (CANADA)
Improved Land	544,464	704,956	893,085	1,147,776	1,303,263	1,755,247	108,148,877
Under Crops*	391,679	505,455	589,133	672,448	788,896	1,092,593	68,765,678
Pasture	87,829	115,326	171,614	343,195	354,830	397,864	10,225,464
Summer Fallow	52,023**	41,761	75,048	70,318	81,785	172,816	26,740,727
Other Improved Land	13,473	42,414	57,290	61,815	77,752	91,974	2,417,008
Unimproved Land	2,316,219	2,836,585	3,140,485	3,554,498	3,203,289	4,067,984	61,519,737
Woodland	1,076,028	1,212,129	1,013,732	1,156,549	752,990	844,257	11,514,171
Other Unimproved Land	1,240,101	1,624,456	2,126,753	2,397,949	2,450,299	3,223,727	50,005,566

(* 10, HA) (* 10, HA) Total Area (* 10, HA) Per Person (2 x 1000)
 (Total Area) (Total Area) Farm Area Population Farming Product 2010
 Total HA. of Agriculture
 Value of

*Includes field, vegetable, fruit, and nursery crop land.

**Includes idle land.

Total B.C. land area was revised in 1971 from 229,938,560 to 220,682,880 acres.

Sources: Statistics Canada, 1971 Census, Cat. No. 96-711, May 1973, Table 2.

Statistics Canada, 1971 Census, Cat. No. 96-701, Table 30.

TABLE 7A

USE OF FARMLAND IN BRITISH COLUMBIA, 1921 TO 1971, AND IN CANADA, 1971

<u>USE (HECTARES)</u>	1921	1931	1941	1951	1961	1971	1971 (CANADA)
Improved Land	217,786	281,982	357,234	459,110	521,305	702,099	43,259,551
Under Crops*	156,672	202,182	235,653	268,979	315,558	437,037	27,506,271
Pasture	35,132	46,130	68,646	137,278	141,932	159,146	4,090,186
Summer Fallow	20,809**	16,704	30,019	28,127	32,714	69,126	10,696,291
Other Improved Land	5,389	16,966	22,916	24,726	31,101	36,790	996,803
Unimproved Land	926,488	1,134,634	1,256,194	1,421,799	1,281,316	1,627,194	24,607,895
Woodland	430,411	484,852	405,493	462,620	301,196	337,703	4,605,668
Other Unimproved Land	496,040	649,782	850,701	959,180	980,120	1,289,491	20,002,226

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*Includes field, vegetable, fruit, and nursery crop land.

**Includes idle land.

Total B.C. land area was revised in 1971 from 91,975,424 to 88,273,152 hectares.

Sources: Statistics Canada, 1971 Census, Cat. No. 96-711, May 1973, Table 2.

Statistics Canada, 1971 Census, Cat. No. 96-701, Table 30.

TABLE 8

FARMLAND IN BRITISH COLUMBIA, 1921-1971

Date	Population Total	% on Farms	Number of Farms	Total Land Area (x10 ³ Ac.) (x10 ³ Ha.)		Farmland as % of Total Area	Average Farm Area (Ac.) (Ha.)		Improved Farmland as a % of Total Farm Area	Value of Agricultural Products Sold (\$ x 1000)
1921	524,582	--	21,973	229,938.6	91,975.4	1.2	130	52	19.0	--
1931	694,263	14.7	26,079	229,938.6	91,975.4	1.5	136	54	19.9	--
1941	817,861	12.5	26,394	229,938.6	91,975.4	1.8	153	61	22.1	25,021.1
1951	1,165,210	10.3	26,406	229,938.6	91,975.4	2.0	178	71	24.4	69,060.3
1961	1,629,082	5.2	19,934	229,938.6	91,975.4	2.0	226	90	28.9	104,090.0
1971	2,184,621	3.6	18,400	220,682.9	88,273.2	2.6	316	126	30.1	209,598.0

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In 1970, 40,958 ac. (16,383 ha.) of land were broken for agricultural use.

Source: 1971 Census of Canada, Cat. 96-711, Vol. IV - Part 1 and 3.

TABLE 9

LOSS OF PRIME AGRICULTURAL LAND BY REGION BETWEEN 1953 AND 1973

	<u>Total Acres</u>	<u>Acres per Annum</u>	<u>Total Hectares</u>	<u>Hectares Per Annum</u>
Prince George.....	26,000	1,300	10,400	520
Peace River.....	9,000	450	3,600	180
Kamloops.....	3,000	150	1,200	60
Cariboo.....	10,000	500	4,000	200
Okanagan.....	15,000	750	6,000	300
Vancouver Island.....	65,000	3,250	26,000	1,300
Fraser Valley.....	57,000	2,850	22,800	1,140
Kootenays.....	6,000	300	2,400	120
Miscellaneous.....	4,000	200	1,600	80
T O T A L	195,000	9,750	78,000	3,900

Table 10 provides 1971 regional district data for farmland distribution, new clearing, and value of agricultural products sold. The four regions with the greatest amount of new land cleared in 1970 are regions 2, 5, 8, and 6. These regions have three common features; namely, climate and soils well suited to extensive cultivation and grazing, small non-farm populations, and distance from major urban markets. Regions with high net losses of farmland have climate and soils well suited to intensive cultivation but contain most of the major urban centres. Farming in these regions occurs in valley bottoms, coastal plains, and river floodplains. The most productive agricultural lands in B.C. are located in the Lower Fraser Valley, adjacent to Metropolitan Vancouver. It has been estimated that 3,000 ac. (1,200 ha.) of farmland in the Lower Fraser Valley are lost each year to hobby farmers and country estates.²⁴ Also, approximately 20 per cent of the land suitable for agriculture in the Lower Fraser Valley and 30 per cent in the Okanagan Valley have been lost to non-agricultural uses. Table 10A provides data in hectares.

²⁴Baxter, op. cit., p. 2.

Regional Districts	1971	Pop. Total	% on Farms	Number of Farms	Total Land Area (Ac. x 1000)	Farmland as % of Total Area	Average Farm Area (Acres)	Improved Farmland as a % of Total Farm Area	Value of Agricultural Products Sold (\$ x 1000)	New Breaking 1970 (Acres)	% of Farmland Area Rented
1. Stikine		1,470			27,969.3						--
2. Peace River - Liard		43,996	14.6	1,745	48,199.7	3.46	956.5	45.6	10,194.2	17,849	34.4
3. Skeena - Queen Charlotte		22,299	0.3	17	3,988.5	0.07	154.6	21.7	9.5	41	24.8
4. Kitimat - Stikine		37,326	1.1	69	23,671.7	0.11	386.4	17.7	587.9	360	48.8
5. Bulkley - Nechako		27,145	1.9	650	17,815.7	2.67	730.9	24.1	3,885.8	6,510	44.5
6. Fraser - Fort George		64,364	3.4	441	12,650.9	1.23	352.4	30.5	1,870.6	2,427	23.3
7. Central Coast		4,215	1.4	19	6,208.6	0.04	139.5	31.2	25.3	5	23.9
8. Cariboo		39,357	8.8	762	17,091.8	4.66	1,044.6	16.9	7,687.3	5,827	28.0
9. Thompson - Nicola		75,752	5.5	678	11,093.1	11.16	1,826.0	14.0	11,386.8	2,107	43.2
10. Columbia - Shuswap		30,641	7.6	571	7,457.9	1.11	144.5	36.0	3,854.3	711	15.4
11. Mount Waddington		10,408	0.5	11	5,303.7	0.03	123.7	10.7	15.8	10	12.2
12. Comox - Strathcona		47,345	2.6	294	4,949.8	0.60	100.7	40.1	2,324.3	315	13.0
13. Squamish - Lillooet		13,081	3.0	85	4,080.0	1.01	484.1	18.0	716.5	127	2.5
14. North Okanagan		34,039	12.8	1,069	1,934.7	9.47	171.4	40.5	7,450.0	1,144	18.1
15. Central Kootenay		44,791	6.8	725	5,742.1	1.37	108.5	51.1	3,823.2	299	17.9
16. East Kootenay		39,720	3.5	342	7,004.2	2.72	556.7	18.3	2,347.5	1,210	35.6
17. Powell River		18,536	0.8	135	1,260.8	0.17	63.0	23.9	62.3	4	7.2

TABLE 10

FARMLAND IN BRITISH COLUMBIA, BY REGIONAL DISTRICT, 1971

FARMLAND IN BRITISH COLUMBIA, BY REGIONAL DISTRICT, 1971 (continued)

Regional Districts 1971	Population			Area						
	Total	% on Farms	Number of Farms	Total Land Area (ac. x 1000)	Farmland As % of Total Area	Average Farm Area (Acres)	Improved Farm-land as a % of Total Farm Area	Value of Agricultural Products Sold (\$ x 1000)	New Breaking 1970 (Acres)	% of Farmland Area Rented
18. Sunshine Coast	9,655	1.1	22	958.7	0.07	32.7	36.7	15.5	34	4.0
19. Dewdney - Alouette*	40,096	8.3	773	779.5	4.97	50.1	59.1	9,653.7	199	20.7
20. Fraser - Cheam*	46,097	11.8	1,248	2,667.5	2.17	46.3	78.6	21,789.4	261	22.2
21. Alberni - Clayoquot	31,747	1.1	78	1,912.3	0.25	64.4	44.7	736.1	75	20.5
22. Nanaimo	48,006	2.4	286	504.3	4.02	70.8	47.7	2,087.9	205	18.8
23. Greater Vancouver*	1,028,334	0.8	1,783	533.1	11.13	33.3	84.8	32,845.6	297	31.1
24. Central Fraser Valley*	58,085	19.4	2,617	174.7	52.19	34.8	78.7	50,487.6	551	17.9
25. Cowichan Valley	38,988	4.6	423	835.2	3.40	67.1	50.8	4,625.0	162	12.7
26. Capital	204,803	1.4	683	572.8	7.06	59.2	39.8	7,344.6	93	25.6
27. Okanagan - Similkameen	42,752	14.8	1,623	2,632.3	10.87	176.4	19.8	11,498.6	389	52.0
28. Central Okanagan	50,177	8.8	1,071	736.0	14.14	97.2	38.7	10,136.3	157	32.5
29. Kootenay Boundary	31,396	3.9	285	1,953.9	5.97	409.2	21.9	2,023.3	209	19.0

*Regional Districts in the Lower Mainland.

Source: 1971 Census of Canada, Cat. 96-711 Vol: IV-Part 1 & 3

TABLE 10A

FARMLAND IN BRITISH COLUMBIA, BY REGIONAL DISTRICT, 1971

	Total Land Area (x 10 ³ Ha.)	Average Farm Area (Ha.)	New Breaking 1970 (Ha.)
1. Stikine	11,187.7	-	-
2. Peace River - Liard	19,279.9	382.6	7,140
3. Skeena - Queen Charlotte	1,595.4	61.8	16
4. Kitimat - Stikine	9,468.7	154.6	152
5. Bulkley - Nechlako	7,126.3	292.4	2,604
6. Fraser - Fort George	5,060.4	141.0	971
7. Central Coast	2,483.4	55.8	2
8. Cariboo	6,836.7	417.8	2,331
9. Thompson - Nicola	4,437.2	730.4	443
10. Columbia - Shuswap	2,983.2	57.8	284
11. Mount Waddington	2,121.5	49.5	4
12. Comox - Strathcona	1,980.0	40.3	126
13. Squamish - Lillooet	1,632.0	193.6	51
14. North Okanagan	773.9	68.6	458
15. Central Kootenay	2,296.8	43.4	120
16. East Kootenay	2,801.7	222.7	484
17. Powell River	504.3	25.2	2
18. Sunshine Coast	333.5	13.1	14
19. Dewdney - Alouette*	311.8	20.0	80
20. Fraser - Cheam*	1,067.0	18.5	104
21. Alberni - Clayoquot	764.9	25.8	30
22. Nanaimo	201.7	28.3	82
23. Greater Vancouver*	213.2	13.3	119
24. Central Fraser Valley*	60.9	13.9	220
25. Cowichan Valley	334.1	26.8	65
26. Capital	229.1	23.7	37
27. Okanagan - Similkameen	1,052.9	70.6	156
28. Central Okanagan	294.4	38.9	63
29. Kootenay Boundary	781.6	163.7	84

* Regional Districts in the Lower Mainland

Source: 1971 Census of Canada, Cat. 96-711 Vol: IV-Part 1 & 3

EFFECTS OF URBAN DEVELOPMENT ON FARMING AND FARMLANDS

In urbanizing areas, a high percentage of the farms are small acreage holdings. Table 10 indicates that the average farm area in the Lower Mainland ranges from a high of 50 ac. (20 ha.) to a low of 33 ac. (13 ha.). Such farms may be identified in one of three categories: full-time intensive cultivation; part-time marginal farms, that is, farmers either semi-retired or earning off-farm incomes; or residential holdings, hobby farms, and country estates. The second and third categories tend to be inefficient or non-productive. Since the acreage required for a viable farm is increasing, hobby farms eliminate productive farming operations as farmlands are subdivided into smaller units. The acreage price of hobby farmland is three to four times the value of land used for intensive farming. Thus, farmers are induced to subdivide their properties in order to realize greater monetary returns for their land.

Problems associated with increasing urban settlement and agricultural production include the fragmentation of farms by highway and power line right-of-ways, increased property taxes to pay for urban-oriented services, and a reluctance by farmers to make long-term investments to improve productivity. Urbanization increases farming costs, which usually cannot be met by farm incomes; thus, farmers are induced to sell their land for immediate or future urban use. However, a farmer will only realize a large monetary return for his land if his farm is in a path of urban development and if his property is rezoned.

OPEN SPACE AND GREENBELTS

The preservation of access to open space for urban residents is an additional reason for controlling the rate of conversion of agricultural land to urban uses. The preservation of greenbelt land under the Land Commission Act is described in chapter IV.

LAND COMMISSION ACT

BACKGROUND

Baxter's paper provides a description of the detailed sequence of events that led to the adoption of the Land Commission Act and the establishment of the Land Commission. Briefly, on August 30, 1972, the NDP party was elected to form the provincial government. Prior to this election, many B.C. residents voiced concern over the loss of farmland and other non-urban land to urban encroachment. Complaints were also made concerning the often disorderly and unplanned development patterns around urban centres. The new government sought a way to plan urban land uses in a more orderly manner and at the same time preserve the remaining farmland.

On December 21, 1972, the B.C. Cabinet passed the Environment and Land Use Act, Order-In-Council 4483/72, which deals with the farmland freeze. No farmland could be subdivided from that date until further orders or provision to the contrary. Land designated as agricultural for real property taxation included all farmland, plus all land deemed suitable for the cultivation of agricultural crops. Both "bona fide" farmers and speculative holders of agricultural land reacted adversely to the freeze. Many people predicted a decrease in farmland prices and thus a decrease in realized income. Concerns were also expressed as to the lack of definition of "land deemed suitable for crop cultivation" and the size of the minimum parcel of land that would be included in this designation.

On January 18, 1973, Environment and Land Use Act, Order-In-Council 157/73, was approved by the Cabinet. It clarified the intent and extent of the freeze. Farmland was defined as any two ac. (0.8 ha.) or greater parcel of land that was designated as either agricultural for the purposes of real property taxation or Classes 1, 2, 3, or 4 of the CLI agricultural soil capability classification. Land did not have to be used for agriculture; it had only to fit into one or both of these categories. Appeals to the Order could be made to the provincial Environment and Land Use Committee.

On February 22, 1973, the Minister of Agriculture introduced Bill 42 for first reading in the B.C. Legislature. This Bill would create a Provincial Land Commission among whose objectives would be the preservation of agricultural land. Amendments were made to the original version of Bill 42 and on April 16, 1973, the resulting Bill was passed and assented to in the Legislature.

OBJECTIVES OF THE ACT²⁵

There are four major and quite distinctive objectives of the Act. These objectives, as described in chapter IV, are the preservation of agricultural land, greenbelt land, landbank land, and parkland. Only for agricultural land is the Land Commission given any zoning or regulatory powers.

Interest in the objects and powers of the Land Commission Act has been expressed by land use planners in all provinces. These objects and powers are contained in appendix II as they apply to each of the four types of preserved land - agricultural, greenbelt, landbank, and park.

B.C. LAND COMMISSION²⁶

The Land Commission was officially established by the proclamation of Section 2 of the Land Commission Act on May 18, 1973. The Commission consists of five members plus support staff. As previously stated, Environment and Land Use Act, Orders-In-Council 4483/72 and 157/73, placed a moratorium on the subdivision and use of certain agricultural land for other than farm purposes. Order-In-Council 157/73 also provided an appeal mechanism to the Environment and Land Use Committee for people affected by the land freeze. On October 25, 1973, the responsibility for hearing appeals was transferred to the Land Commission. When Agricultural Land Reserve (ALR) plans, described in chapter III, are designated by the Commission for each regional planning district, the effect of the Orders-In-Council is terminated. Up to March 31, 1975, designations

²⁵ B.C. Land Commission, Annual Report, April 1, 1973 to March 31, 1974, p. 4.

²⁶ Ibid. and Annual Report, April 1, 1974 to March 31, 1975.

had been made for all districts, except East Kootenay and Mount Waddington. Table 11 shows the amount of land in ALRs for each regional district and the per cent of each regional district in ALRs.

MODIFICATIONS IN ALR BOUNDARIES

The ALR boundaries delineate areas in B.C. with a soil/climate potential for agriculture. Municipalities and regional districts can submit appeals to the Land Commission requesting adjustments in ALR boundaries. These appeals are made in order to accommodate urban development of a very specific nature, such as a housing subdivision, or as a consequence of a newly-designed community plan, where suitable areas are allocated both for farmland preservation plus residential, commercial, and industrial growth. The Land Commission works in co-operation with Regional District Boards, Municipal Councils, and their respective staffs in investigating appeals to ALR Plans before final recommendations are sent to the Lieutenant-Governor in Council.

APPLICATIONS TO THE LAND COMMISSION UNDER THE LAND COMMISSION ACT FOR EXCLUSION OF LAND FROM ALRS²⁷

There are two sets of regulations under the Land Commission Act dealing with land exclusions from ALRs.

The first is B.C. Regulation 60/74, Order-In-Council 353/74, which covers:

- a) Procedures governing applications for exclusion from an ALR under three sections of the Act:

Section 9(1), which permits the Lieutenant-Governor in Council, upon application from the Land Commission, a regional district, a municipality or on his own, by order, to exclude land from a designated ALR.

Section 9(2), which allows an individual owner to apply to the Land Commission for exclusion (via the regional district).

²⁷ Personal contact with Environment and Land Use Secretariat.

TABLE 11

AMOUNT OF LAND IN DESIGNATED AGRICULTURAL LAND RESERVES, BY REGIONAL DISTRICT

	Approximate Area in ALR		% of Regional District in ALR
	Acres	Hectares	
1. Stikine	(not an incorporated regional district).		
2. Peace River-Liard	3,702,500	1,481,000	7.2
3. Skeena-Queen Charlotte	108,400	43,360	2.7
4. Kitimat-Stikine	158,512	63,405	0.6
5. Bulkley-Nechlako	735,120	294,048	3.8
6. Fraser-Fort George	863,600	345,440	6.7
7. Central Coast	11,000	4,400	0.2
8. Cariboo	2,286,000	914,400	11.2 (1)
9. Thompson-Nicola	1,404,700	561,880	12.4 (1)
10. Columbia-Shuswap	166,500	66,600	2.2
11. Mount Waddington	-	-	- (2)
12. Comox-Strathcona	108,000	43,200	2.1
13. Squamish-Lillooet	66,988	26,795	1.6
14. North Okanagan	173,600	69,440	8.9
15. Central Kootenay	176,700	70,680	3.0
16. East Kootenay	-	-	- (2)
17. Powell River	34,860	13,944	2.6
18. Sunshine Coast	15,500	6,200	1.6
19. Dewdney-Alouette	58,700	23,480	8.2
20. Fraser-Cheam	90,800	36,320	3.3
21. Alberni-Clayoquot	19,600	7,840	1.1
22. Nanaimo	52,000	20,800	10.2
23. Greater Vancouver	80,400	32,160	12.5
24. Central Fraser Valley	136,700	54,680	75.6
25. Cowichan Valley	54,300	21,720	6.2
26. Capital	48,400	19,360	8.1
27. Okanagan-Similkameen	213,600	85,440	7.8
28. Central Okanagan	81,700	32,680	11.1 (1)
29. Kootenay Boundary	136,000	54,400	6.6 (1)

(1) Includes substantial areas of range land (classes 5 and 6 CLI).

(2) Not yet calculated.

Source: B.C. Land Commission, Annual Report April 1, 1974 to March 31, 1975, Schedule "B".

Section 9(7), which allows a person who is dissatisfied with the decision of the Land Commission, under 9(2), to appeal that decision to the ELUC provided he is granted a certified copy of authorization to appeal from the municipality or regional district and a certificate of leave to appeal signed by two members of the Land Commission.

- b) Procedures for making application to exempt the use of land under Section 11(4) of the Act.
- c) An amendment to this set of regulations covering the procedures for the inclusion of land in the ALR.

A second amendment to this set of regulations is now being prepared to cover anomalies that have become apparent in using the regulations.

The second is B.C. Regulation 93/75, Order-In-Council 420/75, which covers subdivision and land use within an ALR and defines:

- a) situations in which subdivisions of land within an ALR are allowable without referral to the Land Commission;
- b) procedures by which a person may apply for authorization from the Commission to subdivide, provided the subdivision carries out the intent of the Act; and
- c) conditional uses which may be permitted by the Commission if, in the opinion of the Commission, the proposed use and manner of development do not materially reduce the future agricultural potential of the land or are in the public interest. This section also outlines the information required to apply for such authorization.

Prior to the designation of the reserves, the first ALRs were established in the Sunshine Coast Regional District, April 3, 1974. There were 2,557 appeals to the Orders-In-Council initiated, of which 2,516 were actually received and processed; of these, 1,460 were allowed (104 with release, 489 without release, 147 with partial release, remainder undefined); 210 were denied outright; 494 were denied pending the establishment of the reserves (to be automatically reviewed after designation); 35 were given partial allowance and partial denial;

190 were withdrawn, cancelled or accepted by the approving officer without completion of the appeal; and some that were being processed simultaneously with the designation of the reserves were either notified of their position in relation to the designated reserve or were given a decision under the Land Commission Act.

Since the establishment of the reserves in April, 1974, and until May 8, 1975, there were 18 Section 9(1) applications (under the Act), 524 Section 9(2) applications, 2 Section 9(7) appeals, 518 Section 11(4) applications, and 19 conditional use applications.

APPLICATIONS TO INCLUDE LAND IN AN ALR

On July 19, 1974, B.C. Regulation 494/74, Order-In-Council 2412/74, was approved by the Lieutenant-Governor in Council whereby B.C. Regulation 60/74 previously discussed was amended by adding eight sections permitting applications to include land in ALRs. A landowner may apply to the regional district in which his land is situated to have such land designated as, or as part of, an ALR. The application fee is \$25. The regional district, where it considers it advisable, will hold a public hearing with respect to an application. The recommendations of the regional district, plus any additional information supplied by the municipality in which the land is situated, are sent to the Land Commission. If the Commission considers the application acceptable under the intent and purpose of the LC Act, it designates, after approval of the Lieutenant-Governor in Council, the land as, or as part of, an ALR. The appropriate applicant, municipality, regional district, and Registrar of Titles are notified by the Commission.

LAND ACQUISITION

The Land Commission has purchased 15 farms, orchards, or ranches. Fourteen of these purchases were made during the fiscal year 1974/75. These 15 acquisitions totalled 6,028 ac. (2,411 ha.) and cost \$4,374,400, including improvements.

A major reason for the purchase of farmland is to establish a small supply of viable farms that can be made available to young farm families. The average age of B.C. farmers has risen to over 50 years recently because of the high cost of land and the great expense of establishing most agricultural operations. Thus, the major reason for the purchase of agricultural land by the Land Commission is to stabilize B.C. farming by reducing the number of farm families leaving the industry.

The career farm leasing program established by the Commission permits young farm families to sign a long-term lease with special provisions. Such leases provide a sense of ownership just short of outright title. Thus, farm families are given the opportunity to purchase the present improvements situated on the leased land and to own any other improvements that they subsequently add to the property. When a farmer retires, these improvements may be sold to a succeeding farm family.

FUTURE ACTIVITIES OF THE LAND COMMISSION²⁸

The initial phase of the Commission's work will terminate with the designation of the final ALR in the Mount Waddington Regional District. Future activities will include:

- Completion of detailed adjustments in the ALRs. This will involve co-operation with municipalities, regional districts, and the provincial government in the co-ordination of community and regional plans with ALR plans.
- Administration and improvement of land use and subdivision regulations.
- Development of new approaches to land use and tenure problems, especially as related to agriculture.
- Research into solutions to urban development problems in order to make urban growth more compatible with farmland preservation.
- Identification of lands suitable for greenbelt, landbank, and park purposes under the Land Commission Act.

²⁸B.C. Land Commission, Annual Report 1974/75, op. cit., pp. 12 and 13.

PROVINCIAL GOVERNMENT DEPARTMENTS AND LEGISLATION RELATED TO AGRICULTURE

The Department of Agriculture, the Lands and Water Resources Services of the Department of Environment, and the Department of Forests have policies and programs related to agriculture.

DEPARTMENT OF AGRICULTURE (BCDA)

The major Acts administered by the BCDA are:

- Agricultural Credit Act,
- Agricultural Land Development Act,
- Agricultural Rehabilitation and Development (British Columbia) Act,
- British Columbia Crop Insurance Act,
- Department of Agriculture Act,
- Farm Income Assurance Act, and
- Farm Products Industry Improvement Act.

Programs and policies of the department are discussed under the General Services, Special Services, and Production and Marketing Services Divisions.

General Services Division

Agricultural Credit Branch

This branch was established in 1974 to administer the Agricultural Credit Act and the Agricultural Land Development Act (ALDA). The processing of applications under the Credit Act began on July 2, 1974.

Under the Agricultural Credit Program, assistance to farmers is provided in three ways. First, guaranteed loans are provided for applicants who are unable to meet the stipulations of a lending agency. Second, there is a partial reimbursement of the interest paid by an applicant on a farm loan. In 1974, farmers with provincially guaranteed farm loans were reimbursed to about 8½ per cent of the effective interest rate. Farm loans that were not

provincially guaranteed were reimbursed at about 8 per cent. Third, special credit assistance programs are offered either to alleviate a regional hardship, such as severe forage-crop losses, or to encourage the development of a commodity, such as an agricultural product diversification program. In 1974, over \$2 million in loan guarantees were made to 36 farm enterprises.

The ALDA replaces the Farmers' Land Clearing Assistance Act and is broader in scope. Financing, up to \$15,000 at 4 per cent interest, can be arranged for land clearing and preparation, irrigation and drainage systems, water supplies and well-drilling (maximum of \$2,000), where a development plan has been approved by the BCDA. Special provisions permit a farmer to act as his own contractor for fruit tree removal, purchasing and planting within the Interior Fruit Board area, and for deeded rangeland improvement. Those who qualify for ALDA are established farmers 65 years of age or younger and who at the time of application have:

- an existing income from the farm of not less than \$1,600 per year and the potential to contribute in a meaningful way to the agricultural industry;
- adequate farming resources to make effective use of land development work;
- a registered interest in the land or an Agricultural Lease Develop Purchase Agreement on Crown lands that has been renewed for the full lease period; and
- the approval and consent of the registered owner.

In 1974 under ALDA, 592 contracts valued at \$3.5 million were issued for clearing or improving 10,500 ac. (4,200 ha.) of land.

Eligibility for guaranteed loans depends on citizenship, income, equity, and age. A farm operator must be a Canadian citizen, landed immigrant or, under special circumstances, at the discretion of the Minister of Agriculture, a resident non-citizen. Having obtained a loan, a farmer must realize a gross annual income from farming of \$1,600. Farm operators with lower equities and under 35 years of age will be given preference to acquire loans in order to establish or improve their farming enterprises. At the time of application, a farm operator's age must be at least 19 and not exceed 65 years.

Crop Insurance Branch

This branch, a sales-oriented organization, administers four crop insurance programs. These programs cover the tree fruit and grape growers in the Okanagan Valley, berry growers in the Fraser Valley, and grain farmers in the Peace River District.

Farm Income Assurance Branch

This branch was formed in 1974 and administers the Farm Income Assurance Act. Programs exist for tree fruit, field tomato, dairy, and swine producers. Each commodity program is based on the insurance principle whereby the B.C. government and producers pay into a fund. When market returns fall below a calculated basic cost of production, indemnities are paid to producers. An aim of these programs is to stabilize product prices.

Farm Products Finance Branch

This branch was established in 1974 to administer the Farm Products Industry Improvement Act. The purpose of this Act is to encourage and assist in the development and expansion of B.C.'s agricultural industry. Seven projects involving about \$10 million in loan guarantees, direct loans, and share acquisitions have been approved by Orders-In-Council.

Property Management Branch

Formed in 1974, this branch was amalgamated with the Farms Branch. Its major responsibility is to select suitable lessees and to administer all agricultural land, farms, and orchards purchased by the B.C. Land Commission. Agricultural land acquired by other provincial government agencies are also managed by this branch. A close liaison with the Lands Commission facilitates the establishment of a co-ordinated management plan for all agricultural land.

Special Services Division

Agricultural Engineering Branch

An advisory service is provided to B.C. farmers and ranchers on the engineering aspects of agricultural production.

Farm drainage plans were completed for 2,460 ac. (984 ha.) in 1974. Under the \$174,000 ARDA Drainage Research Project, designed to improve farm drainage techniques and cost-benefit information, major construction and installation of equipment was completed at four Fraser Valley sites. Irrigation feasibility studies and irrigation instruction sessions are also carried out.

Soils Branch

Reconnaissance surveys are conducted to provide information for resource planning and management; 12,269,000 ac. (4,907,600 ha.) were surveyed in 1974. Capability for agriculture ratings were applied to 12,484,000 ac. (4,993,600 ha.) in 1974. Assistance is provided to the Land Commission in the production of ALR maps, the processing of appeals, and on-site inspections.

Demonstration of Applied Technology and Economics (DATE) Program

The DATE program was initiated in 1973 to stimulate B.C. Department of Agriculture staff-supervised projects aimed at increasing the incomes of B.C. farmers. Thirty-two projects were funded under the DATE program in 1974. Three examples of such projects are: increases in legume production in the Interior through sulphur applications; the installation of wind machines to control frost hazards in the Okanagan Valley; and experiments in the Fraser Valley on the use of alfalfa hay cubes, in an attempt to reduce the importation of hay from the U.S.A.

Youth Development Branch

This branch co-ordinates the Family Farm Vacation Program, introduced in

1974. Eighteen farms and ranches throughout B.C. hosted urban vacationers. The program received wide support from the public.

Production and Marketing Services Division

Agricultural Development and Extension Branch

The B.C. Department of Agriculture has 17 district offices throughout the province. Information is provided to farmers on such departmental programs as farm income assurance, agricultural credit, agricultural land development, ALRs, hay freight subsidy, and land use planning. Special projects range from community pasture development to planning assistance for emergency floods.

DEPARTMENT OF ENVIRONMENT

Lands Service

Over 90 per cent of B.C. is owned by the Crown. The Lands Service, under the 1970 Land Act, has jurisdiction for the disposition and administration of Crown land. This service also administers the Homestead Act.

Six general conditions apply to all B.C. Crown land.

- There is no free Crown land.
- There are no published lists of land available through the province.
- Persons 19 years of age and older are eligible to apply for land.
- Only Canadian citizens, within the meaning of the Canadian Citizenship Act, may acquire title to Crown land.
- Canadian citizens or landed immigrants may obtain a lease. A lease is issued to a landed immigrant subject to him becoming a Canadian citizen within one year from the date he becomes eligible for citizenship. Failure of the lessee to obtain Canadian citizenship within the allotted time renders the lease subject to cancellation.
- Corporations registered under the Companies Act of B.C. come under Canadian law and may also lease Crown land.

Following are descriptions of Lands Service policies related to agricultural and grazing leases.

Agricultural Leases

In 1962, the Lands Branch restricted the maximum area that could be held under agricultural lease by any one person to 1,280 ac. (512 ha.) and the minimum percentage of arable land at 50 per cent. A lease covers a term of three years, subject to renewal for a further period of up to 17 years. To qualify for renewal, the lessee must clear and cultivate a minimum of 10 per cent of the arable acreage within the first three years of the lease. The lease is subject to cancellation without renewal if the arable land is not improved.

A lease must be in effect for a minimum of three years before an assignment of that lease will be considered, and only then if the lessee has cleared and cultivated a minimum of 50 per cent of the arable acreage.

Annual rental is based on 5 per cent of the appraised value of the land for the first 10 years, subject to review and adjustment of rental for each successive five-year period. The minimum annual rental is \$100.

A lease-develop-purchase policy for agricultural leases was adopted in 1964 to curtail speculation, to ensure that Crown land was brought into production, and to encourage its development. The option-to-purchase may be exercised during the initial 10-year period of the lease and after the lessee has cleared and cultivated at least 80 per cent of the arable acreage. The lessee may purchase the land at its initially-appraised value plus the value of any Crown timber remaining on the leasehold at the time the option to purchase is exercised. There are additional fees for the certificate of purchase and Crown grant.

Crown grants are subject to certain conditions and reservations. Grants do not convey any right, title, or interest to minerals, coal, petroleum, natural gas, or other gases. Timber rights may also be reserved by the Crown.

For highly-specialized farming (for example, chicken ranches, truck gardens, orchards, or vineyards) or farming that may be practiced on land that is predominantly non-arable, leases may be granted for up to 40 ac. (16 ha.) of land of which 50 per cent may be arable.

Grazing Leases

Except in the case of renewal, grazing leases are only issued in those areas of B.C. where the Department of Forests does not issue grazing permits under the Grazing Act and Regulations, i.e. Vancouver and Prince Rupert Forest Districts, or upon recommendation of the Chief Forester or District Forester.

The term for new leases is five years. A lessee must fence the area, if the livestock is not controlled by natural boundaries or other means, and stock the area to capacity during the first three years. Annual rental is based on the carrying capacity of the land and ranges from 4 cents per acre for waste land to 50 cents per acre for wild hay meadows. The minimum annual rental is \$25.

A grazing lease applicant must supply details of the number of stock owned and details of his private land holdings at the time of application.

A grazing lease cannot be assigned during the initial three-year term. After the three-year period, an "assignment" will be considered to a Canadian citizen or company incorporated under the B.C. statutes, provided that the individual or company can prove bona fide use of the area for grazing. An assignment will only be approved if an entire ranch or economically-viable part of it is being assigned.

Water Resources Service

Under Section 4 of the Pollution Control Act, 1967, the Pollution Control Branch has established pollution control objectives for food-processing and

agriculturally-oriented industries.²⁹ The purpose of these objectives is to preserve the land, water, and air of B.C. at the highest possible pollution-free levels.

Department of Forests (BCDF)

There are 18 million ac. (7.2 million ha.) of range land in B.C. The majority of this land is administered by the BCDF under the Grazing Act. The remainder either falls under the jurisdiction of the Lands Service of BCDOE or is privately owned. In general, the B.C. government encourages grazing permits under the Grazing Act, rather than grazing leases under the Land Act, because it believes that the use of forage on Crown range can best be administered under the Grazing Act. Such permits are issued on the basis of the range carrying-capacity, the number of head of livestock, and the duration of the grazing period. Permits are issued through the BCDF district offices at Nelson, Kamloops, Prince George, and Williams Lake. If a district forester confirms in writing that a parcel of land is impractical to administer under permit, up to 1,280 ac. (512 ha.) of mainly non-arable, non-cultivable Crown land may be applied for as leased grazing land under the Land Act.

The Grazing Range Improvement Fund was established under Section 13 of the Grazing Act. The B.C. government contributes to the fund annually, and the figure for the 1973-74 fiscal year was \$254,000. In January, 1974, the Range Land Management Task Force was formed to make recommendations on the structure, staffing, and legislation for a revised range land management unit, within the Grazing Division, to deal with current problems, such as the multiple use of range land for forestry, animal grazing, wildlife, and recreation.

FEDERAL-PROVINCIAL PROGRAMS

Two such programs are discussed: ARDA III and the Small Farm Development Program.

²⁹ Department of Lands, Forests, and Water Resources, Pollution Control Objectives for Food-processing, Agriculturally Oriented and Other Miscellaneous Industries, 35 pp.

ARDA III, 1971-1975

This agreement was applicable to March 31, 1975, and was signed under the Agricultural and Rural Development Act (ARDA). The programs and projects under ARDA III remain in force until mutually terminated by the B.C. Department of Agriculture and Regional Economic Expansion Canada.

B.C. organizes, operates, and maintains each program or project unless otherwise agreed to by the Ministers of the B.C. Department of Agriculture and Regional Economic Expansion Canada. Under ARDA III, programs and projects are conducted for the more effective use and economic development of rural lands; for the development of income and employment opportunities in rural areas and for the improvement of standards of living in those areas; for the development and conservation of agricultural and other rural water supplies; and for soil improvement and conservation in rural areas.

Small Farm Development Program

The agreement initiating this program was signed November 21, 1972, between the Ministers of the B.C. Department of Agriculture and Agriculture Canada. Funding covers five years from the date of the agreement.

The objectives of the agreement are:

- to facilitate land transfers toward the development of economically-viable family farms; and
- to assist owner-operators of small farms to benefit from the equity in their farm holdings.

To accomplish these objectives, a Land Transfer Plan was established. Additional details may be found in publications listed in the Selected Bibliography of this report.

VI

FORESTRY

The Department of Forests (BCDF) carries the sole responsibility for administering Crown timber resources pursuant to the Forest Act. Forestry is the single most important primary industrial sector in the provincial economy and the BCDF has legislated jurisdiction, which affects over 50 per cent of the province's area.

The BCDF regulates Crown timber harvesting via sustained-yield principles, which are designed to prevent the long-term depletion of merchantable timber. B.C. has two forest tenure systems, Tree Farm Licences (TFLs) and Public Sustained Yield Units (PSYUs). All BCDF forest management programs are based on a detailed forest inventory mapping program, the resource overlay folio system, which is discussed in this chapter. These folios are the primary tool for resolving resource conflicts.

The forest tenure system of B.C. is very complex. Only in the PSYUs does the province have complete control of harvesting. In order to show how this complexity evolved over time, the history of forest tenures and the present forest tenure system are discussed in this chapter. The province has less control over TFLs and thus, such tenures are less amenable to manipulation within regional and local land use management systems.

Since January, 1974, a task force and a Royal Commission have been established. The Task Force on Crown Timber Disposal and the Royal Commission on Forest Resources are discussed.

The discussion of forestry in this chapter follows the following format:

- the history of forest tenures;
- the present tenure situation;
- the Task Force on Crown Timber Disposal;
- the Royal Commission on Forest Resources; and
- government agencies and legislation related to forestry.

HISTORY OF FOREST TENURES³⁰

The following discussion of the history of old tenures related to timber leases, timber licences, timber berths, pulp leases, and pulp licences is provided as background information upon which an appreciation can be gained of the present forest tenure situation in B.C. The first land disposals, land and all the timber on it, were made by the Crown colonies of Vancouver Island and Mainland B.C. in 1858 for 10 shillings per acre. This price was considered excessive and was reduced to 4 shillings and 2 pence in 1861, and changed to \$1.00 per acre in 1870.

The 1884 purchase price was \$2.50 per acre and timber assumed increased importance. From 1887, new landowners were obliged to obtain provincial government authorization to log their properties and to pay a Crown royalty on harvested timber. The importance of timber land was further recognized by the government in 1891 and more clearly defined in 1896, when the sale of such Crown land was prohibited. However, the law was loosely enforced and "timber lands" fell into private ownership until the Forest Service was created in 1912.

From 1912 until 1947, "logged-off and reforested lands" were not classified as "timber lands" and thus could still be purchased. Nevertheless, the recognition of the value of forest land to the Crown was growing and steps to retain control of such land were quite successful. Today, Crown-owned timber represents about 95 per cent, or 120,650,000 ac. (48,260,000 ha.) of the 127 million ac. (50,800,000 ha.) controlled by the Department of Forests.

TIMBER LEASES

Under the 1865 Land Ordinance, timber leases were granted to persons "cutting spars, timber or lumber" in return for "such rent, terms and provisions" as determined by the Governor. The major objective of these leases was to gain more revenue from the forests than would be possible through outright land sales.

³⁰ B.C. Forest Service, Forestalk, Spring 1974, "Appraised Timber Royalties Advocated by Task Force", pp. 6-9.

The terms of timber leases were changed frequently. The initial annual fee, 5 to 10 cents per acre, was raised to 50 cents in 1965, where it remains to-day. Royalties on cut timber from leases were introduced in 1888 and were set at 50 cents per thousand board feet. The last change in royalties occurred in 1968 when the rates were set at \$1.10 to \$5.10 per 100 cubic feet, depending on grade and species.

Initially, no time limit was set on tenancy. Leased lands would be returned to the Crown upon removal of the merchantable timber. However, in 1910 all existing leases were renewed for a 21-year period. In 1973, there were 95 timber leases covering 107,084 ac. (42,834 ha.). The oldest was issued in 1892 and none more recently than 1907.

TIMBER LICENCES

Timber licences were first issued under the Timber Act of 1884 and authorized holders to remove merchantable timber from Crown lands. Each licence was limited to 1,000 ac. (400 ha.) and covered a period of four years at an annual fee of \$10. The licences were limited to one person, were not transferrable, and had a primary purpose of raising revenue for the Crown.

The essential difference between timber licences and timber leases lay in the fact that the latter were designed to meet the needs of mill owners while the former were introduced for the benefit of independent loggers. In 1888, these timber licences acquired the name of "special timber licences", were issued for only one year, and were renewable. The annual fee was \$50. Royalties, first imposed in 1887, were 20 cents per thousand board feet plus 15 cents per tree cut.

In 1901, each licensee could have two timber licences but the area of each was reduced to 640 ac. (256 ha.), 1 sq. mi., and the fees were raised to \$100 each. Shortly afterward, annual fees rose to \$140 and the royalty to 50 cents per thousand board feet.

In 1905, the "special timber licences" were made transferrable and the limit was removed on the number that an individual could acquire. Soon 15,109 licences were in effect.

Issuance of these licences was suspended in 1907 and legislation pertaining to them remained unchanged until 1965 when annual renewal became subject to the approval of the Minister of Lands, Forests, and Water Resources. In 1973, 2,255 special timber licences were in effect and covered 1,140,334 ac. (456,134 ha.) of Crown land.

TIMBER BERTHS

Upon B.C.'s entrance into Confederation in 1871, one of the terms involved the construction by the Dominion of a railway connecting B.C. to the rest of Canada. In return, B.C. granted the Dominion a belt of land extending 20 mi. (32 km.) on each side of the proposed railway. Thus, the CPR was built and the land area within the belt totalled nearly 11 million ac. (4,400,000 ha.).

In 1930, the belt of land was returned to B.C., but a number of licences had been issued for timber-cutting rights within it. These tenures, called "timber berths", revert to the Crown upon completion of logging.

Timber berths were issued between 1883 and 1929 for a one-year term. Each berth was renewable upon payment of an annual rental and provided that there was sufficient merchantable timber to make it commercially valuable.

In 1973, 113 berths, covering 179,122 ac. (71,649 ac.), had not reverted to the Crown.

PULP LEASES

Pulp leases were made available between 1901 and 1903 to owners of pulp mills. These tenures were based on 1 sq. mi. (2.6 sq. km.) of forest land for each ton

of daily pulp capacity of the mill. They covered a period of 21 years and were renewable.

These leases were intended to stimulate pulp mill development and to provide pulp timber, which is of lower value than saw-timber. Thus, the rentals and royalties were initially less than for other tenures.

Pulp leases alienated 354,399 ac. (141,760 ha.). Few acres have reverted to the Crown because in 1973, 301,411 ac. (120,564 ha.) were held by lessees.

PULP LICENCES

The term "pulp licence" was applied to special timber licences, which were converted between 1919 and 1921 so that the holders of pulp licences could realize advantages similar to those with pulp leases. Essentially large pulp and paper companies acquired and held licences as timber reserves. In 1973, 103,182 ac. (41,273 ha.) were held under pulp licences.

PRESENT FOREST TENURE SITUATION

Nearly 50 per cent of the 2,673 old tenures in good standing described above are included within Tree Farm Licences (TFLs). The TFL tenure system, discussed in the following section of this chapter, is a more recent tenure system. The old tenure holders under TFLs are subject to most of the current forestry requirements and revenue payments.

However, the remaining old tenure holders are not controlled as strictly with respect to cutting practices, utilization, and reforestation requirements. None, either within or outside of TFLs, pays appraised stumpage rates on harvested timber. Fixed royalties are required but are usually considerably less than stumpage. In 1972, 15.6 per cent of the timber cut in B.C. was under old tenures, but only 2.3 per cent of the total royalty and stumpage revenue was derived from these tenures.

Of the 138 million ac. (55.2 million ha.) of B.C. forest land, about 1 per cent is federal park land and about 4 per cent has been disposed of through outright grants, most of which were made before 1896. Nearly 3 million ac. (1.2 million ha.) is provincial park land, leaving approximately 127 million ac. (50.8 million ha.) under the jurisdiction of the B.C. Department of Forests. Two major management units exist, Tree Farm Licences (TFLs), which involve over 10 million ac. (4 million ha.) of land leased to logging companies, and proposed Public Sustained-Yield Units (PSYUs), which occupy the remaining 117 million ac. (46.8 million ha.).

TREE FARM LICENCE

A TFL is a binding contract under which a logging company is responsible for the management and protection of an area of forest land. It may be entirely Crown land or a combination of Crown and privately-owned land.

The purpose of the licence or agreement is to provide the company with an assured long-term supply of timber that will justify the capital investment necessary to harvest and process the trees on an efficient and economical basis. In return, the company is required to log in accordance with a number of principles or guidelines prescribed by the Department of Forests, and pay stumpage charges on timber removed.

Forty-one TFLs have been issued but, as a result of several consolidations, the number had been reduced to 34 by the end of 1970. They include a total 1973 productive forest acreage of about 10.5 million ac. (4.2 million ha.) and, on a sustained-yield basis, have an annual allowable cut of 5,810,000 cunits. One cunit equals 100 cubic feet. The term of a TFL lease was 21 years and, although it was renewable, it was subject to renegotiation. Recently, the B.C. government has made the renewal period conditional on the government's discretion. A fixed term has yet to be established. A leasing company agrees to participate in seed collection; planting; inventory; re-

habilitation of logged areas; fire-fighting and the salvage of fire-killed timber; and the protection of timber in danger from insects, disease, or wind.

PUBLIC SUSTAINED-YIELD UNITS

A PSYU is an area of Crown land that is usually defined by natural topographical features such as rivers or mountain ranges. There were 80 such units approved at the end of 1973 and they included 81.1 million ac. (32.4 million ha.) of productive forest land, with an annual allowable cut of about 127,000 cunits of timber. Additional units, including over 30 million ac. (12 million ha.) of forest land, are now being planned for the unregulated northern part of B.C.

Within the approved PSYUs, the Department of Forests sells the mature timber of commercial value on a sustained-yield basis to private companies or individuals by means of relatively short-term contracts, the most common of which are the timber sale harvesting licences. They have a 10-year term and authorize the holder to cut a specific volume from a PSYU each year.

There are usually several operators working within each unit, but collectively they are not permitted to harvest more than allowed under the sustained-yield policy. Using a quota system, the allowable cut is distributed among the operators established in the area.

TASK FORCE ON CROWN TIMBER DISPOSAL

The most recent Task Force on Crown Timber Disposal was established in January, 1974, and had a one-year mandate. The three-man task force was headed by Dr. Peter Pearse, a resource economist from the University of British Columbia.

The specific responsibilities assigned by the B.C. government to the task force were:

"Formulate recommendations for changes in the arrangements governing (forest use and management) with a view toward protecting the public interest in the Crown forest resources, and in particular toward ensuring:

- that the full potential contribution of the public forests to the economic and social welfare of British Columbia is realized, recognizing the diverse commercial wood products, recreation and wildlife benefits, domestic stock grazing and environmental values of forest resources;
- that the payments made for Crown timber reflect the full value of the resources made available for harvesting, after fair and reasonable allowance for harvesting costs, forestry and development costs and profits; and that the marketing arrangements for timber products permit their full value to be realized;
- that the health and vigor of the forestry industry in the province is maintained; and
- that good forest management in terms of harvesting practices, protection and conservation, reforestation and silviculture is provided for."

The first priority of the task force was to examine the conditions by which the old temporary tenures were issued and are now held, and to make recommendations for improving timber charges and harvesting rights on such tenures.

RECOMMENDATIONS OF THE TASK FORCE ON CROWN TIMBER DISPOSAL³¹

These recommendations covered the topics of royalties, forest land tax, logging tax, and economic impacts. Adoption of these recommendations would mean amendments to the Forest Act, Taxation Act, and Logging Tax Act.

Royalties

The task force recommended that the existing fixed royalties on old temporary tenures be abolished and that royalties be determined by forest appraisals that now apply in establishing the price of other Crown timber. In support of this proposal to abolish fixed royalties, such royalties imply that all

³¹ Ibid., pp. 8 and 9.

timber is of equal value and thus loggers are encouraged to harvest only the best timber. Differences in logging and transportation costs cause the value of timber to vary among locations. Also, appraised royalties reflect changing market conditions and costs whereas fixed royalties do not.

Forest Land Tax

The second recommendation was the abolition of the forest land tax at the end of the 1974 assessment year, December 31, 1974. A 1953 amendment to the Taxation Act stated that timber leases, licences, and berths that had not reverted to the Crown would be classified as forest land for property taxation purposes with an annual tax of one per cent of their assessed value. Since the task force recommended that royalty payments on old temporary tenures be the same as for other Crown timber, it recommended that the forest land tax be abolished and all Crown timber lands be equally taxed.

The Logging Tax

The third recommendation was to abolish the tax on logging profits of the forest industry. The formula used would be to reduce the tax rate from 15 to 10 per cent and to increase the allowed credit against provincial income tax to one-third of the logging tax paid. The tax burden would be eliminated since the other two-thirds is allowed as a credit against federal income tax. The province still benefits from the transfer of tax revenues from the federal treasury resulting from credit arrangements. It was also recommended that logging tax profits be defined in the same way as income tax profits, thus eliminating double accounting. Thus, the forest industry profits would be taxed in the same way as the profits of other industries.

ECONOMIC IMPACTS OF THE TASK FORCE RECOMMENDATIONS

The task force, through its recommendations, desired that harvested Crown timber reflect its full value after allowances for harvesting costs, forestry

and development costs, and profits.

If all three recommendations are adopted by the B.C. government, the net gain to the Crown will likely be substantial in years of normal or above-average economic conditions.

ROYAL COMMISSION ON FOREST RESOURCES

This is the first Royal Commission to look at the forest industry since 1956. The commissioner is Dr. Peter Pearse who headed the aforementioned Task Force on Crown Timber Disposal. The Commission will inquire into and formulate regulations on:

- the allocation of forest resources under all forms of tenure, both public and private;
- the procedures for allocating rights under these tenures;
- the various forms of royalties, taxes, rentals, and other charges on forest lands, timber and forest products;
- the means of conservation, utilization, management, and development of provincial forest resources; and
- the implications of existing tenure arrangements for the structure of the forest industry in terms of patterns of integration, concentration, ownership and control, as well as for the structure of markets for B.C. forest products.³²

Multiple use of forest land will be considered. The provisions for forest management will include the integration of forestry, recreation, fish and wildlife, and ecological reserve uses of forest tenures, including Crown grants. This is the first Royal Commission on Forestry to consider ecological and environmental issues.

The Commission held an organizational meeting in Vancouver in June, 1975, and held its first hearing in Prince George on August 12th. Hearings were also

³²British Columbia Government News, July/August 1975, p. 6.

held in Nelson, Prince Rupert, Kamloops, Victoria, and Vancouver.

Submissions to the Commission were made by individuals; firms; public agencies; and professional, industrial, and environmental associations. Hearings were conducted throughout the remaining months of 1975. A report will be submitted to the B.C. government in 1976.

GOVERNMENT AGENCIES AND LEGISLATION RELATED TO FORESTRY

DEPARTMENT OF FORESTS (BCDF)

The BCDF is responsible for planning and administering the forest lands of B.C. under the Forest Act.

There are six forest districts in the province; namely, Cariboo, Kamloops, Nelson, Prince George, Prince Rupert, and Vancouver. District foresters report to the Assistant Chief Forester (Operations).

Within the forest districts, multiple land use planning for B.C. forest lands is conducted in co-operation with other provincial departments and agencies. Following is a description of the BCDF resource folio system, which uses the watershed as the planning unit.³³ The BCDF, the Fish and Wildlife Branch of the Department of Recreation and Travel Industry, the Water Investigations Branch of the Department of Environment, and the Federal Fisheries and Marine Service contribute jointly to the folios according to the resource responsibilities of each agency.

The roles of the BCDF are:

- to discuss with the forest industry their timber requirements and the various implications associated with potential development areas;
- to co-ordinate the presentation of mapped values (present use, capability

³³B.C. Forest Service, Forest Resource Planning in British Columbia, a brief submitted to the Royal Commission on Forest Resources, pp. 19-24.

- classes) for each resource sector (fish, water, wildlife, recreation, grazing, forestry, agriculture, mining and any other land use that is considered to be important); and
- to develop management objectives and constraints on development and logging, in consultation with other resource managers.

Watershed plans consist of inventory and capability maps for individual resource sectors, as well as management objectives and specifications, which the licensee must follow in developing and using the resources of a watershed. A minimum requirement for resource planning is 1:50,000 scale mapping of forest cover and present transportation systems, land-forms and soils, aquatic systems, wildlife and recreation capability, and features. Such mapping data are collected by district forestry officials.

A watershed plan, consisting of all resource sector data, constitutes the development plan that is required by a company to obtain a timber licence. In other words, the BCDF uses the folio system as part of its planning process for locating timber sale licences in PSYUs. Using the folio data, BCDF officials determine, within general areas selected by logging companies, the exact shape, size, location, and orientation of each stand to be logged. Approximately 400 folios are planned throughout B.C. and over one-half of these have been completed.

The BCDF encourages public participation at all levels of planning - regional, watershed, and site specific - but especially on the watershed basis, since this is the level that receives the most attention via the folio system. Public input is also encouraged on a broader resource planning basis, outside the immediate scope of a folio plan. Such input is used by the BCDF to acquire a more balanced appreciation of the regional impact of resource decisions in areas such as grazing, recreation, access, etc.

The B.C. Land Commission has asked the Environment and Land Use Committee

Secretariat to prepare resource folios in areas of B.C., where the ALRs experience considerable development pressure, especially in the Lower Mainland. Such data provide a framework for evaluating applications for exemption from ALR zoning.

WATER RESOURCES SERVICE (WRS), DEPARTMENT OF ENVIRONMENT

The Pollution Control Branch of the WRS establishes pollution control objectives for the forest products industry of B.C. These objectives were established to meet the requirements of the Pollution Control Act. Permits issued by the Pollution Control Branch relate to air emissions, power boilers, refuse, and effluent. As of January 1, 1975, the disposal of wood wastes in non-modified wood-waste burners is illegal.

DEPARTMENT OF FINANCE

Three provincial acts administered by this department affect forestry. They are the Logging Tax Act, the Taxation Tax Act, and the Accelerated Reforestation Fund Act (ARFA).

Under ARFA, which was assented to on March 30, 1972, a fund of \$10 million was created. The purpose of this fund is to establish an accelerated reforestation or forest improvement program in B.C., including land acquired under the Green Belt Protection Fund Act.

B.C. FOREST PRODUCTS BOARD (FPB)

This board was created under the Timber Products Stabilization Act, 1974. Under Section 7 of the Act, its objects, and respective powers, are to improve the performance of markets for forest products and to encourage the utilization of timber in B.C. The board consists of not less than three, or more than six, directors of whom at least one shall be an officer of the BCDF. Directors are appointed by the Lieutenant-Governor in Council.

The FPB acts under the direction of, and makes recommendations to, the Minister of BCDF who is a member of the Executive Council appointed by the Lieutenant-Governor in Council to administer the Act. Matters considered by the FPB are:

- the procedures to be followed by the BCDF in collecting, compiling, analyzing, classifying, and publishing data related to markets and prices for forest products in B.C.;
- the structure of markets in B.C. for forest products and the remedial action required to improve the performance of such markets; and
- matters respecting forest resources of B.C. as directed by the Minister.

VII

RECREATION

Recreational lands in B.C. include federal, provincial, regional and municipal park areas. The user demands on all categories of outdoor recreation are increasing and the greatest pressures occur near the major urban centres. Recreational use implies disturbance to natural systems. The B.C. government is increasing its attempts to manage recreational land use by planning facilities in accordance with natural carrying capacities.

The major conflicts and issues associated with recreational land uses in B.C. are:

- deterioration of heavily-used sites;
- demands by recreationists for the withdrawal of lands from timber harvest or other extractive uses, in the face of growing demands by such extractive industries;
- threats of increased fire hazard;
- abuse of logging or industrial equipment by irresponsible recreationists;
- conflicts between owners of private recreation properties and the recreating public;
- adverse impacts of recreational properties on water quality; and
- intensive pressures on localized wildlife populations.

To help alleviate these conflicts, the B.C. government has begun a systematic study and review of recreational demands. Increasing emphasis has been placed on achieving integrated resource management. The resource folio mapping project outlined in chapter VI includes consideration for recreational land uses. Five provincial departments have policies and programs related to recreation. These departments are Recreation and Travel Industry, Environment, Forests, Municipal Affairs, and Finance. However, no single govern-

ment agency is responsible for the co-ordination and management of outdoor recreational programs.

The program, policies, and relevant legislation of these departments related to recreation are discussed in this chapter. Additional details may be found in a publication produced by the ELUC.³⁴ The ELUC defines open space as land or water used for outdoor recreation or in need of protection for conservation reasons.

DEPARTMENT OF RECREATION AND TRAVEL INDUSTRY (BCDRTI), PROVINCIAL PARKS BRANCH (PPB)

The BCDRTI manages and administers all matters related to parks, recreation areas, and the disposition of the Community Recreational Facilities Fund under provisions of the DRC Act, Park Act, Park Amendment Act, 1973, Regional Parks Act, the Recreational Land Green Belt Encouragement Act and Regulations and the Community Recreational Facilities Fund Act. The PPB executes these duties and responsibilities. Following a review of this legislation, the programs of the following PPB Divisions - Planning, Interpretation, Management, Recreational Facilities and Regional Parks, and Historic Parks and Sites - are outlined.

LEGISLATION

Parks Act

A park or recreation area is any area designated under provisions of the Park Act and includes water and dry land, the atmosphere above them, the flora and fauna upon and within them, and all their subsurface components.

The Park Act provides for the classification of parks (either A, B. or C) to limit and guide subordinate use of resources and for the establishment

³⁴ELUC, Open Space - An Inventory of Opportunities, 1975.

of Nature Conservancy Areas (NCAs). These NCAs are created to preserve natural ecosystems within park and recreation areas. Parks of classes A and C are reserved for recreational use and no commercial or industrial exploitation is permitted, except as related to recreational uses. Class B parks are reserved for public recreation and no other resource uses are permissible, except those that do not reduce recreational values or are authorized by the Lieutenant-Governor in Council. The conservancy areas are wilderness areas reserved exclusively for the preservation of representative ecosystems and landforms or for the maintenance of outstanding environments in their natural states. No resource exploration is permitted in NCAs and no manipulation or development is permissible except to ensure their preservation and wilderness use.

Table 12 provides a summary of provincial parks by classification and acreage as of December 31, 1974.

The Park Amendment Act, 1973

This Act established nine new provincial parks encompassing an area of 1,565,000 ac. (626,000 ha.). Also, it gave the PPB effective jurisdiction over all resources in provincial parks and the Park Act has precedence over all other provincial statutes, except the Environment and Land Use Act and the Pollution Control Act. The Park Amendment Act also provided for statutory protection of the boundaries of over 70 parks. Over the next few years, it is the intent of the government to give all park boundaries this protection.

Regional Parks Act (RPA)

By administering the RPA, the Provincial Parks Branch guides and assists the regional districts in the selection, acquisition, and development of land for regional parks. It is an objective of the PPB to try to ensure that each regional district has the most suitable and complete system of regional parks that it can administer. A Regional Parks Board, under the RPA, or a Regional

TABLE 12
SUMMARY OF PROVINCIAL PARKS
TO DECEMBER 31, 1974

<u>CLASSIFICATION</u>			<u>TOTAL AREA</u>	
			<u>ACRES</u>	<u>HECTARES</u>
Class "A" Parks	249	5,198,578	5,198,578	2,079,431
Nature Conservancy Areas in "B" Parks	5	<u>1,053,994</u>		
TOTAL PROTECTED PARK ACREAGE		6,252,572		
Class "B" Parks	6		3,321,163	1,328,465
Class "C" Parks	<u>66</u>		<u>27,721</u>	<u>11,088</u>
<u>TOTAL PARKS</u>	<u>321</u>		<u>8,547,462</u>	<u>3,418,984</u>
Recreation Areas	17		561,355	224,542
Wilderness Conservancies	1		325,000	130,000
<u>Nature Conservancy Areas in "A" Parks</u>				
1. Black Tusk (Garibaldi)			44,032	17,613
2. Murtle Lake (Wells Gray)			<u>525,732</u>	<u>210,293</u>
			569,764	227,906
<u>Nature Conservancy Areas in "B" Parks</u>				
1. Big Den (Strathcona)	29,784			
2. Central Strathcona (Strathcona)	215,000			
3. Comox Glacier (Strathcona)	58,010			
4. Eutsuk (Tweedsmuir)	629,300			
5. Rainbow (Tweedsmuir)	<u>121,900</u>			
	1,053,994		<u>1,053,994</u>	<u>421,598</u>
			<u>1,623,758</u>	<u>649,504</u>

Source: Provincial Parks Branch, Provincial Parks List.

Board, under the Municipal Act, exercises planning powers over regional parks. Within five years of its establishment, a Regional Parks Board must prepare a regional park plan. Upon approval of this plan by the Minister of Recreation and Travel Industry, it is designated by by-law, thus becoming an official regional park plan. If a regional district has not designated an official regional park plan at the end of five years, the Minister may withhold grants until such a plan is designated and approved.

Recreational Land Green Belt Encouragement Act (RLGBEA) and Regulations

The RLGBEA was assented to on June 20, 1974. Under Regulations to this Act, effective February 20, 1975, the Minister of Recreation and Conservation (RC), now Recreation and Travel Industry (RTI), became responsible for administering this Act; previously, the Lieutenant-Governor in Council appointed a member of the Executive Council as administrator. The purpose of the Act and Regulations is to increase the supply of recreational land in B.C. Under the Regulations, recreational land is defined as "any parcel or tract of land, or any portion of any such parcel or tract of land, as the Minister may designate, the principal or primary use of which is the provision of opportunity for public participation in recreational activities, which are of demonstrable benefit to the community in which the land is situated".

A private landowner may apply to the Minister of RTI to have his land designated as approved recreational land. Upon designation of such land, the owner is reimbursed the real property taxes paid on the land for the current taxation year.

The Minister of RTI, in consultation with the Minister of Environment, may designate certain Crown-owned lands as approved recreational lands. Any lease issued for such lands must conform to the requirements of the RLGBEA.

Community Recreational Facilities Fund Act (CRFFA)

Under the CRFFA, the PPB provides technical and financial assistance to com-

munities who wish to improve the recreational opportunities available to their residents. For the purpose of this Act, a recreational facility is defined in general terms and may include visual and performing arts, cultural and social activities, plus individual and competitive sports facilities. Such facilities are oriented towards the beneficial participation of the user rather than the advancement of the activity.

This fund was \$15 million during the 1974-75 fiscal year. Approved grants of one-third of the cost of the first million dollars or less are made to community recreational facilities sponsored by a municipality or a non-profit, cultural, ethnic, or religious group. The CRFFA was enacted on March 31, 1973, but was made retroactive to August 13, 1972.

DIVISIONS OF THE PPB

Planning Division

The Planning Division is composed of six sections - Co-ordination, Coastal, Central, Northern, Long Range Planning, and Research. Following is a:

- description of the Long Range Planning Section programs; namely, the regional recreational development program and the natural histories objective program, plus land acquisition and park establishment priorities;
- description of the zonal planning program, which applies to each of the three zones - Coastal, Central, and Northern. The zonal planning program has seven sub-programs related to land use planning; namely,
 - legal administration of recreation lands,
 - regional recreational plans,
 - conceptual plans for park use,
 - development plans,
 - integrated resource management studies,
 - environmental impact studies, and
 - policy review;
- description of the Research Section programs related to land use planning.

Long Range Planning Section

A major purpose of the regional recreational development program is to provide the people in various regions of B.C. with recreational opportunities in natural environments; namely, provincial parks. The Long Range Planning Section identifies sets of objectives-related recreational opportunities. Such objectives are utilized in developing land use, facility, and program development priorities.

The natural histories objective program has the major aim of preserving natural environments for the cultural, educational, and inspirational enjoyment of present and future generations of British Columbians. To satisfy this aim, a system of identifying natural environments is being developed by the Long Range Planning Section for the purpose of preservation, rather than utilization, of resources. Such a system will be used to assess existing natural environment types within parks and to incorporate those natural environment types that are not represented in the parks system.

A new proposed program of the Long Range Planning Section, entitled "Recreational Corridors", would include rivers, trails, and roadways, and would range from wilderness to urban environments. These corridors would possess exceptional scenic or recreational opportunities. The main objectives in creating a corridor system are to protect these resources for future generations, to identify and recognize certain travel corridors as available public recreational opportunities, and to provide management guidelines for administering agencies of these corridors. The types of corridors would include wild rivers, recreational rivers, natural rivers, scenic shorelines, historical trails, recreational trails, back country trails, and roadways.

Such a corridor system would involve a number of land uses, land ownerships, and various government agencies. A recreational corridors act is being proposed by the PPB. The corridor concept will involve close co-operation among

government resource agencies and an integrated approach to land management. Municipalities, regional agencies, and resource management agencies will be involved in the identification and administration of the corridors.

Private lands will be included both for direct use and for scenic use only. For direct use, lands will be purchased in order to compensate the owner and remove liability. Scenic lands, where no trespassing is permitted, will only require controls over conflicting land uses.

Zonal Planning Program

The zonal planning program is conducted by inter-disciplinary planning teams concerned with site design, land use planning, resource analysis, and assessment of recreation user needs. This program is part of the framework developed by the Long Range Planning Section and complies with user needs and resource considerations formulated by the Research Section. Continuous dialogues related to regional and park concept plans are conducted with regional offices.

The Planning Division is responsible for compiling and storing all legal descriptions of the land base contained within provincial parks. Legal information is also compiled on all lands being considered for inclusion within the park system. Such information is an integral part of land resource allocation decisions that are made by inter-agency governmental bodies.

Regional recreation plans are being developed in an attempt to objectively analyze recreational needs and landscape characteristics on a regional basis. A comparison is made between provincial objectives of the Parks Branch and the needs and opportunities within a given region. This will result in proposals for the designation of parks and recreation areas that will more closely relate to the needs of the population and Parks Branch objectives.

Conceptual plans for park use are statements of intent for specific parks or areas of parks. They offer guidelines for types of recreational use and an

overall scope of development. The purposes of concept plans include: the identification of goals and objectives for a specific park relative to other recreational resources or on a regional or provincial scale; the provision of a basis for management planning, master planning, and detailed site planning; and the assurance of consistency in all aspects of planning for a specific park.

Development plans are applications of park concepts and result in specific site plans. Objectives of site plans include the specification of the nature, type, extent, and priority of park development; the detailing of park site development and standards for departmental and public discussions; and the evaluation of planning alternatives.

Integrated resource management studies are being conducted in a series of government-designated special areas. These areas contain lands with recreational qualities that favour the designation of all or part of such areas for parks. These studies involve reconnaissance, research, concept planning, and inter-agency discussion.

Environmental impact studies related to recreational resources are the responsibility of the Planning Division. Since no other provincial agency has a mandate for planning outdoor recreation systems, the ELUC has directed the Planning Division to be responsible for a basic overview of recreational aspects of resource projects. Often new resource projects are not directly related to existing or proposed new parks, but have recreational effects through the creation of new recreational opportunities or the alteration of recreational markets via improved access. The outcomes of impact studies by the Planning Division are:

- the definition of recreational opportunities and some indication of responsibility for their provision;
- the definition of new park proposals;
- the enunciation of the impact of a project on an existing park system.

Policy review exercises involve the interpretation and application of current Parks Branch and B.C. government resource management policies.

Research Section Programs

The function of this section is to improve the quality and quantity of information that is used to make recreational and planning decisions within the PPB.

Programs include making park user data more readily available, establishing an inventory of user facilities available in provincial parks, environmental impact studies on trail use, a study of winter recreational activities, and development of campground visitation models.

Interpretation Division

This division evaluates the natural features of parks, interprets natural values, and prepares interpretive plans. A working liaison exists with the Fish and Wildlife Branch whereby park fauna are evaluated. Naturalists of the division offer interpretation programs to park users.

Management Division

Park district offices are located within the seven Regional Resource Management Districts. Each district is divided into a number of regions that conduct management throughout the province and report to the Regional Resource Management Committees.

Recreational Facilities and Regional Parks Division

This division was created in 1974 and administers the Community Recreational Facilities Fund Act, the Regional Parks Act, and the Recreational Land Green Belt Encouragement Act, and supervises Class C provincial parks.

Historic Parks and Sites Division

There are four historic parks in B.C.; namely, Barkerville, Cottonwood House, Fort Steele, and Kilby. In all provincial parks, the emphasis has been on natural history interpretation. Within the research section, more emphasis is being given to the human history of parks and thus the interpretive program will be broadened along roads and trails, at archaeological and historical remains and structures, and within interpretation centres.

DEPARTMENT OF ENVIRONMENT (BCDOE)

LANDS SERVICE

Recreational Cottage-Site Leases

The Lands Branch administers recreational cottage-site leases. Under the Land Act, leases are issued for recreational cottage-sites. Such a lease permits a person (one lease per family unit) to construct a dwelling for recreational purposes around a lake, by the ocean, in a ski area, etc. A lease is issued for a term of three years subject to renewal for a further 15 years with no option to purchase. To qualify for renewal of a lease for a further 15 years, the lessee must construct on the land a habitable dwelling permanently fixed to the ground.

Upon approval in principle of a lease, an applicant must forward to the Director of Lands a letter from the local medical health officer stating that the site is suitable for a water-carried sewage disposal system or a suitable alternative.

All Crown lands lying within ten chains (660 feet or 198 metres) of the high-water mark of any lake in the province are reserved for application. However, all lots available for applications are situated in planning subdivisions or reserves. Such reserves exist in order to prevent persons from staking lots haphazardly around a lake. A nomination expressing a desire to obtain a lot

within a reserve is filed with a Land Inspector or with a district forester if the lands are located within a provincial forest. Such nominations do not give a nominee any claim, priority, preference, or right to occupy the Crown lands.

When a development plan and survey are completed for an area, nominees are notified that the lots will be disposed of by public competition, either by auction or tender. Lots not disposed of at the time of competition may be applied for through a Regional Inspector's Land office. As concerns surveyed waterfront lots, a strip of land is sometimes deleted from the lot along the waterfront for the purpose of public access, if BCDOE considers it practical.

Ecological Reserves

The Ecological Reserves Unit of the Lands Service administers the Ecological Reserves Act, 1971. These reserves are an outgrowth of the International Biological Program of the mid-1960s, which sought the conservation of carefully-selected terrestrial ecosystems. In 1968, the B.C. government established the B.C. Ecological Reserves Committee (ERC) to advise on the selection of potential reserve sites. In 1969, ecological reserves were established under the Land Act. With the assent of the Ecological Reserves Act in 1971, B.C. became the first Canadian province to formalize and give permanent status to ecological reserves. Québec, the second province to do so, established its Act in 1974. As of September, 1975, there were 65 reserves in B.C. varying from 1.5 to 24,300 ac. (0.6 to 9,720 ha.), averaging 1,732 ac. (693 ha.). The total acreage of all reserves is 112,568 ac. (45,027 ha.).

The basic purpose of the Ecological Reserves Act is to reserve Crown land for ecological purposes, including:

- areas suitable for scientific research and educational purposes associated with studies in productivity and other aspects of the natural environment;

- areas representative of natural ecosystems;
- areas that serve as examples of ecosystems that have been modified by man and that offer an opportunity to study the recovery of the natural ecosystem from such modification;
- areas in which rare or endangered native plants or animals may be preserved in their natural habitat; and
- areas that contain unique and rare examples of botanical, zoological, or geological phenomena.³⁵

Areas with potential for one or more of these purposes are screened by the ERC and relevant B.C. government departments to resolve any resource conflicts. Areas with scenic or recreational values are transferred to the Provincial Parks Branch. The Ecological Reserves Act stipulates that only Crown lands may be made into ecological reserves; however, provincial funds can be made available to the Crown to purchase private lands, which will then form part of a reserve.

Ecological reserves are separate from parks or other types of recreational areas, historic or archaeological sites, and wildlife management areas, all of which are provided for and administered under separate statutes.

WATER RESOURCES SERVICE

The Water Investigation Branch conducts tourism and recreation research (if such research is outlined in a study proposal) as part of its water resource management studies; for example, in the Kalamalka-Wood Lakes Basin. Objectives of this study included identifying present water-based recreational facilities serving both residents and tourists; determining the significance of tourist and recreational activities on the local economy; and outlining possible recreational development patterns in the Kalamalka-Wood Lakes Basin. Inventories were made of water-based recreational facilities and shoreline

³⁵ Department of LFWR, Ecological Reserves in British Columbia (4th Edition, Revised 1975), pp. 1 and 2.

land use and tenure. The value of water-based recreation was estimated and future demands for recreational facilities by both Okanagan residents and tourists were projected.

DEPARTMENT OF FORESTS

Forest recreation is conducted under the Resource Planning Division. The Forest Service, in conjunction with other government departments, plans public recreational use of Crown forest lands through the multiple and integrated use concept. Forest access roads, normally open to the public on week-ends, provide access to numerous lakes, streams, hunting areas, and campgrounds. Logging companies have built campsites, boat launching ramps, and picnic areas at company expense.

In 1970, the Forest Service began an inventory of lakes, streams, scenic observation points, and hiking areas which could be developed for public recreation. Future programs will involve upgrading roads, preparing local maps, clearing campsites and parking areas, and posting road signs. The general goal is to maximize public use of forests while minimizing interference with the forest industry.

Recreation planning is conducted on a public sustained-yield unit (PSYU) basis. Plans for 27 of these units are now in various stages of completion. Twenty-five intensive recreation plans have been initiated for specific areas, and 18 are complete. Recreational input is also made into Environment and Land Use Committee resource studies such as the Skagit River, Mica Pondage, and Purcell Range Studies.

DEPARTMENT OF MUNICIPAL AFFAIRS (BCDMA)

As previously mentioned, there are twenty-nine regional districts in B.C. Twelve of the twenty-nine assume responsibility for regional parks, either

over an entire district or part thereof. The regional approach to planning parks and recreational facilities provides a more equitable distribution of costs.

The function of regional parks is pursuant to the Municipal Act, administered by the BCDMA, and the Regional Parks Act, administered by the Department of Recreation and Travel Industry (BCDRTI). A minimum of 60 per cent of the annual revenue of a regional park district is used to acquire property for regional trails. Such acquisitions can be made in each of the first five years after the formulation of a Regional Parks Board.

Following is a discussion of the Resort Municipality of Whistler Act. Although this Act is not directly administered by the BCDMA, it relates to municipal planning and thus is discussed under the BCDMA.

RESORT MUNICIPALITY OF WHISTLER ACT (RMWA)

This Act was enacted in 1975. The Municipality Act applies to the municipality of Whistler, except for variances expressed under the RMWA or by regulation. The minister responsible for administering this Act is the Minister of Municipal Affairs. An official community plan has been prepared to guide development of this ski resort area. The Municipality came into being on September 6, 1975. An official community plan has been prepared by the BCDMA.

DEPARTMENT OF FINANCE

The Minister of Finance administers two funds related to recreational lands under the Green Belt Protection Fund Act (GBPFA) and the Accelerated Park Development Fund Act (APDFA).

On March 31, 1972, the Minister of Finance appropriated \$25 million to establish the Green Belt Protection Fund. The minister may appoint a person or

persons to advise him on the expenditure of this fund to acquire land for establishing and preserving green belt areas throughout B.C. The ELUC provides advice on the lands that should be purchased. Such green belt lands can be used as park lands without camping, forestry reserves, leased lands for farming, or any other use designated by the Lieutenant-Governor in Council.

Also on March 31, 1972, the Minister of Finance appropriated \$10 million to establish the Accelerated Park Development Fund. The purpose of this fund is to create or improve parks in B.C., including land acquired under the GBPFA, and thus create additional employment opportunities. The minister may appoint a person or persons to advise him on the expenditure of this fund.

VIII

FISH AND WILDLIFEDEPARTMENT OF RECREATION AND TRAVEL INDUSTRY, FISH AND WILDLIFE BRANCH (FWB)

The FWB has seven regional offices corresponding to the seven resource management regions (see map 1). There are 51 district offices. The programs conducted by the branch are pursuant to the Wildlife Act, and are discussed under the headings of fisheries management, wildlife management, and Habitat Protection Section referrals. The FWB is not empowered to set aside areas for wildlife management. It enforces legislation designed to control levels of hunting and fishing, and provides referral services for developers.

FISHERIES MANAGEMENT

All seven management regions are conducting recreational evaluations related to sports fishing. Sample surveys of sports fishermen have been conducted in order to determine other recreational activities that may be favoured by the fishermen. Thus, integrated resource management programs can provide fishermen with facilities for fishing, boating, camping, hunting, wildlife viewing, etc.

The Lower Mainland Coast Region of the FWB has experienced growing population pressures during the 1970s. Such pressures have increased demands for urban, suburban, and recreational living space and have resulted in land use conflicts. Land use often interacts and conflicts with fishery values, especially along small streams. Regional districts and municipalities require that land developers consult fishery agencies during the planning stages of land development along water bodies, prior to the construction of residences.

Through liaison with the public, regional districts, municipalities, and other government agencies, both provincial and federal, the FWB attempts to protect

freshwater fish habitats. The B.C. Department of Forests and the FWB co-operate to plan fish protection. The following program was initiated in the Prince George region in 1973 as part of the total resources planning process. The zone fish biologist lists the fish species of various lakes and streams and designates important spawning areas. A zone is an area within a forest district. The management objective is to preserve and maintain the fish habitat respecting spawning areas, stream bank vegetation, water temperature, and siltation. Other specifications made by the fish biologist are:

- No logs, fill, obstructions, or debris likely to cause pollution are to be deposited in streams.
- No equipment is to be operated in streams or gravel removed from them.
- Stream crossings must consist of a bridge or culvert large enough to accommodate maximum stream flows and construction of crossings must not coincide with spawning dates.

The zone forester, in consultation with the zone biologist, makes the following specifications:

- Tree growth on unstable, erodible banks and leaning trees along water courses shall remain uncut.
- Timber harvesting within 10 chains (660 feet or 198 metres) of streams will be deferred where it is necessary to keep the water temperature at an optimum level for fish and where no siltation is permitted.

WILDLIFE MANAGEMENT

The B.C. government's emphasis on multiple resource planning has strengthened the position of wildlife management in the field of provincial land use planning. Studies such as those in the Mica Reservoir and Purcell Range of the East Kootenays have examined ways of minimizing land use conflicts. These studies sought to establish wildlife as a legitimate user of land in terms of its public value.

The interaction between wildlife and domestic livestock has been studied in the following locations. In the East Kootenays, winter range preferences

of elk, mule deer, whitetail deer, bighorn sheep, and cattle have been studied by the FWB. On the Dewdrop Range near Kamloops, the effects of cattle grazing on the capability of winter range for deer was studied.

Improvements in the recreational use of private lands for hunting are being studied in the Fraser Valley. Guidelines will be developed for better relationships among wildlife managers, landowners, and sportsmen. The FWB promotes co-operation between the owners of huntable lands and the hunting public.

As previously mentioned under fisheries management, the FWB and the Department of Forests are engaged in a total resource planning program. The objective of the program is to establish and identify all resource values with their respective constraints before forest harvest planning begins. Wildlife considerations under this program are based on the B.C. Land Inventory Capability Analysis Report, which delineates important ungulate wintering areas and other significant range areas. Zone biologists and foresters discuss these areas in terms of their prime habitat values. They draft a management objective to maintain wildlife ungulate habitats that are ecologically adjusted and will maximize socio-economic returns to the public. Next, constraints to achieve the objective are drafted and include a limit on logging openings, not to exceed agreed acreages, and the cutting shapes of areas to be harvested. Habitats of other wildlife, such as waterfowl and fur-bearers, are noted when the information is available.

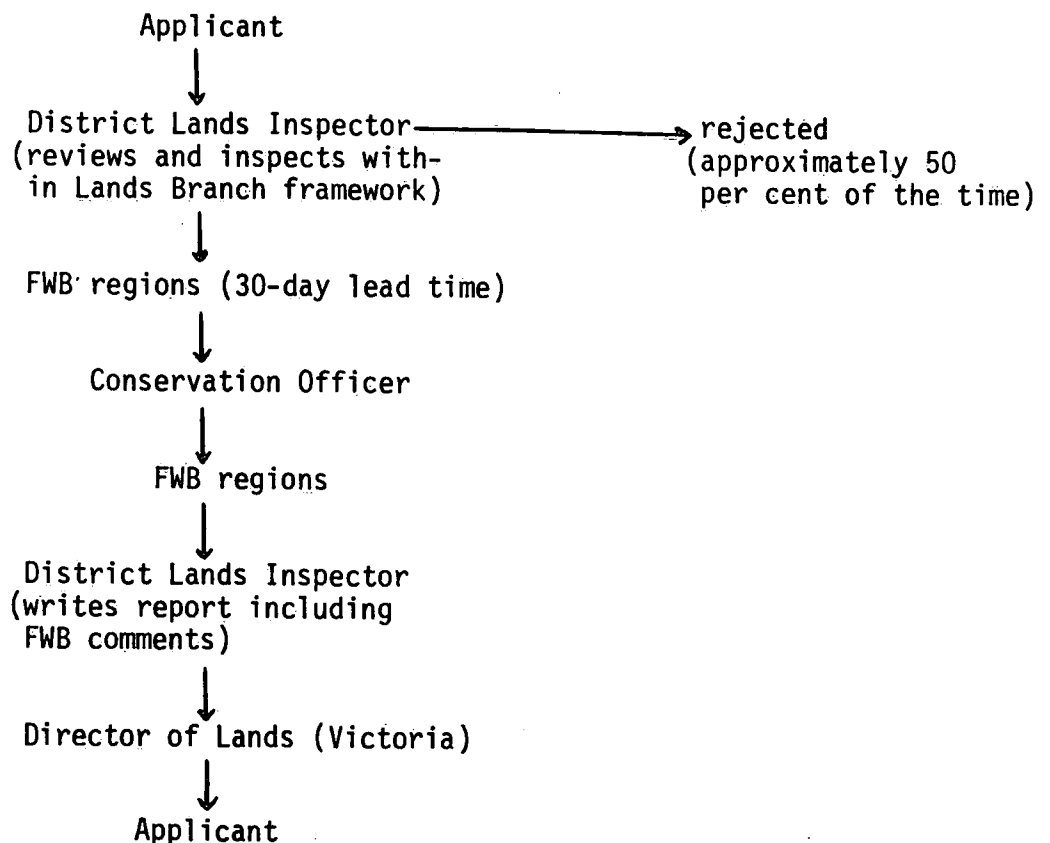
HABITAT PROTECTION SECTION (HPS) REFERRALS³⁶

The "Involvement in Referral Systems" report describes the various types of referrals processed by the HPS and identifies the agencies from which such referrals are received. Each of these referral agencies is identified below and the interactions of these agencies as concerns fish and wildlife management in B.C. are discussed. For the Department of Mines and Petroleum Resources and B.C. Hydro and Power Authority referrals, the Land Commission Act has overriding powers.

³⁶ von Barloewen, C., FWB, Involvement in Referral Systems, 28 pp., May, 1975.

LANDS SERVICE REFERRALS

The Lands Service, as a matter of policy, requests input from other agencies before granting leases. In April, 1974, a referral system was formalized. The routing of applications is as follows:



The majority of these applications concern agricultural, grazing and, in coastal regions, foreshore leases. They are dealt with on a regional basis. The FWB office in Victoria comments on occasional transmission line and pipeline applications referred by the Lands Service.

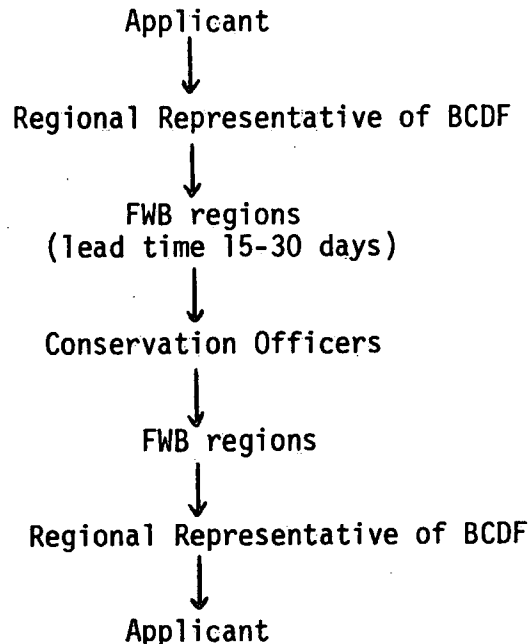
DEPARTMENT OF FORESTS REFERRALS (BCDF)

The B.C. Forest Act, 1960, does not require the BCDF to request resource planning input from other agencies before granting leases. In 1973, a formal

referral system was established upon recommendation of the chief forester. Also in October, 1973, the Select Standing Committee on Forestry and Fisheries, established by the B.C. Legislature, recommended that:

Any agency, corporation or individual contemplating resource development be required to notify all other agencies of its intentions....and that notification be required far enough in advance that all resource values involved can be taken into consideration before development begins.³⁷

Routing of applications is as follows:



BCDF referrals are based on applications for the following permits - Special Use Permits, Tree Farm Licences, Timber Berths, and Grazing Permits.

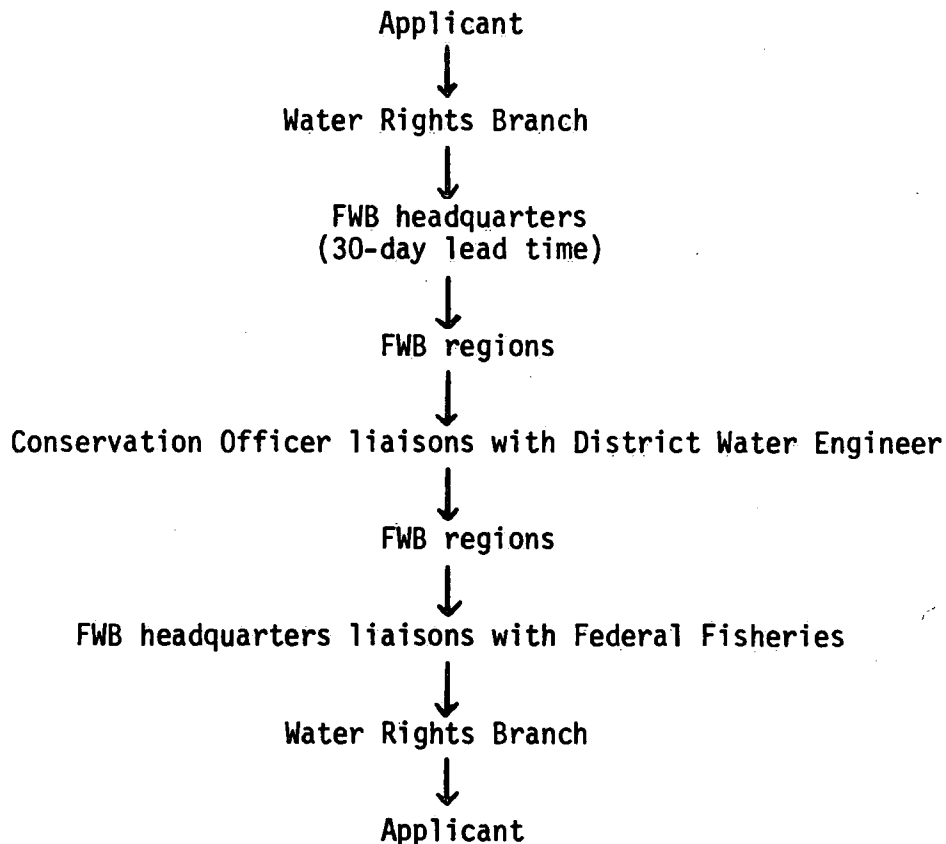
WATER RESOURCES SERVICE

Water Rights Branch Referrals

Section 9 of the Water Act, 1960, affords the Department of Recreation and

³⁷ Ibid., p. 5.

Travel Industry (BCDRTI) the opportunity to object to the issuance or amendment of a water licence. Therefore, the Water Rights Branch must refer water withdrawal applications to the FWB. Routing of these referrals is as follows:



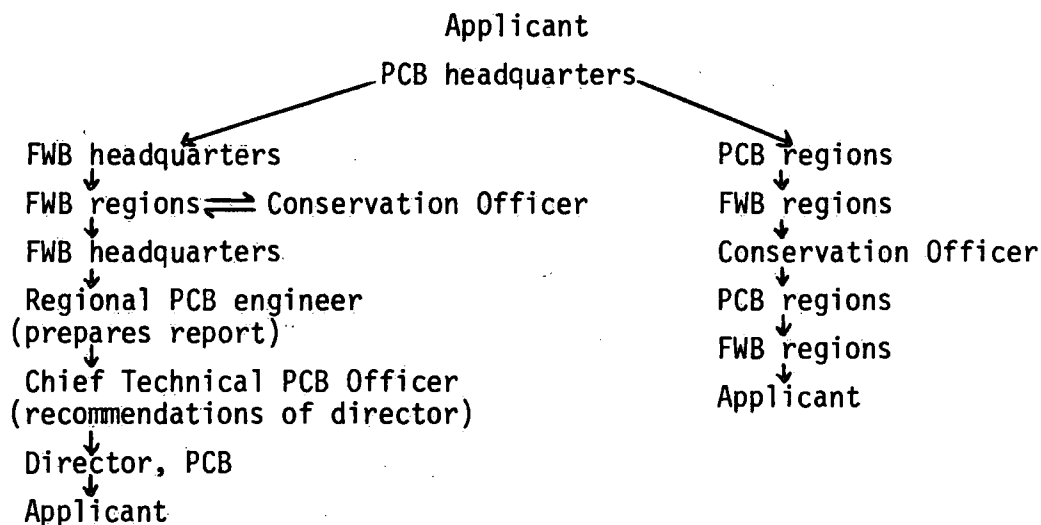
All water licence applications are received by the FWB head office in Victoria, which forwards them to the appropriate regional offices. However, all applications for hydro developments are processed in Victoria.

Pollution Control Branch (PCB) Referrals

As in Section 5, subsections (4) and (5) of the Pollution Control Act, 1967, and under Section 4.01 of the Pollution Control Regulations, the director of the PCB forwards copies of all applications to the Comptroller of Water Rights, the Deputy Minister of the Department of Health and the Deputy Minister of the BCDRTI, each of whom may file recommendations with respect to an application.

The director of the PCB considers these recommendations.

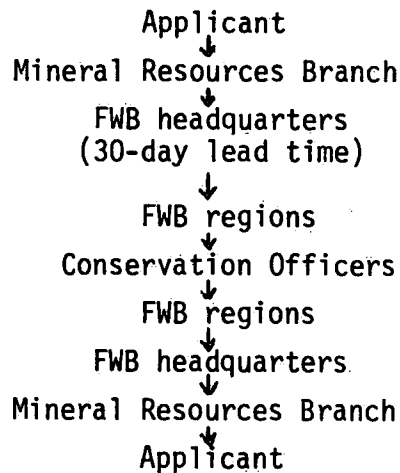
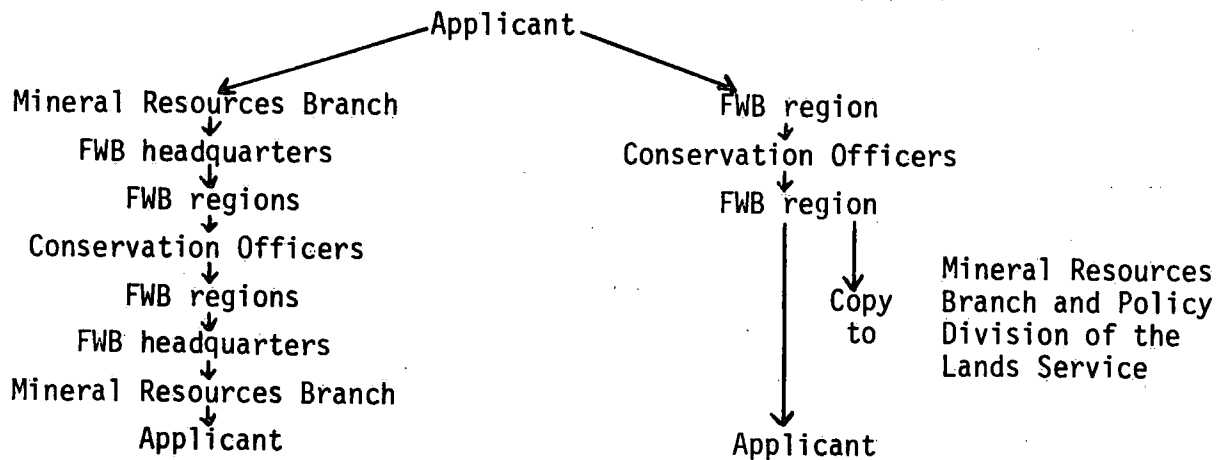
The routing of referrals is as follows:



Major applications are processed through the FWB Victoria Office while minor applications, for example, septic tanks and wood waste disposal, are handled solely by the regions.

Department of Mines and Petroleum Resources (BCDMPR) Referrals

The Mineral Act, 1960, does not require the BCDMPR to request BCDRTI input prior to granting mining permits and licences. However, the BCDMPR must obtain approval from the BCDRTI for the reclamation and conservation program proposed by a mining company under Section 8, subsection (5) (a) of the Coal Mines Regulations Act, 1969, and under section 11, subsection (6) of the Mines Regulation Act, 1967. Upon approval of such a program, the Minister of Mines and Petroleum Resources issues a permit authorizing commencement or continuation of work. Also, Section 11, subsection (3) (a) of the Placer Mining Act, states that a lessee must comply with the Mines Regulation Act. Mineral Resources Branch referral routings depend on the type of application, whether placer mining or mineral exploration and mining; petroleum and gas.

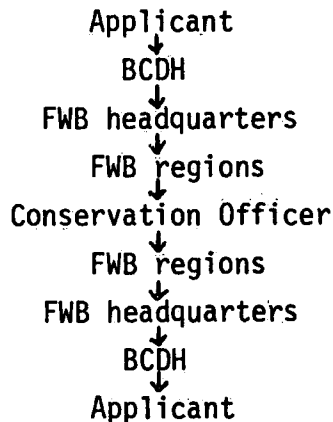
Placer MiningMineral Exploration and Mining; Petroleum and Gas

The Victoria office of the FWB receives all placer mining applications and some mineral exploration and mining applications, which it forwards to regional offices. Regional offices receive directly petroleum and gas applications, plus some mineral exploration and mining referrals.

Department of Highways (BCDH)

The Highways Act, 1960, does not require that the BCDH receive inputs from other agencies prior to commencing highway developments or prior to issuing permits. An informal referral system has been established and the routing

is as follows:

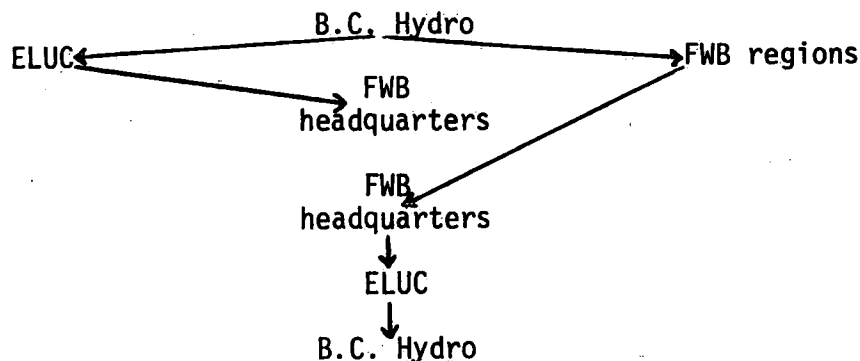


The FFW headquarters office processes major referrals; minor ones are forwarded to the region. Some referrals are sent directly from the BCDH to the regional offices.

B.C. Hydro Referrals

There is no legal basis for these referrals. The 1973 recommendations of the Select Standing Committee on Forestry and Fisheries, referred to previously in this chapter, has influenced hydro referrals.

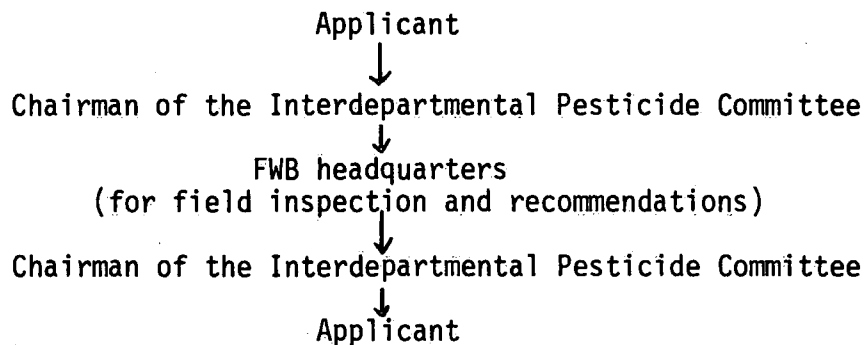
Routing of referrals is as follows:



Referrals deal mainly with transmission lines and pipelines, and occasionally with microwave towers.

Pesticide Referrals

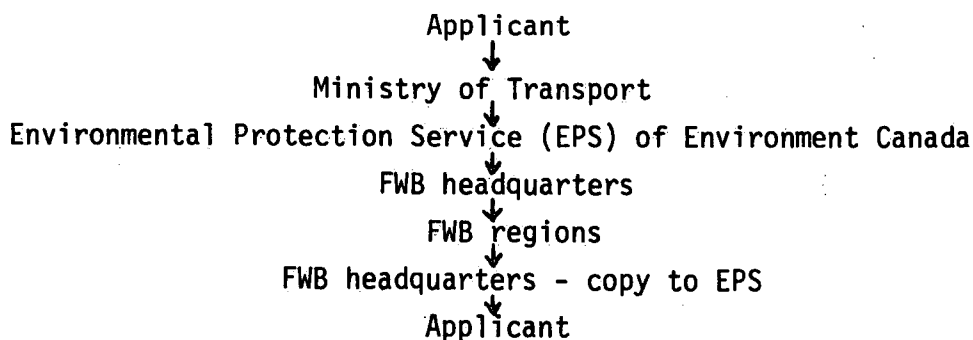
Pesticides are regulated under the Pharmacy Act, 1974, Department of Health, but this Act makes no provisions for application referrals. An Interdepartmental Pesticide Committee, appointed by the Minister of Agriculture, processes and refers pesticide referrals. Routing is as follows:



These referrals are reviewed by headquarters staff of the FWB.

Transport Canada

Under the Navigable Waters Act, 1952, all applications to do work on, over, under, through, or across any navigable water are processed by Transport Canada. Applications cover dyking, dredging, airport construction, cable laying, marinas, and log dumps. Routing of applications is as follows:



Other Referrals

The regional offices of the FWB receive referrals on an informal basis from such agencies as the CNR, regional districts, municipalities, Crown corporations, and large companies. Routing and degree of involvement are unique to each region.

IX

ENERGY RESOURCES, MINING, AND QUARRYING

The types of energy discussed in this chapter are natural gas, crude oil, coal, and electricity. Government policies, programs, and legislation related to both energy resources and mining and quarrying are discussed.

Energy production in B.C. is defined as primary and secondary production.³⁸ Primary does not entail a conversion of one fuel to another. Secondary energy is produced by such a conversion, for example, refined petroleum products from crude oil and electricity produced from natural gas. Total energy statistics include the following energy types: natural gas, crude oil, refined petroleum products, liquid petroleum gases (propane and butane), thermally-generated electricity, coal, coke, and coke over gas. All energy data are reported in barrels of oil equivalent (BOE), the number of barrels of oil that contain an equivalent amount of energy.

Primary production in B.C. grew from 62 million BOE in 1966 to 156 million in 1973, an average annual growth rate of over 14 per cent. During this period, crude oil production declined in relative importance, while electricity and coal increased. However, most of the coal was exported to Japan and used for metallurgical purposes; coal production for energy purposes declined in relative importance. Natural gas, the largest source of energy production, remained at approximately the same level of relative importance, 50 per cent of all primary production in 1966 and 51 per cent in 1973.

Secondary production of energy grew from 38 million BOE in 1966 to 55 million BOE in 1973, an average annual growth rate of over 5 per cent. Refined petroleum products accounted for over 90 per cent of the secondary production.

³⁸B.C. Energy Commission, British Columbia Energy Supply and Demand, 1974-2006, 1974, p. 6.

Total net production grew from 60 million to 152 million BOE between 1966 and 1973, an annual growth rate of 14 per cent.

Total energy consumption grew at an annual rate of 6.5 per cent between 1966 and 1971. The complete consumption data are not available for 1972 and 1973. The growth rates for the residential and commercial sectors were above average at 7.4 and 7.6, respectively. The industrial sector growth rate was 6.5 per cent and transportation was 5.5 per cent. Table 13 lists the energy consumption for each sector for 1966 and 1971 and provides respective percentage figures.

TABLE 13

B.C. ENERGY CONSUMPTION BY SECTOR FOR 1966 AND 1971

SECTOR	1966 CONSUMPTION ('000 BOE)	% OF TOTAL	1971 CONSUMPTION ('000 BOE)	% OF TOTAL
RESIDENTIAL	11,295	19.8	16,122	20.6
COMMERCIAL	8,423	14.8	12,135	15.5
INDUSTRIAL	19,797	34.7	27,077	34.6
TRANSPORTATION	17,559	30.7	22,971	29.3
TOTAL	57,074		78,304	

Source: B.C. Energy Commission, "British Columbia Energy Supply and Demand Forecast 1974-2006", p. 11.

NATURAL GAS

Natural gas, in marketable volume, was first discovered in 1948 near Pouce Coupe. Production to supply Fort St. John began in 1954. In 1957, a gas plant at Taylor and the thirty-inch West Coast pipeline to serve B.C. and the export market in northwestern U.S.A. were completed. In 1973, the Fort St. John area produced about 35 per cent of the total gas output, the remainder being in the Fort Nelson area.

A second major pipeline is the Trans Mountain Pipeline, which extends from Edmonton to Huntington, in southwestern B.C.

B.C. ENERGY COMMISSION

The B.C. Energy Act was passed by the Legislature on April 18, 1973. On May 7th, the Lieutenant-Governor in Council proclaimed Order-in-Council Number 1481 under Section 19 of the Energy Act. This Order-in-Council established the B.C. Energy Commission consisting of a chairman, a deputy chairman and three commissioners, who were sworn in on May 8, 1973, and called upon the Commission to hold public hearings into the natural gas industry. On September 14, 1973, the "Report on Matters Concerning the Natural Gas Industry in British Columbia" was submitted by the Commission.

B.C. PETROLEUM CORPORATION

It was recommended in the September 14th Report named above that a Crown Corporation be formed to assume responsibility for the purchasing and marketing of all B.C. natural gas. The province, as owner of this resource, should have more direct control in the final uses, prices, reserves, and returns to the province. To accomplish this recommendation, the Legislature passed the B.C. Petroleum Act on November 7, 1973, under which the B.C. Petroleum Corporation was formed. This corporation is the sole buyer and wholesaler of natural gas in B.C.

ENERGY RESOURCE MANAGEMENT

On November 29, 1973, the Lieutenant-Governor in Council proclaimed Order-in-Council Number 3907. This Order-in-Council makes provision for "an annual review by the Commission of: natural gas reserves, demand, and prices; and of the results of research by the Commission into all energy resources and requirements of the Province and of the conclusions of the Commission with respect to the dedication of available forms of energy to the most ap-

appropriate uses and the eventual replacement of natural gas with the most acceptable possible alternative". The first annual review culminated in a report entitled "British Columbia Energy Supply and Demand Forecast 1974-2006".

On August 20, 1975, the chairman of the Commission submitted an interim report to the B.C. Attorney General on natural gas and crude oil field prices. This report noted that the oil industry in B.C. was realizing an average return of less than 7 per cent after taxes. The report recommends returns of between 10 and 12 per cent.

CRUDE OIL

Oil production began in 1956 but was not significant until late 1961, when the twelve-inch oil pipeline was built from the Taylor oil-gathering terminal to the Trans Mountain Oil Pipe Line Company near Kamloops.

Between 1970 and 1973, the production of crude oil in B.C. had been declining at an average annual rate of 3.8 per cent. The importation of crude oil from Alberta during this period averaged 9.2 per cent per annum.

Future supply problems will focus on the availability of imported oil. Freight charges and transportation costs are rising for suppliers. Since the Lower Mainland will probably remain the region with the highest oil demands and since this region is the most distant point from prairie refineries, the future price of oil to consumers will likely continue to rise.

COAL

Coal was discovered at Suquash on Vancouver Island in 1835 and Nanaimo in 1850. Production in the Nanaimo basin began in 1852. The Nanaimo and Comox fields produced virtually all the provincial coal until the Crowsnest Pass fields, which contain excellent coking coal, began production in 1898.

A branch of the CPR was built from Alberta to Fernie in 1898 and the economy of the region prospered. By 1900, rail connections to Trail and Grand Forks permitted shipments to B.C. and U.S. smelters. Coal fields were opened at Nicola-Princeton in 1907, Telkwa in 1918, and on the Peace River in 1923. The output of coal from the Crowsnest has exceeded Vancouver Island production since 1940. In 1953, the Nanaimo field was virtually exhausted, the Tsable River mine in the Comox basin closed, and all mining of coal on Vancouver Island terminated.

The 1973 B.C. coal production was 7,772,338 short tons, mainly from mines in southeastern B.C. However, a very large coal deposit has been discovered in the Dawson Creek region. B.C. Hydro may use this deposit to generate electricity. Exports in 1973, of which 95 per cent were destined for Japan, totalled 7,300,726 short tons.

Legislation related to coal includes the Coal Act and the Coal Mines Regulation Act. The B.C. Coal Task Force was established in the spring of 1975 to look into all aspects of provincial coal development. Executive members on the Task Force represent the BCDMPR (Chairman), B.C. Hydro, the B.C. Energy Commission, the B.C. Department of Economic Development, and the University of British Columbia. Technical members on the Task Force represent the above organizations, and also include consultants. Studies include a resource inventory, mining technology, beneficiation and coal preparation, end uses, supply and demand for coal, and manpower and transportation problems. Proposals will be made to the B.C. cabinet later in 1976.

The present provincial government established a Cabinet Committee on Coal Development, composed of Ministers of the following departments:

- Department of Economic Development (Chairman)
- Department of Mines and Petroleum Resources
- Department of Transport and Communications
- Department of the Environment.

A technical committee composed of the deputy ministers of the departments represented on the Coal Development Committee has been established. Sub-committees have been established for coal developments in various regions of the province. One such sub-committee exists for northeast B.C. The North East Coal Development Project is described below.

Northeast B.C. is located in B.C. Census Division 23 (the Peace River - Laird Regional District) and has an area of 80,542 sq. mi. (209,409 sq. km.). The development of coal resources in this region is seen by the provincial government as a catalyst for overall development in this region of the province. The area of coal development is an area lying south of the Peace River plus Fort St. John, Hudson Hope, and Taylor; an area of 10,000 sq. mi. (26,000 sq. km.). A Federal-Provincial Committee on North East British Columbia Coal Development has been established; the federal Department of Regional Economic Expansion (DREE) is the federal lead agency and the B.C. Department of Economic Development is the provincial lead agency.

ELECTRICITY

The major producer of electricity in B.C. is the B.C. Hydro and Power Authority, which was established under the B.C. Hydro and Power Authority Act, 1962. Environmental impact studies of power generation projects and transmission lines are co-ordinated by the Special Projects Unit of the Environment and Land Use Committee Secretariat through referrals to other provincial government agencies. Such environmental impact studies are composed of a three-stage review process. This process, as related to power generation projects, is outlined below.

ENVIRONMENTAL IMPACT STUDY

Stage 1 - Project Justification

Energy demand projections are being developed by B.C. Hydro for five- and

10-year planning periods. The Secretariat plays no direct role in this phase for energy developments, but Secretariat economists do prepare demand studies for other projects, such as new transportation routes.

Stage 2 - Evaluation of Alternatives

Following the demonstration that additional power generation is required, a number of alternative projects are identified and the economic, environmental, and social implications are evaluated.

The Special Projects Unit is working with B.C. Hydro and provincial government agencies to develop a set of guidelines that can be applied to broad regional assessments of such projects. Both comprehensive and comparative information is being developed for a number of alternative projects to aid decision-making. A draft set of criteria for evaluating impacts on natural resources has been completed; a similar set for assessing social impacts is being developed.

Stage 3 - Development of an Environmental and Social Impact Statement

Upon the selection of a specific power generation project, an assessment is made of site-specific impacts of the project on the natural and social environments. Possible compensatory or mitigatory measures for reducing these impacts are also identified.

For power projects, this process is developed between the Special Projects Unit and the Water Resources Service of the Department of Environment. For projects requiring Crown land lease permits such as transmission lines, pipelines, or developments on foreshores, the Unit works with the Lands Service of BCDOE. Specific government agencies are responsible for monitoring recommended environmental and social mitigatory measures during and following project construction.

ELECTRICAL ENERGY PRODUCTION FACILITIES

Since most of B.C.'s electrical energy production is supplied by hydro-electric projects, large-scale environmental and social disruptions are possibly due to the inundation of land and the displacement of communities and transportation facilities. Large-scale hydro-electric projects can result in the loss of river fish spawning opportunities and possible changes to estuarial systems. Other land use issues associated with the siting of electrical energy production facilities in B.C. are; the loss of forest production, which may affect regional allocation of timber; loss of wildlife habitat; loss of agricultural lands; and the destruction of certain recreational opportunities.

Thermal plants also create environmental problems. Such problems are related to the mining of coal; the discharge of solid, liquid, and gaseous effluents; and land acquisition requirements.

As previously outlined, environmental impact assessments are undertaken for all major hydro and thermal projects. Major supporting legislation of these projects includes the B.C. Environment and Land Use Act, B.C. Land Act, and the B.C. Water Act.

DEPARTMENT OF MINES AND PETROLEUM RESOURCES (BCDMPR)

This department (formed in 1874) comprises two branches - the Mineral Resources Branch and the Petroleum Resources Branch. All mine development is administered through this department. The BCDMPR is responsible for bringing the requirements of all other agencies to the attention of the developer, and for ensuring that developers conform to these requirements. Public hearings are held to exchange information about mine developments with the affected people in the area.

MINERAL RESOURCES BRANCH

The Geological Division of this branch provides information on the quantity and distribution of coal and mineral resources in B.C. to assist in the discovery, exploration, development, and use of these resources. Major programs include mineral evaluation assessments of land and the production of maps for land use planning purposes. Mineral Deposit Land Use maps, showing the mineral potential of the land, are produced at a scale of 1:250,000. These maps were designed for planning and are useful also as guides to exploration.

The Titles Division, under the Chief Gold Commissioner, administers the Mineral, Placer Mining, and Coal Acts which control the acquisition of title to all solid minerals with the exception of sand, gravel, and some industrial minerals which are handled under the Land Act.

The Inspection and Engineering Division inspects coal mines, metal mines, and quarries and is responsible for safety, engineering standards, and conservation on all mining properties. Reclamation sections of the Coal Mines Regulation Act and the Mines Regulation Act are administered by this division. The Lands Service of the B.C. Department of Environment issues leases on Crown lands. The onus is on the owner or agent of every surface mine to carry out a program for the protection and reclamation of the surface of the land and water courses that are affected thereby. A surface mine by definition includes a quarry. The owner is responsible for the filing of a report before commencing preparatory work for production from a quarry. The report must outline the location and extent of the quarry, the location of waterways and habitations, particulars of the nature of the quarry, and the present use of the land. The report must also include a program of reclamation during the operation as well as on its discontinuance. The program must refer particularly to the location of the land, its effect on life in the vicinity, and its general appearance. The report must indicate the potential use of the land with regard to its best and fullest use and its importance for existing and future forestry, grazing, water, recreation, wildlife, or mineral use. Security, the amount of which is

determined by the Lieutenant-Governor in Council, not to exceed \$500.00 per acre, is held by the Minister to ensure performance, or it may be used for reclamation purposes. Reclamation must take place during the entire production period or a deposit must be made annually to provide the funds necessary to carry out the program. In case of a dispute that the Minister cannot reconcile, an appeal is made to the Lieutenant-Governor in Council, who may hear the appeal or appoint a Cabinet appeal committee or set up an appeal board, whose decision is final. Where the reclamation program has not been performed satisfactorily, the Minister may apply any part of the security toward payment of the cost of the work to be completed. It is an offence not to comply with the provisions. The Minister may order the operation to cease and close down the mine upon failure to comply with the reclamation plan.

Under the Department of Mines and Petroleum Resources Act, public funds may be available for the construction or repair of roads and trails into mining areas. This program, with some assistance from a Roads to Resources agreement between the federal and B.C. governments, has resulted in the construction of the Stewart-Cassiar Road. The B.C. Department of Highways undertook the construction on behalf of BCDMPR. Such roads provide access not only to mineral resources but to recreational, fishing, hunting, and logging opportunities.

PETROLEUM RESOURCES BRANCH

The Titles Division handles all matters related to Crown petroleum and natural gas rights. Regulations regarding petroleum development roads are also administered. The Drilling and Land Report, published monthly, shows the location of all forms of title - permits, licences, leases, and drilling reservations, plus acreage synopses. The Engineering Division controls all drilling and production for petroleum and natural gas and is responsible for conservation. The Geology Division handles the geological research of petroleum lands.

The Conservation Committee was established on October 11, 1957, under the Petroleum and Natural Gas Act. It is responsible to the Minister of MPR and

its duties are:

- to advise the Minister on questions related to conservation, which the Minister requests from the Committee, in writing; and
- to deal with questions of conservation and production as may arise between two or more operators in the same field or between operators and the Branch when appeals on such questions are made to the Minister and are referred to him by the Committee.

DEPARTMENT OF ENVIRONMENT

LANDS SERVICE

The Lands Service issues leases on vacant unreserved Crown land for the purpose of quarrying. If an unsurveyed area is desired, the applicant, at his own expense, must have the area surveyed before a lease is granted. The maximum term of a lease is twenty years with the possibility of extension following examination by a land inspector.

Rental for a quarrying lease, with the exception of limestone, is set at a rate of not less than \$2.00 per acre per annum or \$100.00 per annum, whichever is the greater. Rental for a limestone quarrying lease is set at not less than \$2.00 per acre for the first year and \$10.00 per acre per annum for the ensuing five-year period. All leases are subject to adjustment at the discretion of the lessor for each successive five-year period that the lease remains in force.

WATER RESOURCES SERVICE

Under the Pollution Control Act, the Industrial Division of the Pollution Control Branch processes applications for pollution control permits. This includes the mining, mine-milling, and smelting industries, and the chemical and petroleum industries of B.C. Controls are established by the Pollution Control Branch for discharges to water and/or air, which will satisfactorily limit pollution in accordance with the Pollution Control Act. Details of

these pollution controls for the industries named above may be found in two reports issued by the Water Resources Service.³⁹

The Pollution Control Branch also processes applications for sand and gravel, concrete, smelter, and fertilizer operations. Pollution control standards have been established for these operations.

The Water Rights Branch has the administrative responsibility of issuing water licences permitting diversion or damming of any water course by any of the industries mentioned above.

³⁹ B.C. Water Resources Service, Pollution Control Objectives for the Mining, Mine-Milling, and Smelting Industries of British Columbia, December 1973, 25 pp., and Pollution Control Objectives for the Chemical and Petroleum Industries of British Columbia, March 1974, 36 pp.

X

TRANSPORTATION

The provision and location of transportation facilities, particularly highways, are key factors in land use issues. Environmental consequences of developing transportation facilities are considered for each proposed project. Environmental and socio-economic impact assessments are undertaken by the ELUC Secretariat and the Lands Service of the Department of Environment. The three stages of this assessment process applied to transportation projects are as follows:

- Proposed projects must demonstrate environmental, social, and economic justification.
- A number of alternative transportation corridors are assessed from environmental, social, and economic viewpoints.
- Site-specific routing studies are undertaken in a selected corridor.

Provincial departments responsible for transportation and communications related to land use planning are the Department of Highways and the Department of Municipal Affairs.

DEPARTMENT OF HIGHWAYS (BCDH)

Pursuant to the Department of Highways Act and the Highway Act, the BCDH plans, builds, and maintains the provincial highway system. In the past, the BCDH developed the provincial highway networks on an ad hoc basis, usually based on short-term local and regional needs. Today, the BCDH relies heavily on referrals to resource and planning agencies in order to identify critical environmental values, key land management requirements, and community needs.

DEPARTMENT OF MUNICIPAL AFFAIRS

The Bureau of Transit Services is responsible for programs that establish new transit services in rural and urban communities. The objective of the bureau is to provide alternative transportation to the automobile, with particular emphasis on public transportation. The bureau determines public transportation requirements within and between various regions, advises the provincial government on policy matters related to provisions of public transportation, and implements public transit programs in B.C.

A major aim of the Transit Program is to bring transit to communities in B.C. Services have been greatly expanded in the lower Mainland and Victoria, and new services are operating in Nanaimo and Kitimat. Transit planning has begun in several Interior communities, including Prince George.

XI

WATER⁴⁰

The water area of B.C. is 6,976 sq. mi. (18,138 sq. km.) and represents 1.9 per cent of the total area of the province. The emphasis of the B.C. economy on renewable and non-renewable primary industry creates large demands on existing water resources for both consumptive and non-consumptive uses.

There are extreme geographical and seasonal variations in water flow patterns throughout B.C. The western slopes of the coastal mountains receive over 100 inches (250 centimetres) of rain annually, while some interior valleys experience prolonged summer drought and have precipitation levels below 10 inches (25 centimetres) per annum. About 50 per cent of available runoff flows through undeveloped coastal areas. A heavy concentration of human and industrial activities in the Fraser Delta, on Vancouver Island, and in the Okanagan-Kootenay valleys, places considerable demands on water supplies.

LAND RECLAMATION⁴¹

The majority of watercourses in B.C. have narrow floodplains with fertile soils. Intensive agriculture requires drainage and dyking works. Arable bench lands above river valley bottoms require irrigation in order to produce crops. Dry farming has developed in the central interior plateau regions and in the Peace River area.

⁴⁰Environment Canada, Canada Water Yearbook, 1975, 232 pp.

⁴¹Water Resources Service, Some Observations on Water Management in British Columbia. 17 pp.

The topographic and climatic conditions of B.C. greatly influence land reclamation activities. Approximately 300,000 ac. (120,000 ha.) of land are being irrigated and 230,000 ac. (92,000 ha.) are protected by dyking and drainage works. Over one-third of the cultivated acreage in the province is dependent on land reclamation works. Additional details of irrigation, dyking, and drainage and stream bank protection may be found in "Some Observations on Water Management in British Columbia".

GOVERNMENT AGENCIES AND LEGISLATION

Following is a discussion of the provincial agencies and legislation related to water planning in B.C. Federal-provincial programs are also discussed.

DEPARTMENT OF ENVIRONMENT (BCDOE)

The Water Resources Service of BCDOE has jurisdiction over all matters pertaining to water. The Water Rights Branch (WRB) controls the use of all surface waters under the Water Act. Activities of the WRB include:

- issuing licences for residential, industrial, irrigation, power and storage uses;
- planning and inspecting power developments; and
- providing engineering and administrative support to Improvement Districts.

The WRB administers the operation of irrigation, dyking, water supply, drainage, sewer and other works, etc. under the Water Act. Landowners can form together to build and maintain a water-oriented structure and tax the benefitting lands to pay for the improvement.

The Water Investigations Branch is responsible for technical water resource matters not directly related to administering the Water Act or Pollution Control Act. Work of this Branch includes surveys and investigations of irrigation and water supply, flooding and erosion, hydrology, ground-water, basin planning, aquatic weed research, water resource management studies, participation in federal-provincial water-related studies, and implementation of federal-provincial programs.

The Pollution Control Branch administers the Pollution Control Act under which permits are required for all discharges of waste material to land, water, or air. Objectives have been set for all industrial discharges and objectives for municipal wastes are currently being formulated. Municipal sewerage works are certified under this Act. The Pollution Control Branch also administers the Litter Act, which prohibits the discharge of litter on land or fresh water and the discharge of domestic sewage from campers, boats, etc. into water.

The inspector of the Dykes Office supervises dykes operated by dyking districts under the Dykes Maintenance Act.

DEPARTMENT OF MUNICIPAL AFFAIRS

The Municipal Act prohibits the fouling or obstruction of waterways.

OTHER AGENCIES

Other B.C. government departments and agencies that administer programs related to water are:

- Department of Health;
- B.C. Environment and Land Use Committee and the ELUC Secretariat; and
- B.C. Hydro and Power Authority.

FEDERAL-PROVINCIAL PROGRAMS

Two such programs are the Fraser River Flood Control Program and the Okanagan Basin Study Agreement.

Fraser River Flood Control

This program began in 1968 with the objective to alleviate flooding in the Fraser River Valley. Two components comprise the program; namely, the Lower

Fraser Valley Flood Control Program and the Fraser River Upstream Storage Study. The program cost, including construction works, was estimated at \$61 million in 1974.

The Lower Fraser program provides protection for land from flooding by rehabilitating existing dykes, constructing new dykes, increasing river bank protection, and improving internal drainage facilities. This program is expected to continue until 1978 or later.

The Upstream Storage Study, near completion in 1975, provides an integrated plan for additional flood protection, plus utilization and control of water resources in the Fraser River basin. Flood protection in the lower river basin is stressed through the use of dykes, upstream storage reservoirs, and diversions.

Okanagan Basin Study Agreement

This agreement was signed in October, 1969, and was completed in 1974. It involved a study to examine water quality and quantity conflicts in the Okanagan Valley. A comprehensive plan was produced for the development and management of the valley's water resources over the next 50 years. Various water management alternatives were identified using environmental, social, and economic criteria. Forty-five recommendations have been made with respect to water quantity and quality, fisheries, and recreation.

XII

CONCLUSIONS

Interest in a provincial land policy began in 1952 when the Lower Mainland Regional Planning Board was established. In 1965, Regional Districts were formed throughout B.C. and subsequently these districts were required to prepare regional plans. In 1971, the Environment and Land Use Act was passed and the Environment and Land Use Committee (ELUC) formed. This committee makes decisions on resource and land use questions which have province-wide significance. Such decisions include the establishment of agricultural land reserves, the exclusion of mining activities from provincial parks, and the planning of the North Western development scheme as an integrated exercise. The Environment and Land Use Secretariat (ELUCS) was created in 1973 as technical support staff for ELUC. ELUC and ELUCS have a monitoring system for environment and land use matters and thus land use planning and resource management.

Following the election of the NDP government in 1972, the Land Commission Act was passed in 1973. The initial purposes of the Land Commission were to establish and administer an agricultural zoning law for the entire province, and, to develop additional recommendations for preserving farmland and farming.

In December, 1975, the Social Credit party took office. To date, very few changes have been made to land use policies that existed under the NDP government. A Department of Environment was created by the Socreds and the ELUC and ELUCS report to the Minister of Environment. The Land Commission and its functions have not been changed by the new government. Both the farming/ranching community and municipalities and public agencies strongly support the Commission. An added benefit of the Land Commission Act has

been the strengthening of the Regional District structure.

There is a wait-and-see attitude in B.C. regarding Social Credit land-related policies. Multiple land use planning is progressing on a coordinated basis. Future land-oriented policies, programs, and legislation will play a significant role in moulding the economy of B.C. and affecting the liveability of the province for its citizens.

APPENDIX ICHECKLIST - LAND USE AND RESOURCE JURISDICTIONS

In any given area of the Province, the following land and resource jurisdictions may be encountered:

a) Federal Jurisdictions

These are exclusively exercised over Indian reserves, military areas, federal harbours, and federal transportation lands and corridors. The regulatory management of anadromous fish is also a federal responsibility.

b) Municipal Jurisdictions

Municipal authorities control the allocation of private lands for specific purposes within their boundaries through their powers to zone and to regulate subdivision and building standards pursuant to the Municipal Act. These powers are restricted in ALRs to allocation of land for compatible uses only.

c) Regional District Jurisdictions

Regional district boards exercise direct control over private lands in unorganized areas pursuant to the Municipal Act. Again, these powers are restricted in ALRs. The boards may also exercise indirect controls on private lands within municipalities where by-laws to that effect have been approved, as in the case of the applicability of the Lower Mainland Regional Plan to the various municipalities within the Greater Vancouver Regional District.

d) Resource Department Jurisdictions

The resource departments exercise direct land use jurisdictions over most of the Province's Crown lands and resources, including the following:

- Forest tenures pursuant to the Forest Act and administered by the BCDF:
 - Timber Sale Licences;
 - Tree Farm Licences;
 - Pulpwood Harvesting Agreements;
 - Old Temporary Tenures.
- Water tenures pursuant to the Water Act and administered by the BCWRS:
 - Water Licences;
 - Water Improvement Districts;
 - Water-Users' Communities.
- Grazing permits pursuant to the Grazing Act and administered by the BCLS, BCDF or BCPPB.
- Ecological reserves pursuant to the Ecological Reserves Act and administered by the BCLS.
- Provincial parks pursuant to the Park Act and administered by the BCPPB, and regional parks pursuant to the Regional Parks Act and administered jointly by the BCPPB and local authorities.
- Mineral tenures pursuant to a variety of mining legislation, including the Mineral Act, the Placer Mining Act and the Coal Act, and administered by the BCDMPR:
 - Free Miner's Certificates;
 - Mineral Claims;
 - Mineral Leases.
- Petroleum and natural gas tenures pursuant to the Petroleum and Natural Gas Act, 1965, and administered by the BCDMPR:

- Permits;
 - Licences;
 - Leases;
 - Reservations.
- Special-purpose leasing arrangements pursuant to the Land Act and administered by the BCLS:
 - Licences of Occupation;
 - Residential Leases;
 - Recreational Cottage-Site Leases;
 - Agricultural Leases;
 - Foreshore Leases;
 - Subdivision Approvals.
 - Vacant Crown lands, administered by the BCLS pursuant to the Land Act.

e) Regulatory Departmental Jurisdictions

In addition to the many direct forms of land use and resource controls exercised by provincial departments, the latter also perform numerous regulatory functions that influence the evolution of land use patterns and resource development. Regulation may be of the following types:

- Subdivision approval procedures in unorganized areas pursuant to the Land Registry Act and administered by the BCDH.
- Regulation of all municipal and regional district functions by the BCDMA pursuant to the Municipal Act.
- Regulation of public health aspects of the servicing of subdivisions and other urban developments by the BCDHe pursuant to the Health Act.
- Regulation of activities along provincial highways, and particularly in the vicinity of controlled-access highways by the BCDH pursuant to

the Department of Highways Act, the Highway Act, and the Controlled Access Highways Act.

- Regulation of the construction and operation of railways, pipelines and industrial access roads by the BCDTC pursuant to the Railway Act, the Pipelines Act, the Mines Right-of-Way Act, and the Industrial Transportation Act.
- Regulation of mining operations by the BCDMPR pursuant to the Mines Regulation Act and the Coal Mines Regulation Act.
- Regulation of municipal and industrial waste discharges by the BCWRS pursuant to the Pollution Control Act, 1967.
- Regulation of all hunting and sport fishing activities by the BCFWB pursuant to the Wildlife Act.
- Regulation of activities on sites of archaeological and historical interest by the ASAB and HSAB pursuant to the Archaeological and Historic Sites Protection Act.

f) Special Development Agency Jurisdictions

The Crown corporations, etc., which are responsible for public developments are generally granted powers to control activities on, and immediately adjacent to, their properties. The BCHPA and BCR are also granted extensive expropriation rights. Other development agencies are empowered to acquire land through normal purchase procedures.

g) Special Regulatory Agency Jurisdictions

- The BCLC administers all lands in ALRs pursuant to the Land Commission Act.

- The BCEC regulates the construction and operation of energy and telecommunications utilities pursuant to the Energy Act.
- The BCAA influences land uses through the impacts of its property taxation assessments pursuant to the Assessment Act.

Sources: R.K. Crook, Towards a Land Use Management Philosophy in British Columbia, pp. 17-20.

APPENDIX II
LAND COMMISSION ACT
AGRICULTURAL LAND

OBJECTS AND POWERS (SECTION 7)

- 7.1 (a) PRESERVE AGRICULTURAL LANDS for "FARM USE" ie. bonafide farm purposes.
- (b) ENCOURAGE ESTABLISHMENT and MAINTENANCE of "FAMILY FARMS" and LAND IN AGRICULTURAL LAND RESERVES (ALR'S) for a use compatible with PRESERVATION OF FAMILY FARMS and FARM USE OF THE LAND.
- (h1) ADVISE and ASSIST MUNICIPALITIES and REGIONAL DISTRICTS in PREPARATION and PRODUCTION of LAND RESERVE PLANS (ALR'S) required for the purpose of this act.

DESIGNATION (SECTION 8)

- 8.1 LAND COMMISSION MAY (with approval of Lieutenant-Governor in Council) DESIGNATE LAND (including Crown land) SUITABLE FOR FARM USE as "AGRICULTURAL LAND".
- 8.2 WITHIN 90 DAYS OF ACCEPTANCE OF THIS ACT, EVERY BOARD OF EVERY REGIONAL DISTRICT and EVERY MUNICIPALITY NOT WITHIN A REGIONAL DISTRICT shall (with the advice of the Land Commission) ADOPT by BY-LAW an ALR, and FILE THE BY-LAW AND PLAN WITH THE LAND COMMISSION.
- 8.3 BY-LAWS SHALL NOT BE ADOPTED UNTIL THERE HAS BEEN A PUBLIC HEARING AND AN AFFIRMATIVE VOTE OF THE MAJORITY.
- 8.5 WHERE THE LAND COMMISSION agrees with LAND RESERVE PLANS IT SHALL DESIGNATE THAT LAND AS ALR.
- 8.6 LAND COMMISSION may RECOMMEND AMENDMENTS TO LAND RESERVE PLANS FILED BY MUNICIPALITIES.
- 8.7 WHEN A MUNICIPALITY FAILS TO SUBMIT A PLAN, THE LAND COMMISSION SHALL PREPARE AND SUBMIT A PLAN TO LIEUTENANT-GOVERNOR IN COUNCIL FOR APPROVAL AFTER
- 8.8 A PUBLIC HEARING
- 8.9 AND UNDER THE TERMS OF THE PUBLIC INQUIRIES ACT.
- 8.10 LIEUTENANT-GOVERNOR IN COUNCIL MAY APPROVE PLAN OR RECOMMEND ALTERNATIVES.

EXCLUSION (SECTION 9)

- 9.1 LIEUTENANT-GOVERNOR may upon application of MUNICIPALITY, REGIONAL DISTRICT, LAND COMMISSION, HIMSELF EXCLUDE LAND FROM ALR'S.
- 9.2 AGGRIEVED LAND OWNER IN ALR MAY APPLY TO LAND COMMISSION FOR EXCLUSION.
- 9.5 BUT IF LAND WAS ZONED AGRICULTURAL PRIOR TO DECEMBER 21, 1972, OWNER MUST FIRST APPLY TO MUNICIPALITY or REGIONAL DISTRICT.
- 9.7 AGGRIEVED OWNER MAY APPEAL TO ENVIRONMENT AND LAND USE COMMITTEE IF AUTHORIZED BY MUNICIPALITY, REGIONAL DISTRICT, or TWO MEMBERS OF THE LAND COMMISSION.
- 10.1 NO PERSON SHALL OCCUPY or USE ALR LAND FOR OTHER THAN FARM USE EXCEPT AS ALLOWED BY
 - 1. THIS ACT
 - 2. THE REGULATIONS UNDER THIS ACT
 - 3. THE ORDER OF THE LAND COMMISSION.
- 10.4(a) NO MUNICIPALITY, REGIONAL DISTRICT AUTHORITY SHALL AUTHORIZE (except as permitted by this act) ALR LAND TO BE USED FOR OTHER THAN FARMLAND or BUILDINGS TO BE ERECTED THEREON EXCEPT FOR FARM USE OR RESIDENCES FOR FARM HANDS.
- 10.4(b) NO REGISTRAR OF TITLES SHALL ACCEPT A SUBDIVISION OF LAND ALL OR PART OF WHICH IS ALR LAND.

EXEMPTIONS (SECTION 11)

- 11.1 LAND PARCELS LESS THAN 2 ACRES WITH SEPARATE TITLE AS OF DECEMBER 21, 1972.
- 11.2 LAND WAS IN A NON-CONFORMING USE (that was otherwise not illegal) FOR AT LEAST 6 MONTHS PRIOR TO DECEMBER 21, 1972.
- 11.2(d) EXEMPTION DOES NOT APPLY IF USE IS CHANGED TO A USE OTHER THAN FARM USE WITHOUT LAND COMMISSION APPROVAL,
 - (e) ANY OTHER ACT PROHIBITS THE USE,
 - (f) ANY PERMIT ISSUED UNDER ANOTHER ACT or BY-LAW EXPIRES.
- 11.3 IF SOLD, LEASED, TRANSFERRED or OTHERWISE DISPOSED OF EXCEPT AS PERMITTED BY THE LAND COMMISSION.
- 11.4 LAND COMMISSION MAY HEAR APPLICATIONS FOR EXEMPTIONS and IMPOSE CONDITIONS OR TERMS DEEMED NECESSARY AND DECISIONS OF LAND COMMISSION ARE FINAL EXCEPT ON A QUESTION OF LAW OR EXCESS OF JURISDICTION.

GREENBELT LANDOBJECTS AND POWERS

- 7.1(c) PRESERVE GREENBELT LAND IN AND AROUND URBAN AREAS.
- 7.1(d) ENCOURAGE ESTABLISHMENT and MAINTENANCE OF LAND IN GREENBELT RESERVE FOR A USE COMPATIBLE WITH PRESERVATION OF GREENBELT.
- 7.2(a) PURCHASE or ACQUIRE (except by expropriation including Crown land) LAND THE PRESENT CONDITION or FUTURE POTENTIAL OF WHICH MERITS PRESERVATION AS GREENBELT BY REASON OF AESTHETIC QUALITY or LOCATION IN AND AROUND URBAN AREAS.

IMPLEMENTATION

LAND MUST BE OWNED BY LAND COMMISSION BEFORE IT CAN BE ZONED AS GREENBELT LAND RESERVE.

LANDBANK LANDOBJECTS AND POWERS

- 7.1(e) PRESERVE LANDBANK LAND HAVING DESIRABLE QUALITIES FOR URBAN or INDUSTRIAL DEVELOPMENT AND RESTRICT SUBDIVISION and USE FOR OTHER PURPOSES.
- 7.1(f) ENCOURAGE ESTABLISHMENT and MAINTENANCE OF LAND IN LANDBANK LAND RESERVES FOR A USE COMPATIBLE WITH AN ULTIMATE USE FOR INDUSTRIAL or URBAN DEVELOPMENT.
- 7.2(b) PURCHASE or ACQUIRE (other than by expropriation) LAND (including Crown land) HAVING DESIRABLE QUALITIES FOR URBAN or INDUSTRIAL DEVELOPMENT or REDEVELOPMENT AS LAND BANK LAND.

IMPLEMENTATION

LAND MUST BE OWNED BY LAND COMMISSION BEFORE IT CAN BE ZONED AS LAND BANK LAND RESERVES.

PARKLAND RESERVESOBJECTS AND POWERS

- 7.1(g) PRESERVE PARKLAND FOR RECREATIONAL USE.
- 7.1(h) ENCOURAGE ESTABLISHMENT and MAINTENANCE OF LAND IN PARKLAND RESERVES FOR A USE COMPATIBLE WITH ANY ULTIMATE RECREATIONAL USE.
- 7.2(c) PURCHASE or ACQUIRE (except by expropriation) LAND (including Crown land) HAVING DESIRABLE QUALITIES OR POTENTIAL FOR RECREATIONAL USE AS PARKLAND.

IMPLEMENTATION

LAND MUST be OWNED BY LAND COMMISSION BEFORE IT CAN BE ZONED
AS PARKLAND RESERVES.

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