PROVINCE OF BRITISH COLUMBIA

MINISTRY OF FORESTS

HON. T. M. WATERLAND, *Minister* J. S. STOKES, *Deputy Minister*

REPORT

of the

FOREST SERVICE

YEAR ENDED DECEMBER 31, 1976

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1977

VICTORIA, B.C., JUNE 13, 1977.

Colonel the Honourable WALTER S. OWEN, Q.C., LL.D.,
Lieutenant-Governor of British Columbia.

MAY IT PLEASE YOUR HONOUR:

Herewith I respectfully submit the Annual Report of the Forest Service for 1976.

T. M. WATERLAND
Minister of Forests

The Honourable T. M. Waterland,
Minister of Forests,
Victoria, B.C.

SIR: This is the Annual Report of the Forest Service for 1976.

J. S. STOKES
Deputy Minister of Forests

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FOREST SERVICE DIRECTORY

Executive Committee

J. S. STOKES, Deputy Minister of Forests, Victoria
E. L. YOUNG, Chief Forester, Victoria
R. W. ROBBINS, Assistant Chief Forester (Operations), Victoria
W. YOUNG, Assistant Chief Forester (Resource Management), Victoria
P. J. J. HEMPHILL, Director of Services, Victoria
J. E. MILROY, Director, Range Branch, Victoria

Staff Consultant

J. A. K. REID

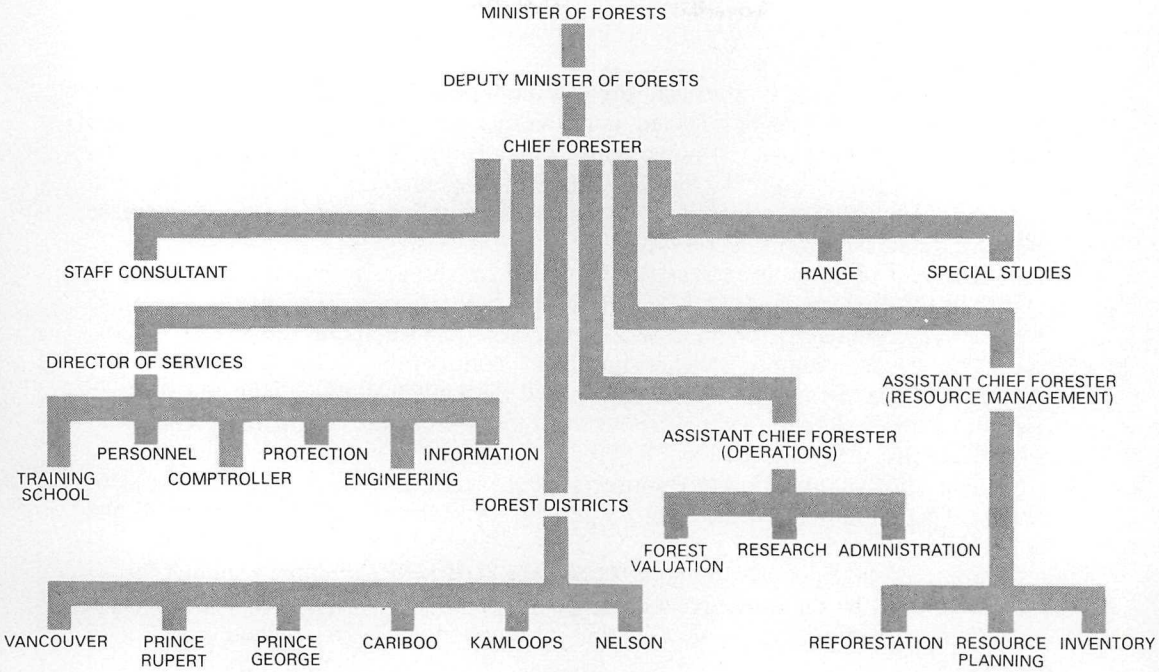
Staff Division Heads

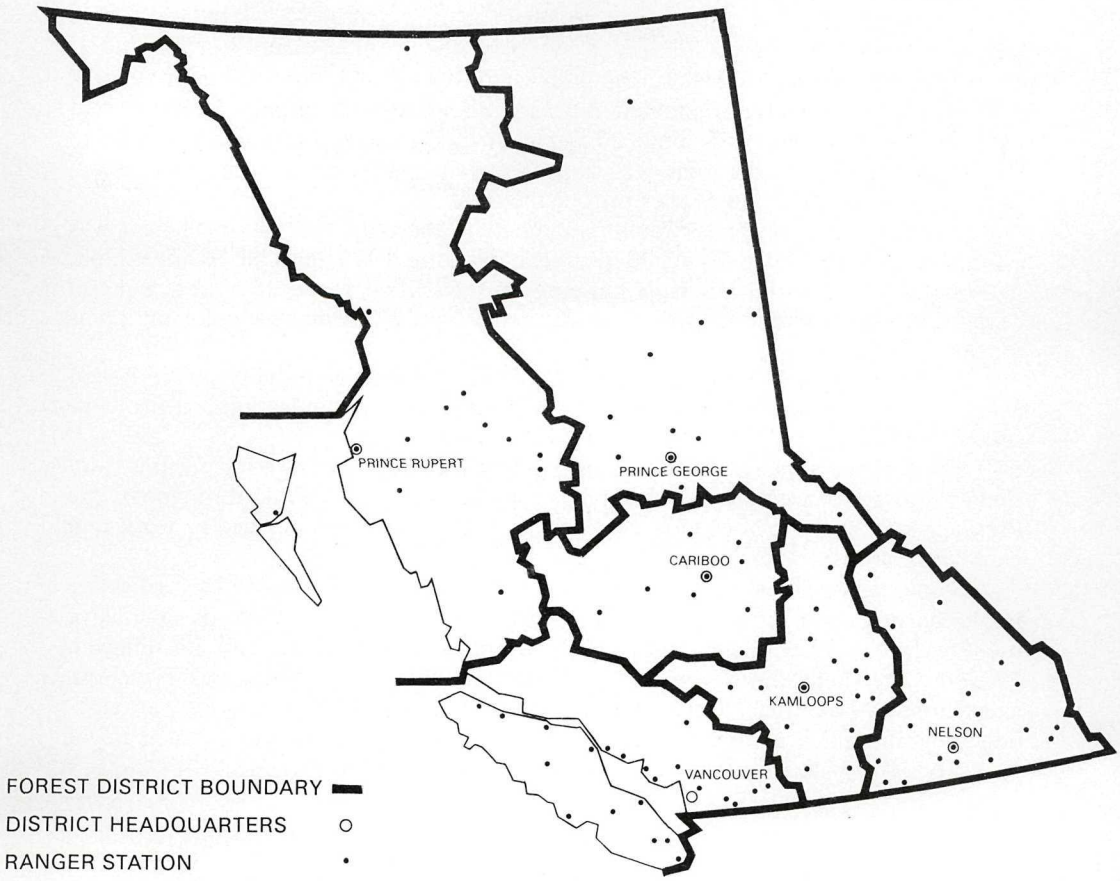
A. M. BRAND, Personnel Officer-in-charge, Personnel Division, Victoria
J. B. BRUCE, Forester-in-charge, Reforestation Division, Victoria
J. H. CARRADICE, Director, Forest Service Training School, Surrey
D. R. GLEW, Forester-in-charge, Inventory Division, Victoria
C. J. HIGHSTED, Forester-in-charge, Resource Planning Division, Victoria
E. KNIGHT, Manager, Special Studies Division, Victoria
L. W. LEHRLE, Forester-in-charge, Engineering Division, Victoria
R. W. LONG, Departmental Comptroller, Victoria
E. H. LYONS, Forester-in-charge, Information Division, Victoria
D. H. OWEN, Forester-in-charge, Protection Division, Victoria
A. B. ROBINSON, Forester-in-charge, Administration Division, Victoria
R. D. THOMAS, Forester-in-charge, Valuation Division, Victoria
G. C. WARRACK, Forester-in-charge, Research Division, Victoria

District Foresters

W. G. BISHOP, District Forester, Vancouver
A. H. DIXON, District Forester, Kamloops
M. G. ISENOR, District Forester, Prince George
J. R. JOHNSTON, District Forester, Nelson
A. C. MACPHERSON, District Forester, Prince Rupert
E. W. ROBINSON, District Forester, Cariboo

FOREST SERVICE ORGANIZATION





CHIEF FORESTER'S REPORT

In many respects 1976 was a progressive year in terms of economics, planning, and social implication.

Although it didn't approach the "boom" period of several years ago, the financial picture of 1976 reflected considerable improvement over the previous year. Total revenue from stumpage and other forest resource sources was $63,-018,456, compared with $57,979,807 in 1975—an increase of nearly 9 per cent.

Amounts charged against logging operations totalled $66,564,449, an increase of more than 52 per cent over 1975.

The year also saw an increase in the timber harvest of the Province: 13,182,376 cunits in the Interior, and 11,368,726 cunits on the Coast. The figures for 1975 were 10,139,399 cunits for the Interior and 7,545,287 cunits on the Coast.

The general lumber market improved considerably, due primarily to an increase in housing starts both in Canada and the United States. Housing starts in British Columbia for the year were set at 36,500—second only to the record year of 1973 which were recorded at 37,600.

The total value of forest resource product shipments this year has been estimated at $4 billion—an increase of 33 per cent from the $3 billion mark established in 1975.

Some 85,000 people (roughly 9 per cent of British Columbia's labour force) were employed by the forest resource industries.

Our economists report that lumber production in 1976 reached about 9.74 billion board feet, which is nearly 67 per cent of Canada's lumber production, and an increase of some 30 per cent over the previous year.

The year also saw an increase in plywood production—2.14 billion square feet, a 20-per-cent jump over 1975.

Although off to a slow start, the pulp sector also showed signs of improvement with the year's production estimated at 5.75 million tons—an increase of 32 per cent over the previous year and about 27 per cent of the entire Canadian production. Paper production for the year was approximately 2.13 million tons, with newsprint accounting for about 68 per cent of the total.

By year's end the total value of shipments in the pulp and paper segment was estimated at $1.69 billion—up 22 per cent over the 1975 level of $1.38 billion.

Although the trend has been building up for several years, 1976 saw a literal "explosion" in constructive input from the general public in matters involving plans for our forest resources.

In the interest of strengthening the credibility and accountability of the Forest Service it is essential we establish two-way lines of communication with a concerned public.

For the first time, on a large scale, public meetings, information forums, and similar programs were staged at many widely scattered points throughout the Province. In many regions citizens' advisory committees were formed to work and plan with Forest Service personnel.

Some significant strides were made in this direction during 1976. Effective public participation took place in forest resource planning in numerous regions of the Province. They included the City of Nelson's watershed, and its adjacent Blewett watershed; the Seven Sisters Mountain between Terrace and Hazelton; and Christina Lake, near Grand Forks. In the Smithers PSYU a public participation program which commenced early in the year is proving so successful it might well serve as a "planning blueprint" for other regions of the Province.

Hydro development plans of the year included the construction of a dam near Revelstoke. For the first time the Forest Service launched legal objections to the proposed flooding of thousands of acres of forest land. By year's end the dam proposal was still being negotiated.

Undoubtedly the administrative highlight of 1976 was the completed report of forest economist Dr. Peter Pearse—a one-man Royal Commission which conducted a Province-wide study into practically all aspects of our forest resources. His two-volume report was released in November.

Before year's end a special Forest Service Advisory Committee, headed by forest consultant Robert Wood, was appointed to make a detailed study of Dr. Pearse's numerous recommendations.

The special committee was given a year to submit recommendations. Among the objectives of the study is a rewriting of the Province's *Forest Act* (presented originally in 1912 and "Band-Aided" in numerous times since), and a review of the *Grazing Act.*

Another noteworthy planning program is now under way in the Sayward Forest—a quarter of a million acres of fine forest land in the heart of Vancouver Island. The second-growth forest born from the ashes of a great fire nearly 40 years ago is now the target of a special committee charged with formulating a master management plan. This, too, may well become a blueprint for other specific forests elsewhere in British Columbia.

The following pages present summarized program accounts for the year.

FOREST PROTECTION PROGRAM

The Forest Protection Program underwent a number of significant developments in 1976.

The Douglas-fir tussock moth control project in the Jameson Creek area north of Kamloops was continued a second season with 25,000 acres of the total 45,000-acre infestation resprayed with an experimental chemical, Orthene. Results of the 1976 operations have been judged as excellent by monitoring agencies of the Federal Department of Environment and the U.S. Forest Service. This particular insect has been controlled successfully, at least temporarily, with no apparent or known environmental damage.

A concerted effort was made in all six forest districts to augment the detection service of the Forest Insect and Disease Survey in order that operational planning to control some of the widespread infestations encompassing many hundreds of thousands acres of mountain pine beetle, spruce budworm, Douglas-fir, and spruce bark beetles can get under way for 1977. Much essential mapping work was done by students and forestry crews to fill this need.

A number of field training seminars for root rot were held throughout the Province by the Canadian Forestry Service with the co-operation of the Forest Service.

A task force, comprised of staff from Provincial and Federal departments and industrial groups studied the spruce budworm infestation covering 600,000 acres in the Fraser Canyon-Lillooet area and submitted a recommendation to the Forest Service for control of this devastating insect.

The widespread nature and extent of the infestation, combined with the variety of insects involved, forebodes potentially dire consequences for the forest resource if control techniques are not implemented in the near future.

FIRE SUPPRESSION PROGRAM

The 1976 fire season will undoubtedly be recorded as one of the lightest fire seasons for several decades due to the unusually cool, wet weather that prevailed throughout the entire Province much of the season.

A brief period of severe spring hazard developed in the Peace River District. However, by the end of May, the flurry of early season fires, several of considerable size, had subsided with the development of the same cool, wet weather pattern over the remainder of the Province.

The fall months of September and October improved sufficiently, weatherwise, to permit a considerable amount of prescribed burning, at least in the southern half of the Province. As a result, site preparation and hazard abatement are more or less current and no significant backlog will remain for 1977. The northern forest districts unfortunately were not able to accomplish their objectives for prescribed burning this season.

A total of 888 fires was recorded, roughly one third of the annual average during the past 10 years. Direct expenditure by the Forest Service was $2.5 million, with staff overhead costs of overtime and standby to be added. The logging industry and other agencies spent an additional $1.4 million on suppression.

Damage was estimated at $2.6 million, encompassing 140,000 acres (57 000 hectares).

STUDENT SUMMER EMPLOYMENT PROGRAM

After repeated delays, the Student Summer Employment Program got under way early in June. Approximately 2,100 students, disadvantaged, and native Indians were employed on many worth-while forestry and recreation projects at 120 locations throughout the Province. The depressed employment situation in industry would have created real hardship to many of these young people if the Forest Service program in co-operation with the Ministry of Labour "Work in Government Program" had not materialized during 1976.

PUBLIC INFORMATION AND EDUCATION PROGRAM

This past year the Information Division undertook a review of the entire line of publications. Major factors considered were the intent, cost, distribution, and over-all effectiveness.

As a result of this review, the Information Division is exercising greater co-ordination of all printed communications originating from the Forest Service.

Many publications are in the process of being phased out, replaced, redesigned, and several new ones initiated.

After a brief interruption in production, our quarterly resource magazine *ForesTalk* resumed publication—"to encourage interest, discussion, and understanding of British Columbia's forest resources."

Wilderness Survival, a pocket-sized booklet available late in 1975, proved popular enough for a second printing in 1976. By year's end a total of 110,000 copies had been distributed to various organizations throughout the Province. A third printing is scheduled for 1977.

A long-desired tree identification booklet was completed, with first printing set for March 1977.

In our continuing program to encourage the teaching of forestry-oriented subjects in the schools, the Forest Service in co-operation with the Vancouver Environmental Education Program, Faculty of Education, UBC, worked on several new teachers' guides. These included *Forest Appreciation, Measuring the Forest, Classroom Nursery,* and *Forest Nursery Studies,* which were released in 1976. In addition, we assisted in a special program specifically developed for the British Columbia Forest Museum in Duncan.

Two new units, *There's Dirt in the Forest* and *Seeing Through the Trees,* are being prepared for distribution in 1977. Development work is continuing on a forest land use game.

In co-operation with the Pacific Forest Research Centre in Victoria, and the Protection Division, a new film was released, titled "The Trees Are Brown." In co-operation with the Reforestation Division, three films, "Well Heeled," "The Checker," and "Model Planter" were also released.

REFORESTATION PROGRAM

Again in 1976 significant gains were made in the Reforestation Program, with nearly 73 million seedlings planted on a total of 156,000 acres by all agencies—30.5 million by the Forest Service and approximately 42.5 million by various companies.

This was an increase of 8 million trees over the previous year and, whereas the planting done by the Forest Service was reduced from that of 1975, company planting was increased through greater involvement in timber sale harvesting licences. The Forest Service awarded 264 contracts to independent planters (an increase of 33 over last year) and itself undertook 478 planting projects.

Some 104,000 acres, or more than double those of the previous year, were prepared for planting and over 78,000 acres were prepared for natural regeneration. Thinning and clearing of brush was implemented on 4,500 acres to maintain suitable stocking levels and promote growth of immature conifer stands.

The project to control tree-damaging dwarf mistletoe was increased to cover 440 acres in 1976. Forest Service crews in all forest districts examined 370,000 acres of logged and (or) burned land to determine the extent of stocking. Of this acreage, 63 per cent was considered to be satisfactorily stocked.

NURSERY OPERATIONS

Up to 1975 the expansion of nursery facilities and productive capacity dominated nursery activities. During 1976, nursery operations were primarily concerned with increasing the efficiency of production and improving seedling quality within the new facilities.

Seed was sown in the nurseries to produce 80 million seedlings, fully utilizing the container unit capacity of 20 million completed in 1975 and 80 per cent of field capacity by sowing 60 million for bareroot production. The residual field capacity was used to transplant 2-year-old seedlings when over-runs in Interior spruce production coincided with a reduction in acreage harvested and sites prepared in 1975.

Our nurseries produced 73.5 million trees for planting in 1976. In addition, two million seedlings were distributed to public and community agencies as part of the Provincially sponsored urban improvement program, which was initiated after

the withdrawal of the Federal program under which the stock was intended to be used in conjunction with the United Nations Habitat Conference held in Vancouver. The Provincial program was very successful, with many cities and towns participating through locally initiated community urban improvement projects.

Frost heaving at several coastal nurseries experienced early in 1976 resulted in the loss of several million 1-year-old spruce seedlings. Fortunately, these losses were offset by the carry-over of spruce transplants and the effect on scheduled planting projects will be minimized.

Additional container units constructed in 1976/77 will provide a total sowing capacity of 27 million container seedlings for the spring of 1977.

Improvements in cultural practices, stock quality, and efficiency of operation will continue to be emphasized in 1977, with the agricultural specialists, nursery technicians, and operational personnel working as a team to achieve more efficient use of funds and personnel, necessary to produce the high-quality seedlings essential for an effective Provincial reforestation program.

SEED PROCESSING

In 1976, a total of over 1 100 kilograms of seed was withdrawn from seed storage for use in forest nursery sowings and the seed-extraction plant at Duncan processed 12,614 bushels of cones to produce over 3 000 kilograms of additional seed. A mobile seed-extraction unit is scheduled for delivery early in 1977 to regionalize seed-extraction capability.

SEED ORCHARDS

Development activities were continued which included the selection of high-quality parent trees, propagating materials from selected trees, and propagation of stock for seed orchard establishment. To produce trees for use in the orchards, 8,320 grafts were completed at the Skimikin Nursery.

To expedite the collection of propagative material for seed orchard operations, a safety plan has been developed to enable the use of helicopters in this important phase.

The collection of 290 bushels of Douglas-fir cones from four seed orchards (two company, two Forest Service) on southern Vancouver Island marks the beginning of production of significant amounts of improved seed; this represents enough seed to produce 3 million seedlings of superior quality.

FOREST CAMPS

The Forest Service continued its co-operative programs with the Corrections Branch, Ministry of the Attorney-General; Canadian Penitentiary Service; Ministry of Human Resources; and the Federal Agricultural Rehabilitation and Development Agency. Inmates and unemployed again worked on a wide variety of projects ranging from tree-stand tending to fire-fighting.

INVENTORY PROGRAM

Reinventory surveys were completed on five units in 1976: Big Bar, Burns Lake, Ootsa, Skeena, and Smithers Public Sustained-yield Units (PSYU's). In all cases, field measurements were made in metric measure.

The two subsections of the Growth and Yield Section, Inventory Division, completed an active program. The Natural Stands Subsection established 134 new

permanent growth plots in the Finlay PSYU; remeasured 99 ten-year old permanent growth plots in the Niskonlith, Nehalliston, and Salmon Arm PSYU's; and remeasured three experimental plots on Vancouver Island. This subsection also completed the preparation of age 50 site index curves for most Interior species and prepared local yield curves for the main types in 10 PSYU's. The Managed Stands Subsection stem-mapped 308 plots and remeasured 280 plots on the Lower Coast.

The Volume and Decay Section sampled balsam stands in the Smithers PSYU for local loss factors and added more data for a balsam snag recovery study and a larch loss factor study in the Cranbrook and Fernie PSYU's.

The low-level fixed-base air photography program aided the work of the Managed Stands Section (spring and fall photos), for four survey projects (Big Bar, Ootsa, Skeena, and Smithers PSYU's), and completed reconnaisance photography for the proposed 1977 inventory survey projects.

The Draughting, Compilation, and Publishing Sections produced most of the 907 forest cover maps and statements and unit reports for the areas surveyed.

RESEARCH PROGRAM

This was a year devoted to the maintenance of the momentum of existing activities owing to the need to hold expenditures of operating funds at the 1975 level. Programs in tree improvement, silviculture, and forest productivity all made steady advances none the less.

The Douglas-fir breeding program is well into the stage of progeny plot establishment; Interior spruce plus-tree grafts have been planted at the southern Interior forest research centre at Vernon and the grafting stage is well under way for the lodgepole pine program.

Renewed attention was given to ecological classification and the integrated use of soils, climate, and vegetation information in the analysis of silvicultural treatments.

The forest productivity program concentrated on development and implementation of a system of simulators for growth and yield prediction by expediting the organization and rationalization of a regional data base; by calibration and validation of stand and single tree-growth models; and by initiation of analysis of fertilization, thinning, and spacing trials. Work on development of more efficient growth-sampling methods continued, as did the evaluation and testing of modelling approaches and methods of defining competition between trees.

Needs for economic input were clarified and several studies were initiated. Of particular interest is a co-operative study between industry and the Provincial Government concerned with defining the present status of treated stands, both operational and research in the Vancouver Forest District. Also, during the year, forest productivity information needs in the Interior were reviewed and were related to several operational and research initiatives in that zone.

Responsibility for the administrative support of the Forest Research Board and its six committees rests with the Research Division. During the year, these committees were active and made considerable progress toward the co-ordination of a Provincial research effort to assist the managers of the forest resource in the definition, priorization, and achievement of their specific goals.

RANGE MANAGEMENT PROGRAM

In many ways, 1976 was a year of new optimism for Range Administration in British Columbia. Dreams and promises began to materialize. Branch status for the former Range Division with a Director on the Forest Service Executive affirmed intentions of the Service to give greater recognition to its responsibilities under the *Grazing Act*.

During the year the staff complement was increased from 20 to 23 incumbents in the fixed roster of 25 professional positions. When full professional staffing is achieved and the needed and proposed technical and support staff increment materializes in the next year or two, the Branch should be able to cope adequately with its responsibilities for protection, enhancement, and usage of range in the integrated resource management scene. The outlook has materially strengthened morale in the Branch.

Communication with other agencies of government and with industry continued to advance. Ground was prepared, in the latter part of the year, for launching term grazing permits to begin the 1977 grazing season. The rapidly increasing number of Co-ordinated Plan completions attests to their popularity as vehicles for securing abatement of resource-user conflicts.

There was some furtherance of decentralization of Regional Range Agrologists to zone headquarters. Several Branch personnel gained familiarity with Co-ordinated Resource planning by participation at training sessions in eastern Oregon. Range utilization appraisal techniques were shown and taught to select representatives, also in eastern Oregon. Our Special Consultant until August 31, 1976, E. W. Anderson, arranged these beneficial training sessions in his homeland.

The range livestock industry expresses hearty concurrence with the new trends in administration. On their own economic front, however, the industry people "took it on the chin" again in 1976. Haying weather was generally poor throughout the Province. Cut hay was spoiled during curing or it became overmature in the stand while weather improvement was hoped for. Cattle market prices did not strengthen at all from what they were the year before. Bluetongue quarantine procedures in the southern Okanagan area severely upset the equilibrium there.

Range plants, after a slow start in cool, overcast spring and early summer weather, did give high net yields. Ranges stayed green all summer and on into fall. Good fall weather for rustling the animals out helped conserve the limited winter feed. Extensions of grazing permits were granted on an individual basis where need could be met out of satisfactory condition range.

After several damper than normal summers, a trend to trees and shrubs begins to be manifest in areas betwixt the drybelt and Interior wetbelt zones. These are the areas in which conflicts seem most sharp between the resource-user groups. Expenditure by one interest for enhancement of its use threatens some displacement of the other uses. Range Branch personnel are spending ever-larger allocations of time on resolution of resource conflicts.

Livestock numbers using Crown range continue to show a slight decline, except in the Prince George Grazing District, where new frontiers and pasture developments offer summertime accommodation for domestic livestock. While the northland is expanding, the opposite trend in southern British Columbia tells the inability of some operators to ride out the present economic storm. It reflects also a conservatism toward resource allocation by the Forest Service. Defaulting users create some vacancies on range but, only where resource condition and management practices are satisfactory are reallocations being made. Without detracting from conservative

reallocation and from integrated resource use concepts, the thrust now is to invoke management prescriptions in the new term grazing permits which will foster inputs by the user (permittee) and the Crown (permittor) to ensure range productivity improvement.

RESOURCE PLANNING PROGRAM

The Resource Planning Program underwent a year of increased development within the framework of the five levels of resource planning—Provincial, regional, unit, sub-unit, and operational.

Special attention was given the unit level with emphasis on a pilot planning program in the Smithers PSYU. Public involvement in the planning process was beneficial and successful.

Discussion papers covering several major aspects of the planning process were sent to a wide range of resource administrators users. The papers informed concerned persons with the resource planning process and invited their advice and assistance.

The Resource Planning Division co-ordinated sub-unit planning procedures in accordance with a priority system approved by the Ministries of Environment, Recreation and Conservation, Agriculture, and Forests. The system was devised to provide a realistic approach to sub-unit plans (folios) commensurate with staff and time capabilities of the resource agencies involved.

The Forest Recreation Section of the Division continued its management and development of forest recreation within established policy and procedures.

There are now 970 forest recreation-sites maintained by the Forest Service throughout the Province. During the year the sites were used by 1,223,300 persons —the majority being British Columbia residents. Projects of 1976 included sign-posting, site design, trail construction, canoe route reconnaissance, winter recreation planning, and inventory of recreation features and æsthetic/landscape design.

Forest Recreation-sites

Forest District	1975		1976	
	Number at Year-end	Visitors	Number at Year-end	Visitors
Cariboo	136	58,000	145	85,400
Kamloops	233	230,000	233	550,000
Nelson	174	87,000	236	94,500
Prince George	137	166,000	153	150,000
Prince Rupert	53	18,000	50	38,400
Vancouver	150	335,000	153	305,000
Totals	883	894,000	970	1,223,300

RESERVOIR WATERWAY IMPROVEMENT PROGRAM

Clearing operations continued at a reduced scale on the Peace, Duncan, and Stave reservoirs. No operations were carried out on the Mica Creek reservoir; work there may be continued by B.C. Hydro. In conjunction with the Prince George District recreational program, the Peace Waterways Improvement Project supervised the development of trails and camp-sites in the Williston Lake area, employing 46 local students under a "Work-in-Government" program.

ENGINEERING SUPPORT SERVICES PROGRAM

Some 21 communication-site surveys were completed and 12 repeaters installed. The current availability of prefabricated fibreglass shelters to house radio repeaters complete with antennas has made usable many high-elevation sites having climatic conditions once considered too severe.

FOREST DEVELOPMENT ROADS PROGRAM

There was no major construction of forest roads, although the forest districts carried out routine maintenance. Road maintenance work was also done on the North Island, Cayoosh–Joffre, and Germansen Landing roads at the request of the Ministry of Highways and Public Works. Support was given to several districts in the evaluation of licensee-constructed roads and bridges.

Survey assistance was given to several forest districts in road location and reconnaissance. Site surveys were made of two large nursery areas as well as about 12 other sites.

Three bridge-site investigations were made on the Fraser River, and assistance was given to districts in evaluating several dozen bridge proposals and problems. Five area investigations into public sustained-yield unit development, two studies of proposed railroad abandonments, and 10 road studies in connection with access and log transportation were made. Other work included a review of Fraser River debris and its implication for the Strait of Georgia, a study of the impact of the proposed Revelstoke Dam on log transport, and an evaluation of log requirements of Cariboo Forest District sawmills.

TRAINING SCHOOL

During 1976, two Unit IV courses were held with a total enrolment of 48 students. This course, entitled "Managerial Skills and Concepts for Forest Land Managers," is of four months' duration and concentrates on administration, communication, and the principles of forest land management. This course is designed to develop skills and concepts essential for personnel wishing to promote to the Ranger, Zone Forester, or senior specialist positions where managerial skills are a requirement.

A major breakthrough was made in the area of updating and refresher courses for senior field personnel during 1976. The first formal refresher courses for Rangers were held during 1976. Two courses of three weeks' duration were held during January and February for senior Rangers. These courses covered the principles of administration, modern forest management practices, and fire management. Further refresher courses are scheduled for 1977.

New innovations were started in two other areas in 1976. A two-week Training Managers Course was put on for our District Training Managers and a Basic Supervision Course was initiated for clerical supervisors. Both of these courses were highly successful and further courses are proposed for 1977.

Two reports on organization of the Forest Service were completed. One arising from the Eden Fire Committee which became a full, comprehensive report on ranger district organization; the other was a committee formed under the Chairmanship of W. Young, Assistant Chief Forester (Resource Management), which offered a number of recommendations to eliminate some present problems and to change the organization for more efficient operation in the future.

SPECIAL STUDIES DIVISION

The Division was created to undertake specialized studies and to provide specialist input in systems development, financial analysis, in economics and in resource management. The participation of the Division in these various areas has not developed uniformly and opportunity for an expanding role in these aspects of Forest Service planning exists.

Projects undertaken by the Division fall into three categories:

To assist divisions and districts:

To prepare confidential information for senior staff:

To undertake special studies of a multi-disciplinary nature.

Studies completed in this latter group include the report "Opportunities for the Expansion of Pulp Production in Southern British Columbia." In addition, several analyses concerning confidential submission to Government were undertaken to assist in determining policy guidelines applicable to each situation.

A study of the organization and work performed by the Forest Ranger staff was completed and provided an objective supplement to studies of Forest Service organization. Studies of production costing of forest nursery operations and analyses of the results have provided that program with basic information necessary for comparison of the effectiveness of the various processes now in use.

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Table 1—Summary of Planting, 1967–76

Year	Forest Service on Crown Land		Forest Service on Crown-granted Land (Forest Act, Sec. 152)		Companies on Tree-farm Licences		Companies on Timber Sale Harvesting Licences		Other Private		Totals	
	Trees in Thousands	Acres	Trees in Thousands	Acres	Trees in Thousands	Acres	Trees in Thousands	Acres	Trees in Thousands	Acres	Trees in Thousands	Acres
Coast												
1976[1]	6,549.3	14,760	.....	.....	11,779.7	33,349	2,937.8	6,450	7,190.2	13,887	28,457.0	68,446
1975	8,725.9	17,897	.....	.....	9,522.9	25,592	1,768.2	3,774	4,123.5	10,236	24,140.5	57,499
1974	8,352.1	20,131	.....	.....	11,921.3	31,643	1,374.2	3,021	3,501.4	8,905	25,149.0	63,700
1973	13,855.7	31,170	.....	.....	12,769.1	33,994	1,550.3	3,441	4,046.0	10,016	32,221.1	78,621
1972	12,998.8	30,458	.....	.....	12,176.0	34,002	187.6	379	4,872.6	11,158	30,235.0	75,997
1971	9,627.0	22,696	55.0	128	11,603.8	31,735	82.4	236	4,756.0	11,370	26,124.2	66,165
1970	7,202.0	17,719	118.0	270	10,616.5	30,512	.....	.....	7,914.6	20,065	25,851.1	68,566
1969	4,791.0	11,356	107.0	201	9,981.6	28,666	.....	.....	5,673.6	14,946	20,553.2	55,169
1968	3,731.9	8,541	82.0	211	8,797.3	25,139	.....	.....	5,470.1	16,688	18,081.3	50,579
1967	4,052.1	9,237	.....	.....	7,036.6	21,784	.....	.....	3,860.6	11,710	14,949.3	42,731
Previously planted	101,306.9	138,191	15,106.9	27,005	73,732.5	187,547	.....	.....	20,875.7	56,835	211,022.0	409,578
Totals to date	181,192.7	322,156	15,468.9	27,815	179,937.3	483,963	7,900.5	17,301	72,284.3	185,816	456,783.7	1,037,051
Interior												
1976[1]	23,801.9	45,967	.....	.....	3,526.0	7,283	16,469.9	32,772	566.4	1,240	44,364.2	87,262
1975	24,712.8	52,026	21.0	40	3,129.7	6,797	12,588.8	24,833	355.0	849	40,807.3	84,545
1974	16,128.2	31,971	.....	.....	3,076.8	7,904	9,380.3	18,620	82.8	89	28,668.1	58,584
1973	14,371.1	27,068	.....	.....	3,551.1	7,497	5,521.1	10,587	541.6	894	23,984.9	46,046
1972	14,256.0	26,600	.....	.....	1,692.0	3,721	2,066.0	4,136	145.0	340	18,159.0	34,797
1971	15,449.2	31,049	.....	.....	1,461.0	3,311	743.0	1,497	69.0	165	17,772.2	36,022
1970	7,201.0	14,672	.....	.....	753.0	2,094	40.0	66	166.0	369	8,160.0	17,201
1969	5,019.9	11,167	.....	.....	301.7	911	.....	.....	70.7	127	5,392.3	12,205
1968	2,512.3	5,854	.....	.....	360.0	921	.....	.....	129.3	222	3,001.6	6,997
1967	1,785.3	3,747	.....	.....	635.5	1,557	.....	.....	95.5	207	2,516.3	5,511
Previously planted	9,887.2	21,588	.....	.....	3,044.1	9,484	.....	.....	546.3	1,165	13,477.6	32,237
Totals to date	135,124.9	271,709	21.0	40	21,530.9	51,480	46,809.1	92,511	2,767.6	5,667	206,253.5	421,407
All planted to date	316,317.6	593,865	15,487.9	27,855	201,468.2	535,443	54,709.6	109,812	75,051.9	191,483	663,037.2	1,458,458
All planted this year[1]	30,351.2	60,727	.....	.....	15,305.7	40,632	19,407.7	39,222	7,756.6	15,127	72,821.2	155,708

[1] Subject to minor adjustments for late returns.

Table 2—Planting by Forest District, 1976

(Number of trees in thousands, acres in parentheses below)

District	Forest Service on Crown Land and Crown-granted Land	Companies on TSL's, TSHL's on Crown Land	Companies on Tree-farm Licences			Tree-farm	Companies on Other Private	District Totals
			Crown Land	Crown-granted Land	Total			
Vancouver	5,280.6	2,028.3	9,565.7	873.4	10,439.1	1,584.7	5,605.5	24,938.2
	(11,665)	(4,597)	(27,630)	(2,497)	(30,127)	(4,040)	(9,847)	(60,276)
Prince Rupert	5,134.6	1,937.3	1,336.8	3.8	1,340.6	.....	.....	8,412.5
	(11,650)	(3,802)	(3,205)	(17)	(3,222)	.....	.....	(18,674)
Prince George	7,650.4	7,744.1	1,551.2	.....	1,551.2	.....	.....	16,945.7
	(14,262)	(15,677)	(3,333)	.....	(3,333)	.....	.....	(33,272)
Kamloops	2,840.9	3,477.1	784.2	.....	784.2	.....	.....	7,102.2
	(5,237)	(6,723)	(1,576)	.....	(1,576)	.....	.....	(13,536)
Nelson	5,068.4	1,631.4[1]	900.0	.....	900.0	566.4	.....	8,166.2
	(9,891)	(3,146)	(1,840)	.....	(1,840)	(1,240)	.....	(16,117)
Cariboo	4,376.3	2,589.5	290.6	.....	290.6	.....	.....	7,256.4
	(8,022)	(5,277)	(534)	.....	(534)	.....	.....	(13,833)
Totals	30,351.2	19.407.7	14.428.5	877.2	15,305.7	2,151.1	5,605.5	72,821.2
	(60,727)	(39,222)	(38,118)	(2,514)	(40,632)	(5,280)	(9,847)	(155,708)

[1] Includes 32,000 trees planted by Ministry of Highways and Public Works and Cominco Parks.

Table 3—Acres Clearcut and Acres Planted in Public Sustained-yield Units by Forest District, 1972–76 (Acres Planted Includes Forest Service and Licensee Planting in PSYU's)

District	1972	1973	1974	1975	1976	Total Five-year Period	Accumulative Total, 1971 +	Per Cent Cutover Planted, 1971 +
Vancouver—								
Acres clearcut	28,431	38,168	25,282	21,339	30,675	143,895	172,796	
Acres planted	27,604	28,205	21,375	19,380	16,262	112,826	134,311	77.7
Prince Rupert—								
Acres clearcut	20,243	30,815	29,409	17,341	27,905	125,714	146,994	
Acres planted	8,287	17,212	8,132	11,586	18,674	63,891	74,445	50.6
Prince George—								
Acres clearcut	73,683	78,107	82,242	66,359	74,792	375,183	448,529	
Acres planted	4,840	8,274	14,281	22,128	33,272	82,795	89,255	19.9
Cariboo—								
Acres clearcut	33,534	32,704	30,621	29,328	36,003	162,190	187,959	
Acres planted	5,269	6,506	11,540	18,426	13,833	55,601	60,367	32.1
Kamloops—								
Acres clearcut	37,343	42,074	26,952	26,042	44,400	176,811	203,939	
Acres planted	5,381	3,635	7,318	11,290	13,536	41,160	47,516	23.3
Nelson—								
Acres clearcut	32,980	32,304	30,716	19,917	35,170	151,087	179,534	
Acres planted	8,902	9,505	10,557	15,780	15,980	60,724	67,369	37.5
Totals—								
Acres clearcut	226,214	254,172	225,222	180,326	248,946	1,134,880	1,339,751	
Acres planted	60,283	73,337	73,743	98,590	111,557	416,997	473,263	35.3

Table 4—Site Preparation, 1976, Forest Service and Licensees on PSYU's

Method of Treatment	Prime Objective Indicated in Appropriate Column				
	(1) Natural Regeneration Preparation	(2) Planting Preparation	(3) Hazard Abatement	(4) Total Acres	(5) Per Cent
1. Broadcast burned	5,537	48,853	17,671	72,061	19.4
2. Bunched and burned	14,674	9,457	8,191	32,322	8.7
3. Spot-burned	5,078	13,633	26,789	45,560	12.2
4. Landings only burned	8,439	4,168	127,780	140,387	37.7
5. Chemical treatment and burn	.....	17	.....	17	.....
6. Drag-scarified	17,821	2,392	.....	20,213	5.4
7. Blade-scarified	4,569	5,435	460	10,464	2.8
8. Bunched only	525	1,126	277	1,928	0.5
9. Chemical treatment only	.....	.....	.....	.....	.....
10. Residual falling only (including snag)	1,301	7,383	1,266	9,950	2.8
11. Snag-falling only	.....	90	4,531	4,621	1.2
12. Other treatment	948	16	2,907	3,871	1.0
13. No treatment	19,583	11,125	.....	30,708	8.3
Totals	78,475	103,695	189,872	372,042	100.0

Table 5—Stand Improvement and Tending, 1976, Forest Service and Licensee on PSYU's

	Acres Completed				
	Stocking Control				Total
	Conifer Release (Brushing)	Juvenile Spacing and Pre-commercial Thinning	Commercial Thinning	Mistletoe Control	
Vancouver—					
Forest Service	805	1,702	(1)	168	2,675
Licensee	(1)	(1)	(1)	(1)	(1)
Total	805	1,702	.....	168	2,675
Prince Rupert—					
Forest Service	216	132	.....	.....	348
Licensee	.....	.....	.....	.....	.....
Total	216	132	.....	.....	348
Prince George—					
Forest Service	2	.....	.....	.....	2
Licensee	.....	.....	.....	.....	.....
Total	2	.....	.....	.....	2
Kamloops—					
Forest Service	.....	211	.....	.....	211
Licensee	.....	.....	.....	430	430
Total	.....	211	.....	430	641
Nelson—					
Forest Service	300	506	.....	30	836
Licensee	.....	.....	.....	.....	.....
Total	300	506	.....	30	836
Cariboo—					
Forest Service	154	524	.....	2,056	2,734
Licensee	.....	.....	.....	1,728	1,728
Total	154	524	.....	3,784	4,462
Provincial totals—					
Forest Service	1,477	3,075	.....	2,254	6,806
Licensee	.....	.....	.....	2,158	2,158
Total	1,477	3,075	.....	4,412	8,964

[1] No data.

Table 6—Regeneration Surveys, 1976, Forest Service and Licensees on PSYU's

	Total Acres Examined	Acres Satisfactorily Stocked	Acres Not Satisfactorily Stocked	Non-productive	Per Cent Stocked
Vancouver[1]—					
Forest Service	62,966	48,146	14,720	4,122	76
Licensee	(2)	(2)	(2)	(2)	----
Total	62,966	48,146	14,720	4,122	----
Prince Rupert—					
Forest Service	73,615	64,164	9,451	(2)	87
Licensee	27,410	14,962	12,448	(2)	----
Total	101,025	79,126	21,899	-------	----
Prince George—					
Forest Service	36,847	26,155	10,692	(2)	76
Licensee	21,307	18,030	3,277	(2)	----
Total	58,154	44,185	13,969	-------	----
Kamloops—					
Forest Service	43,381	25,527	17,062	1,046	59
Licensee	42,861	21,874	19,837	1,028	----
Total	86,242	47,407	36,899	2,074	----
Nelson—					
Forest Service	22,865	14,929	7,936	(2)	65
Licensee	27,180	13,552	13,628	(2)	----
Total	50,045	28,481	21,564	-------	----
Cariboo—					
Forest Service	131,556	56,609	75,103 (3)	(2)	43
Licensee	4,468	5,864	912	(2)	----
Total	136,024	62,473	76,015	-------	----
Provincial totals—					
Forest Service	371,230	235,530	134,964	-------	63
Licensee	123,226	74,282	50,102	-------	----
Total	494,456	309,812	185,066	-------	----

[1] Vancouver data incomplete (no licensee report).
[2] No data.
[3] Includes 22,210 acres classified as "Disturbed—Stocking Doubtful" (DSD).

Table 7—Cone Collections, 1976, Forest Service (Bushels)

Species	Vancouver	Prince Rupert	Prince George	Cariboo	Kamloops	Nelson	Total
Douglas-fir	860	----	------	2,775	48	------	3,683
Western hemlock	126	----	------	-------	-------	7½	133½
Mountain hemlock	5½	----	------	-------	-------	------	5½
Amabilis fir	91	----	------	-------	-------	------	91
Grand fir	235	----	------	-------	-------	4½	239½
Alpine fir	22	----	------	-------	-------	------	22
Sitka spruce	4	----	------	-------	-------	------	4
Interior spruce	202	60	415	-------	1,240	356½	2,273½
Western red cedar	5	----	------	-------	-------	9½	14½
Lodgepole pine[1]	2½	----	------	207	523	15	747½
Ponderosa pine	14	----	------	-------	640	------	654
White pine	-------	----	------	-------	-------	6	6
Limber pine	-------	----	------	-------	-------	16½	16½
White larch	-------	----	------	-------	67	58½	125½
Birch	-------	----	------	-------	-------	1	1
Totals	1,567	60	415	2,982	2,518	475	8,017

[1] Further collections anticipated in 1976. Licensees in Nelson and Kamloops collected a further 575 bushels.

Table 8—Summary of Basic Data for Certified Tree-farms (Private Sustained-yield Units Over Crown-granted Lands), 1976

INCLUDED WITHIN TREE-FARM LICENCES

Forest District	Number of Tree-farms	Productive Area (Acres)				Total Area (Acres)	Allowable Annual Cut Or Estimated (Cunits)
		Mature	Immature	NSR and NCC	Total		
Vancouver	14	62,384	235,803	30,576	328,763	363,227	327,591
Prince George	1	33	1,043	145	1,221	1,280	458
Nelson	2	494	4,719	4,394	9,607	10,158	4,312
Totals	17	62,911	241,565	35,115	339,591	374,665	332,361

NOT INCLUDED WITHIN TREE-FARM LICENCES

Vancouver	20	90,021	310,449	39,857	440,327	476,448	428,198
Nelson	10	110,428	216,808	90,996	418,232	486,900	109,646 (292,700)
Totals	30	200,449	527,257	130,853	858,559	963,348	537,844 (292,700)
Grand totals	47	263,360	768,822	165,968	1,198,150	1,338,013	870,205 (292,700)

Figures in parentheses ( ) are Christmas trees.

Table 9—Summary of Basic Data for Farm Wood-lot Licences (Private Sustained-yield Units), 1976

Forest District	Number of Farm Wood-lot Licences	Productive Area (Acres)			Total Area (Acres)	Allowable Annual Cut (Cunits)
		Crown	Private	Total		
Vancouver	10	1,433	158	1,591	2,072	706
Prince Rupert	4	1,274	147	1,421	2,436	284
Prince George	4	997	.....	997	1,032	400
Cariboo	11	3,006	337	3,248	5,417	946
Kamloops	2	371	96	467	467	163
Nelson	4	1,359	617	1,976	2,071	267
Grand totals	35	8,440	1,355	9,700	13,495	2,766

Table 10—Summary of Basic Data for Public Sustained-yield Units, 1976

Forest District and Unit Name	Date of Survey	Mature Volume (Cunits)	Productive Area (Acres)			Total Area (Including Nonforest Acres)	Commitment (Cunits)	Volume Scaled (Cunits)
			Mature	Immature	Total Productive (Includes NSR, NCC)			
Vancouver[1]								
Dewdney	1974	43,647,860	517,197	381,064	990,736	1,792,885	458,246	492,614
Kingcome	1966, 69, 71, 74	89,555,950	1,045,657	243,680	1,322,663	2,706,047	416,130	367,953
Nootka	1969	60,098,260	579,441	64,101	663,877	786,629	396,642	477,304
Quadra	1962, 66, 67, 68	49,153,860	561,777	682,917	1,336,518	2,855,229	683,746	625,501
Soo	1975	26,427,300	316,884	188,773	525,655	1,476,440	220,210	178,029
Vancouver	1970	13,279,340	135,920	152,269	319,676	550,367	111,205	134,851
District totals	.....	282,162,570	3,156,876	1,712,804	5,158,825	10,167,597	2,286,179	2,276,252
Prince Rupert (Coast[1]*)*								
Dean	1962, 63, 68	62,424,590	881,134	80,045	968,273	3,916,986	97,040	114,202
Hecate	1964, 65	100,823,060	1,558,329	100,615	1,695,026	4,228,235	202,620	101,512
Queen Charlotte	1967	60,619,620	945,266	76,508	1,026,867	1,346,809	127,310	99,803
Rivers Inlet	1968	67,879,520	841,139	52,660	913,938	1,966,175	101,790	93,550
District subtotals	.....	291,746,790	4,225,868	309,828	4,604,104	11,458,205	528,760	409,067
Prince Rupert (Interior[2]*)*								
Babine	1974	37,136,390	1,057,695	397,114	1,582,527	2,098,082	199,967	235,986
Bell-Irving	1973	18,147,930	279,081	14,871	326,576	1,580,988	.....	.....
Burns Lake	1964	14,011,060	411,810	529,850	991,529	1,125,044	241,793	203,673
Morice	1972	28,082,330	577,640	220,646	861,367	1,420,877	93,400	91,208
Ootsa	1965	42,201,300	1,112,636	850,873	2,006,822	2,658,653	474,117	92,299
Skeena	1961, 63, 66	102,637,680	1,668,059	390,298	2,124,385	3,924,708	441,495	449,917
Smithers	1961, 66	26,648,260	736,966	344,456	1,099,714	1,461,926	207,286	199,210
Subtotals	.....	268,864,950	5,843,887	2,748,108	8,992,920	14,270,278	1,658,058	1,272,293
District totals	.....	560,611,740	10,069,755	3,057,936	13,597,024	25,728,483	2,186,818	1,681,360
Cariboo[2]								
Big Bar (partial)	1962	6,966,640	458,201	586,389	1,119,299	1,325,756	140,324	101,963
Big Valley—Block 2	1969	6,006,970	147,818	24,417	182,483	192,945	65,080	69,011
Bowron	1967	4,013,430	93,993	49,179	150,686	168,773	49,003	79,285
Chilko	1966	28,648,690	1,463,453	1,546,439	3,120,920	5,134,347	6,000	32
Cottonwood	1969	14,319,160	312,522	105,217	452,808	480,242	200,583	196,618
Lac la Hache	1972	22,949,580	792,363	654,235	1,524,466	1,779,099	292,072	356,823
Narcosli	1974	24,916,820	1,093,842	863,651	2,000,482	2,176,973	364,044	413,909

Quesnel Lake	1971	40,952,460	898,012	542,380	1,536,854	2,073,296	344,876	333,501
Stum	1963, 66	23,196,240	1,490,927	1,471,337	3,049,404	3,590,698	299,373	301,119
Williams Lake	1973	12,383,090	371,645	227,843	671,381	747,169	120,749	219,159
District totals	....	184,353,080	7,122,776	6,071,087	13,817,783	17,669,298	1,882,104	2,071,420
Kamloops[2]								
Adams	1968	9,463,770	225,311	246,190	496,335	584,686	140,777	163,108
Ashnola	1969	8,273,000	265,492	141,504	422,239	525,919	90,833	95,730
Barriere	1967	4,796,280	120,140	157,123	292,190	326,925	85,314	53,155
Barton Hill	1970	1,385,540	125,574	19,823	150,036	162,173	39,503	25,381
Big Bar (partial)[2]	1962	1,467,810	99,278	176,317	285,004	321,412	.....	39,465
Botanie	1970	13,024,100	526,056	274,734	861,654	1,298,414	124,394	135,305
Eagle	1971	8,326,940	145,870	87,784	254,507	351,854	90,725	109,743
Kamloops	1968	6,191,360	284,335	333,818	678,963	805,980	111,712	122,666
Nehalliston	1965, 73	5,968,250	174,152	160,477	347,849	390,372	98,083	96,636
Nicola	1970	10,282,250	370,429	353,464	815,533	950,883	127,626	143,148
Niskonlith	1968	3,420,670	95,632	165,003	277,225	295,057	76,054	92,588
North Thompson	1967	16,253,360	351,010	84,940	470,385	983,673	93,066	97,957
Okanagan	1975	15,246,450	491,293	531,859	1,057,630	1,269,087	222,039	301,722
Raft	1967	7,677,310	192,134	275,607	505,395	557,435	119,904	126,317
Salmon Arm	1975	1,620,230	43,646	122,106	179,126	223,080	32,213	40,398
Shuswap	1975	13,465,090	238,568	216,901	517,550	756,179	142,007	144,980
Similkameen	1969	14,640,930	347,392	379,260	781,706	872,515	212,716	209,912
Spallumcheen	1972	16,371,610	350,460	391,030	783,094	980,584	274,714	294,338
Yalakom	1965	17,431,570	489,603	386,217	906,808	1,838,356	169,101	95,399
District totals	.....	178,306,520	4,936,375	4,504,157	10,083,229	13,494,584	2,250,781	2,387,948
Prince George[2]								
Big Valley—Block 1	1969	7,219,620	156,251	16,222	183,653	199,645	78,030	175,669
Blueberry	1964	13,404,870	464,110	1,090,513	1,919,971	2,748,392	175,000	175,899
Canoe	1974	10,342,650	209,023	86,371	315,290	877,262	64,067	117,257
Carp	1959, 60, 73	32,074,080	672,293	555,401	1,293,397	1,486,602	314,879	291,769
Crooked River	1960, 73	15,964,450	322,340	222,651	593,366	669,724	169,160	154,240
Finlay	1962	93,607,370	3,566,573	1,866,840	5,897,187	11,652,835	1,000,000	582,381
Fontas	1969, 70	3,302,310	100,405	734,933	1,079,038	2,699,016	30,000	.....
Fort Nelson	1968	14,704,830	477,637	1,444,501	2,188,252	4,751,019	235,000	154,555
Kluskus	1975	11,886,760	442,611	338,182	781,591	952,807	57,800	.....
Kotcho	1969, 70	3,902,420	145,403	1,865,709	3,079,616	5,513,175	.....	.....
Laird	1972, 73	46,140,920	1,831,848	1,806,479	4,287,324	7,505,413	.....	.....
Longworth	1971	31,980,410	742,778	72,015	853,565	1,215,095	215,407	121,043
Moberly	1970	20,738,420	700,688	650,821	1,491,486	1,889,393	120,573	59,904
Monkman	1966	23,751,650	693,610	32,716	747,086	1,353,615	146,293	117,257

[1] 9.1″ + d.b.h.
[2] 7.1″ + d.b.h.
[3] *See* Cariboo for commitment.

Table 10—Summary of Basic Data for Public Sustained-yield Units, 1976—Continued

Forest District and Unit Name	Date of Survey	Mature Volume (Cunits)	Productive Area (Acres)			Total Area (Including Nonforest Acres)	Commitment (Cunits)	Volume Scaled (Cunits)
			Mature	Immature	Total Productive (Includes NSR, NCC)			
Prince George[2]—Continued								
Naver	1969	6,669,060	145,183	120,771	303,502	325,233	110,053	98,087
Nechako	1975	37,046,020	1,204,042	769,643	2,045,504	2,309,018	501,593	530,049
Parsnip	1965	22,973,290	787,082	166,187	1,097,919	1,475,932	204,210	188,654
Peace	1972	22,478,140	738,509	384,930	1,210,994	1,744,883	116,720	79,569
Purden	1967	16,269,520	417,234	74,842	533,282	590,461	158,347	293,765
Robson	1974	12,448,730	299,533	162,599	496,120	1,317,975	83,772	91,958
Sikanni	1971	1,188,803	631,083	1,753,210	2,617,630	4,792,926	30,000	1,093
Stuart Lake	1970	25,591,910	660,216	496,168	1,204,637	1,510,800	170,260	187,250
Takla	1970, 71	48,555,960	1,301,992	839,421	2,235,170	3,060,611	363,900	268,325
Wapiti	1969	17,486,360	609,329	1,290,137	2,111,420	2,871,553	85,687	66,687
Westlake	1975	11,880,590	329,557	181,843	553,842	588,028	167,984	159,150
Willow River	1969	6,293,540	140,441	126,129	301,273	319,807	112,246	128,647
District totals	.....	557,902,683	17,789,771	17,149,234	39,422,115	64,421,220	4,710,981	4,043,208
Nelson[2]								
Arrowhead	1962	5,070,520	111,907	81,194	201,181	509,020	42,876	60,723
Cranbrook	1964	11,566,660	299,849	767,016	1,219,401	1,725,800	215,418	160,706
Creston	1973	4,508,450	122,347	362,296	516,499	678,721	91,034	102,420
Edgewood	1967	3,316,650	96,993	150,704	262,074	297,938	67,173	74,381
Fernie	1973	7,127,870	223,221	458,176	755,327	1,337,504	72,523	130,986
Granby	1967	3,687,370	96,684	382,180	504,008	643,186	82,283	60,981
Kettle	1963	5,175,690	189,863	510,428	763,124	822,487	127,957	184,106
Kinbasket	1968	23,533,800	409,753	328,076	787,514	2,287,243	240,987	234,431
Lardeau	1969	19,027,060	373,337	500,198	931,866	1,827,754	143,175	60,605
Nakusp	1967	3,967,070	81,502	93,546	192,992	311,847	29,500	28,219
Salmo	1974	3,206,220	72,341	351,277	449,664	630,029	96,987	98,797
Slocan	1967	3,423,440	84,076	197,572	301,981	517,862	51,359	51,895
Upper Kootenay	1965	12,136,370	343,012	371,207	757,244	1,260,615	161,470	135,685
Windermere	1974	4,636,520	132,787	231,148	377,796	806,237	61,005	49,512
District totals	.....	110,383,690	2,637,672	4,785,018	8,020,671	13,656,243	1,483,747	1,433,447
Totals for Province	.....	1,873,720,283	45,713,225	37,280,236	90,099,647	145,137,425	14,800,610	13,893,635

[2] 7.1" + d.b.h.
[3] *See* Cariboo for commitment.

Table 11—Summary of Basic Data for Tree-farm Licences (Private Sustained-yield Units), 1976

TFL No. and Name	Five-year Working-plan Period	Licensee	Productive Area (Acres)			Total Area (Acres)	Allowable Annual Cut (Cunits)
			Crown	Private	Total		
Vancouver Forest District							
2. Duncan Bay[1]	1970–74 (ext. 1976)	Crown Zellerbach Canada Ltd.	257,327	159,900	417,227	467,117	390,560
6. Quatsino	1976–Mar. 1979	Rayonier Canada (B.C.) Limited	295,170	60,365	355,535	420,134	417,000
7. Salmon River	1972–76	MacMillan Bloedel Limited	117,704	57,530	175,234	193,908	190,000
10. Toba	1975–Mar. 1979	Timberland Development Co. Ltd.	70,616	611	71,227	574,279	63,300
12. Hardwicke	1974–78	Crown Zellerbach (Hardwicke Island) Ltd.	19,935	1,641	21,576	23,404	25,000
17. Knight Inlet	1970–74 (ext. 1976)	British Columbia Forest Products Ltd.	118,719	553	119,272	681,435	73,360
19. Tahsis	1972–76	Tahsis Company Ltd.	257,717	21,780	279,497	473,662	302,000
20. Tofino	1973–77 (ext. 1978)	MacMillan Bloedel Industries Ltd.	214,849	141,243	356,092	426,371	383,120
21. Alberni	1973–77 (ext. 1978)	MacMillan Bloedel Industries Ltd.	273,206	260,693	533,899	638,050	683,420
22. Maquinna	1972–76	British Columbia Forest Products Ltd.	316,179	58,122	374,301	413,687	363,044
25. Naka[1]	1972–76	Rayonier Canada (B.C.) Limited	157,751	67,742	225,493	360,890	214,000
26. Mission Municipal	1974–78	Corporation of the District of Mission	13,260	2,934	16,194	18,957	11,400
27. Nitinat	1970–74 (ext. 1976)	British Columbia Forest Products Ltd.	29,363	2,708	32,071	35,870	40,639
36. Cordero	1972–76	British Columbia Forest Products Ltd.	20,902	6,100	27,002	28,821	31,050
37. Nimpkish	1976–80	Canadian Forest Products Ltd.	242,555	92,211	334,766	465,031	387,000
38. Squamish	1973–77	Empire Mills Limited	129,266	470	129,736	541,175	93,000
39. Haida[1]	1976–80	MacMillan Bloedel Limited	453,563	177,549	631,112	1,060,028	648,450
Totals	17		2,988,082	1,112,152	4,100,234	6,822,819	4,316,343
Prince Rupert Forest District							
1. Port Edward	1970–74 (ext. 1977)	Canadian Cellulose Company Limited	2,288,010	15,085	2,303,095	6,665,920	720,000
2. Duncan Bay[2]	1970–74 (ext. 1976)	Crown Zellerbach Canada Limited	22,034	42,667	64,701	68,164	70,100
24. Moresby	1974–78	Rayonier Canada (B.C.) Ltd.	184,781	7,332	192,113	277,909	154,000
25. Naka[2]	1972–76	Rayonier Canada (B.C.) Ltd.	102,856	36,336	139,192	779,389	22,000
39. Haida[2]	1976–80	MacMillan Bloedel Limited	435,349	101,567	536,916	734,941	530,550[3]
41. Kitimat	1975–79	Eurocan Pulp & Paper Co. Ltd.	602,219		602,219	2,526,261	200,000
Totals	6		3,635,249	202,987	3,838,236	11,052,584	1,696,650
Kamloops Forest District							
9. Okanagan West	1972–76 (ext. 1977)	Crown Zellerbach Canada Ltd.	178,532	1,686	180,218	195,981	74,300
15. Inkaneep	1974–78	Northwood Properties Ltd.	113,133	160	113,293	120,261	29,250
16. Monte Lake	1974–78	Crown Zellerbach Canada Ltd.	120,172		120,172	128,101	45,200
18. Clearwater	1969–73 (ext. 1976)	Clearwater Timber Products Limited	170,697		170,697	183,972	58,000
32. Bolean	1975–79	Crown Zellerbach Canada Ltd.	31,327		31,327	33,494	12,000
33. Sicamous	1975–79	Federated Co-operatives Limited	20,566		20,566	21,032	10,055
35. Jamieson Creek	1974–78	Weyerhaeuser Canada Ltd.	92,129		92,129	97,650	31,950
Totals	7		726,556	1,846	728,402	780,491	260,755

[1] Tree-farm licences partly within the Prince Rupert District.
[2] Tree-farm licences partly within the Vancouver Forest District.
[3] Estimated.

Table 11—Summary of Basic Data for Tree-farm Licences (Private Sustained-yield Units), 1976—Continued

TFL No. and Name	Five-year Working-plan Period	Licensee	Productive Area (Acres)			Total Area (Acres)	Allowable Annual Cut (Cunits)
			Crown	Private	Total		
Nelson Forest District							
3. Little Slocan	1973–77	Triangle-Pacific Forest Products Ltd.	109,925	.....	109,925	196,951	44,600
8. Boundary Creek	1974–78	Pope & Talbot Ltd.	179,569	.....	179,569	192,136	53,250
13. Bull River	1974–78	Galloway Lumber Company Limited	51,112	485	51,597	92,270	12,700
14. Spillimacheen	1974–78	Crestbrook Forest Industries Ltd.	118,043	1,000	119,043	344,749	40 800
23. Arrow Lakes	1972–76 (ext. 1979)	Canadian Cellulose Company Limited	930,515	37,245	967,760	2,518,737	415,000
Totals	5		1,389,164	38,730	1,427,894	3,344,843	566,350
Cariboo Forest District							
5. Mackenzie-Cariboo	1975–Mar. 1979	Weldwood of Canada Ltd.	81,196	695	81,891	85,047	47,600
Prince George Forest District							
30. Northwood	1976–June 2, 1980	Northwood Pulp & Timber Limited	390,929	1,725	392,654	447,946	155,720
Grand totals	34		9,211,176	1,358,135	10,569,311	22,533,730	7,043,418

Table 12—Total Scale of Christmas Trees Billed, 1970–76

(Segregated by land status and forest districts)

Year	Vancouver		Prince Rupert		Prince George		Cariboo		Kamloops		Nelson		Total		Total
	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	
1976	77,554	7,217	.....	495	444	.....	9,558	23,680	35,360	12,290	496,343	217,072	619,259	260,754	880,013
1975	71,617	6,926	.....	500	677	.....	8,020	19,634	63,057	13,829	505,372	334,010	648,743	374,899	1,023,642
1974	85,413	4,124	.....	500	645	800	12,860	31,486	76,884	10,709	557,240	210,764	733,042	258,383	991,425
1973	81,743	7,348	.....	.....	185	.....	11,677	28,588	61,401	25,467	603,533	225,036	758,539	286,439	1,044,978
1972	72,067	10,985	.....	500	3,868	280	.....	3,366	34,883	66,716	457,940	367,056	568,758	448,903	1,017,661
1971	65,043	2,775	60	375	188	900	.....	.....	83,188	77,783	752,079	448,423	900,558	530,256	1,430,814
1970	77,662	2,130	.....	.....	.....	100	.....	.....	152,578	103,083	822,322	455,865	1,052,562	561,178	1,613,740

Table 13—Total Amount of Timber Scale Billed in British Columbia During the Years 1975 and 1976 (in Cunits)

Forest District	10-Year Average, 1967–76	1975	1976	Increase	Net Increase
Vancouver	8,234,826	6,355,486	9,732,729	3,377,243	.....
Prince Rupert (Coast)	1,569,530	1,189,801	1,635,997	446,196	.....
Totals, Coast	9,804,356	7,545,287	11,368,726	3,823,439	.....
Prince Rupert (Interior)	1,226,909	1,125,847	1,460,641	334,794	.....
Prince George	3,623,932	3,378,125	4,355,744	977,619	.....
Cariboo	796,448	1,922,542	2,417,524	494,982	.....
Kamloops	2,664,706	1,985,440	2,805,461	820,021	.....
Nelson	1,853,366	1,727,446	2,143,006	415,560	.....
Totals, Interior	10,165,361	10,139,400	13,182,376	3,042,976	.....
Grand totals	19,969,717	17,684,687	24,551,102	6,866,415	6,866,415

Table 14—Total Scale of All Products Billed in 1976 (in Cunits)

(Segregated by land status and forest districts)

Land Status	Vancouver	Prince Rupert (Coast)	Prince Rupert (Interior)	Prince George	Cariboo	Kamloops	Nelson	Total
Timber licences	2,032,509	336,480	.....	61	.....	37,033	27,798	2,433,881
Timber berths	86,713	.....	.....	.....	.....	42,191	46,729	175,633
Timber leases	292,027	.....	.....	.....	.....	.....	.....	292,027
Pulp leases	208,749	34,349	.....	.....	.....	.....	.....	243,098
Pulp licences	100,093	103,238	.....	.....	.....	.....	.....	203,331
Farm wood-lots	268	.....	413	455	770	27	71	2,004
Timber sales	600,059	59,218	194,162	1,776,701	1,111,126	962,798	462,686	5,166,750
Timber sale harvesting licences	1,805,843	349,573	959,458	2,222,064	1,100,761	1,295,075	843,420	8,576,194
Tree-farm licences	2,322,691	633,570	248,042	110,068	31,682	302,002	439,287	4,087,342
Beachcomb, trespass	124,636	15,977	453	.....	.....	.....	.....	141,066
Miscellaneous	2,940	.....	1,882	132,094	47,469	12,914	22,167	219,466
Subtotals, Crown lands	7,576,528	1,532,405	1,404,410	4,241,443	2,291,808	2,652,040	1,842,158	21,540,792
Federal lands	22,535	12,710	1,967	7,375	6,143	5,286	1,927	57,943
Crown grants to 1887	1,697,665	4,574	.....	68	4,039	36,820	72,759	1,815,925
Crown grants 1887–1906	116,218	68,482	140	36	3,133	19,259	101,830	309,098
Crown grants 1906–1914	64,545	2,583	8,161	17,175	8,350	23,413	23,075	147,302
Crown grants to date	255,238	15,243	45,963	89,647	104,051	68,643	101,257	680,042
Totals	9,732,729	1,635,997	1,460,641	4,355,744	2,417,524	2,805,461	2,143,006	24,551,102

Table 15—Species Cut, All Products, 1976 (in Cunits)

Forest District	Fir	Cedar	Spruce	Lodgepole Pine	Hemlock	Balsam	White Pine
Vancouver	1,670,397	1,928,178	143,415	9,269	3,808,254	1,849,619	49,445
Prince Rupert (Coast)	27,625	328,170	249,536	733	803,439	178,824	26
Totals, Coast	1,698,022	2,256,348	392,951	10,002	4,611,693	2,028,443	49,471
Prince Rupert (Interior)	207	50,888	323,316	532,414	298,878	221,840	6,290
Prince George	90,617	30,419	2,434,762	1,390,832	10,422	375,226	156
Cariboo	587,796	25,337	672,264	989,494	5,249	124,027	.....
Kamloops	632,075	201,769	748,199	673,635	136,572	314,527	20,761
Nelson	251,794	327,881	535,784	392,157	235,063	238,313	39,813
Totals, Interior	1,562,489	636,294	4,714,325	3,978,532	686,184	1,273,933	67,020
Grand totals	3,260,511	2,892,642	5,107,276	3,988,534	5,297,877	3,302,376	116,491

Forest District	Yellow Pine	Cypress	Larch	Hardwood	Cotton-wood	Unspeci-fied	Total
Vancouver	40	228,851	2	11,278	23,141	10,840	9,732,729
Prince Rupert (Coast)	.....	32,638	.....	354	5,875	8,777	1,635,997
Totals, Coast	40	261,489	2	11,632	29,016	19,617	11,368,726
Prince Rupert (Interior)	.....	.....	.....	2,875	10,994	12,939	1,460,641
Prince George	.....	.....	28	3,040	10,839	9,403	4,355,744
Cariboo	794	.....	.....	195	28	12,340	2,417,524
Kamloops	30,409	75	29,962	895	914	15,668	2,805,461
Nelson	20,521	.....	89,188	.....	1,900	10,592	2,143,006
Totals, Interior	51,724	75	119,178	7,005	24,675	60,942	13,182,376
Grand totals	51,764	261,564	119,180	18,637	53,691	80,559	24,551,102

Table 16—Acreage Logged, 1976

Forest District	Clear Cutting	Selective Cutting	Total
Vancouver	76,203	2,574	78,777
Prince Rupert	40,309	4,693	45,002
Prince George	93,870	15	93,885
Cariboo	39,395	20,643	60,038
Kamloops	44,375	19,914	64,289
Nelson	35,170	10,721	45,891
Totals, 1976	329,322	58,560	387,882
Totals, 1975	248,333	47,122	295,455
Totals, 1974	323,324	44,488	367,812
Totals, 1973	368,792	59,121	427,913
Totals, 1972	328,553	48,005	376,558
Totals, 1971	334,994	73,039	408,033

Table 17—Unit Standard Reinventory Surveys, 1976 Field Work

Unit Name (PSYU)	Maps Classified	Number of Samples	Total Area (Acres)
Big Bar	89	398	890,783
Burns Lake	67	230	1,221,384
Ootsa	126	514	2,752,013
Skeena	202	376	4,073,016
Smithers	73	289	1,577,917
Totals	557	1,807	10,515,113

Table 18—Production of Final Forest Cover Maps for 1975 Projects

Subject	Number of Maps	Forest and Nonforest Area (Acres)			Volume in M.C.F. for Mature Crown Area (Close "U")
		Crown	Alienated	Total	
Proposed Alsek PSYU	43	2,371,067	461,934	2,833,001	201,295
Proposed Boundary PSYU (north half)	16	1,928,171	.....	1,928,171	945,529
Proposed Dease PSYU	85	7,342,899	9,740	7,352,639	1,954,188
Proposed Taku PSYU	106	7,513,988	7,450	7,521,438	2,936,243
Kluskus PSYU	43	952,807	16,904	969,711	1,188,676
Nechako PSYU	119	2,309,015	305,255	2,614,240	2,888,966
Okanagan PSYU	91	1,269,087	597,545	1,866,632	1,524,645
Salmon Arm PSYU	18	223,080	98,223	321,303	162,023
Shuswap PSYU	47	756,179	61,791	817,970	1,346,509
Soo PSYU	90	1,476,440	194,070	1,670,510	2,915,269
Westlake PSYU	34	588,028	19,011	607,039	1,188,059
TFL 1 (northeast portion)	216	3,968,744	.....	3,968,744	2,965,876
Meldrum Creek Military Reserve	9	.....	101,210	101,210	144,148
Totals	917	30,699,505	1,873,103	32,572,608	20,361,426

Table 19—Average Bid Stumpage Prices by Species and Forest Districts on Cutting Permits of Timber Sale Harvesting Licences and Timber Sales Issued During 1976 per Cunit Log Scale

Forest District	Douglas-fir			Cedar			Spruce			Hemlock			Balsam		
	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit
		$	$		$	$		$	$		$	$		$	$
Vancouver	259,043	8.50	1.70–41.50	300,280	6.21	0.55–70.60	63,928	8.60	2.00–38.80	784,461	3.31	0.55–27.50	542,203	3.40	0.55–15.80
Prince Rupert (C.)	10,731	5.71	1.10– 9.50	54,609	5.90	1.10–10.10	74,658	5.94	1.10–19.00	175,725	3.35	1.10– 9.50	45,655	3.60	1.10– 9.50
Prince Rupert (I.)	.....	.....	.....	28,650	1.37	1.10– 8.00	348,542	1.20	1.10– 9.40	187,253	1.31	1.10– 8.00	226,296	1.11	1.10– 8.00
Prince George	83,985	1.90	1.10–14.00	19,224	1.41	1.10– 5.20	1,990,512	1.39	1.10– 8.80	22,256	1.10	1.10– 2.00	350,310	1.10	1.10– 2.00
Cariboo	426,938	2.88	1.10–16.40	29,025	1.10	1.10– 7.90	652,194	1.13	1.10– 8.60	992	1.10	1.10– 7.90	132,203	1.10	1.10– 7.90
Kamloops	569,867	1.64	1.10–15.60	294,530	1.27	1.10–10.00	726,387	1.15	1.10–10.00	180,093	1.14	1.10– 5.00	306,811	1.10	1.10– 5.00
Nelson	146,727	1.65	1.10–14.00	265,620	1.22	1.10–10.75	405,866	1.12	1.10–10.75	153,402	1.13	1.10–10.75	212,668	1.10	1.10–10.75
All districts	1,497,291	3.23	1.10–41.50	991,938	3.01	1.10–70.60	4,262,087	4.13	1.10–38.80	1,504,182	1.56	.55–27.50	1,816,146	1.86	.55–15.80

Forest District	White Pine			Lodgepole Pine			Larch			Other Species			All Species		
	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit
		$	$		$	$		$	$		$	$		$	$
Vancouver	4,116	2.38	0.55–14.10	3,137	1.10	2.00–14.10	.....	.....	.....	97,906	7.19	0.55–22.70	2,055,124	4.76	0.55–70.60
Prince Rupert (C.)	.....	.....	.....	721	1.96	1.10– 9.50	.....	.....	.....	3,320	3.38	1.10– 9.50	365,418	3.56	1.10–19.00
Prince Rupert (I.)	.....	.....	.....	557,138	1.49	1.10– 8.50	.....	.....	.....	6,003	1.10	1.10– 8.50	1,353,882	1.33	1.10– 9.40
Prince George	700	8.80	1.10– 2.00	924,695	1.16	1.10– 3.70	.....	.....	.....	72,715	1.10	1.10– 3.70	3,464,397	1.31	1.10–14.00
Cariboo	.....	.....	.....	1,069,125	1.13	1.10–10.20	.....	.....	.....	1,826	1.65	1.10– 7.90	2,312,303	1.45	1.10–16.40
Kamloops	23,046	21.47	1.10–47.20	627,657	1.22	1.10–20.00	19,140	2.65	1.10– 5.00	17,801	2.62	1.10– 5.00	2,765,332	1.46	1.10–47.20
Nelson	39,833	21.81	1.10–38.10	280,257	1.13	1.10–10.75	60,301	1.54	1.10–10.75	11,760	1.90	1.10–10.75	1,576,434	1.73	1.10–38.10
All districts	67,695	20.38	.55–47.20	3,462,730	1.21	1.10–20.00	79,441	1.81	1.10–10.75	211,331	4.13	.55–22.70	13,892,890	1.98	.55–70.60

Table 20—Average Stumpage Prices Received by Species and Forest Districts on Timber Scaled From Tree-farm Licence Cutting Permits During 1976

Forest District	Douglas-fir			Cedar			Spruce			Hemlock			Balsam		
	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit
		$	$		$	$		$	$		$	$		$	$
Vancouver	227,201	11.59	1.90–21.91	503,849	9.83	1.30–59.91	22,331	19.55	1.91–54.85	993,491	4.93	1.30–10.66	488,615	5.23	1.30– 6.30
Prince Rupert	90	5.54	5.16– 6.49	148,775	5.61	.55–20.00	104,025	11.68	1.10–21.47	469,905	2.64	.55– 4.70	109,816	2.03	.55– 5.61
Prince George	1,101	1.19	1.10– 8.40	58	1.10	1.10–	79,608	1.24	1.10– 7.70	578	1.10	1.10–	22,354	1.10	1.10–
Cariboo	21,685	5.62	1.10–23.90	.....	.....	.....	9,098	3.91	1.10– 9.70	.....	.....	.....	1,934	1.24	1.10– 2.40
Kamloops	35,271	6.00	1.10–24.30	4,430	2.94	1.10–22.70	84,489	1.39	1.10– 9.50	7,980	1.10	1.10–	33,778	1.10	1.10– 2.40
Nelson	34,639	5.86	1.10–30.40	96,661	3.48	1.10–26.40	76,216	1.53	1.10–22.60	132,793	1.10	1.10– 9.20	33,489	1.22	1.10–22.60
All districts	319,987	9.91	1.10–30.40	753,773	8.14	.55–59.91	375,767	5.38	1.10–54.85	1,604,747	3.92	.55–10.66	689,986	4.18	.55–22.60

Forest District	Lodgepole Pine			White Pine			Larch			Other Species			All Species		
	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit	Volume (Cunits)	Price per Cunit	Price Range per Cunit
		$	$		$	$		$	$		$	$		$	$
Vancouver	148	4.87	1.80– 5.76	7,959	3.91	1.40– 6.20	.....	.....	.....	60,484	10.58	.55–22.52	2,304,078	7.01	.55–59.91
Prince Rupert	5,076	1.25	.55– 6.59	6,296	1.66	.55– 6.52	.....	.....	.....	27,789	4.70	1.10– 7.49	871,772	4.20	.55–21.47
Prince George	6,291	1.10	1.10–	.....	.....	.....	.....	.....	.....	.....	.....	.....	109,990	1.21	1.10– 8.40
Cariboo	9,417	1.19	1.10– 2.40	.....	.....	.....	.....	.....	.....	2	1.10	1.10–	42,136	4.05	1.10–23.90
Kamloops	133,152	1.10	1.10– 2.00	1,111	10.60	1.10–65.20	6,860	3.38	1.10–10.70	519	6.15	1.10–23.30	307,590	1.86	1.10–65.20
Nelson	40,639	1.12	1.10–22.60	8,397	38.69	1.10–73.30	11,975	7.23	1.10–26.20	137	4.91	1.10–12.40	434,946	2.97	1.10–73.30
All districts	194,723	1.12	.55–22.60	23,763	15.92	.55–73.30	18,835	5.83	1.10–26.20	88,931	8.71	.55–23.30	4,070,512	5.40	.55–73.30

Table 21—Timber Cut and Billed From Timber Sales and Timber Sale Harvesting Licences, 1976

Forest District	Cunits	Board Feet	Lineal Feet	Cords	Posts	Car Stakes	Fence-rails, Palings	Slag Poles	Shingle Shakes	Shake Blanks
Vancouver	2,398,135	.....	.....	2,086	3,800	.....	.....	.....	2,842,982	4,687
Prince Rupert (Coast)	408,790	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prince Rupert (Interior)	1,153,620	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prince George	3,998,377	.....	.....	113	5,076	.....	.....	.....	100,155	.....
Cariboo	2,210,687	.....	91,906	1,679	17,022	950	13,558	.....	9,810	.....
Kamloops	2,257,224	.....	41,485	238	9,961	.....	810	.....	.....	.....
Nelson	1,304,578	.....	39,400	1,784	32,219	.....	.....	.....	1,840	.....
Totals, 1976	13,731,411	.....	172,791	5,900	68,078	950	14,368	.....	2,954,787	4,687
Totals, 1975	9,929,328	.....	1,054,761	3,131	210,745	1,400	14,372	.....	2,307,573	5,756
Totals, 1974	10,354,644	.....	1,215,860	3,271	324,083	2,100	18,927	.....	3,278,183	16,950
Totals, 1973	12,419,197	.....	185,850	7,369	89,629	4,045	7,785	.....	5,217,017	63,931
Totals, 1972	10,592,009	.....	390,014	3,815	35,322	1,547	.....	.....	4,281,398	100,252
Totals, 1971	9,935,172	3,957,998	775,330	5,440	89,015	742	.....	.....	4,423,122	322,740
Totals, 1970	9,004,256	9,699,203	1,918,009	4,327	36,720	1,253	.....	.....	4,379,241	866,431
Totals, 1969	8,048,571	6,250,091	3,280,599	7,046	103,192	3,494	2,441	61,829	5,676,051	1,856,028
Totals, 1968	7,143,846	6,416,864	3,862,509	7,819	172,642	3,751	.....	.....	4,360,011	1,133,289
Totals, 1967	6,193,358	6,083,295	6,107,876	8,719	283,712	6,277	.....	.....	3,264,427	553,397
Ten-year average, 1967–76	9,735,179	3,240,745	1,896,360	5,684	141,314	2,556	5,789	6,183	4,015,081	492,346

Table 22—Wood-processing Plants of the Province

Forest Districts	Operating								Shut Down			
	Sawmills				Shingle-mills				Sawmills		Shingle-mills	
	Number	Eight-hour Daily Production (Cunits)	Number of Attached Chippers	Number of Attached Barkers	Number	Eight-hour Daily Production (Cunits)	Number of Pulp-mills	Number of Veneer and Plywood Plants	Number	Eight-hour Daily Production (Cunits)	Number	Eight-hour Daily Production (Cunits)
Vancouver	161	16,595	134	84	69	1,605	12	14	49	323	15	36
Prince Rupert	70	3,205	25	21	6	36	4	.....	140	914	3	16
Prince George	114	12,423	60	71	2	44	5	3	207	2,707	3	8
Cariboo	37	5,794	40	40	2	4	1	3	52	156	2	3
Kamloops	147	6,506	65	70	12	38	1	6	18	104	.....	.....
Nelson	130	5,372	41	40	8	108	2	4	77	612	2	21
Totals, 1976	659	49,895	365	326	99	1,835	25	30	543	4,816	25	84
Totals, 1975	661	52,242	354	318	106	2,017	25	30	575	5,313	19	132
Totals, 1974	787	45,541	326	304	103	1,615	25	27	495	6,889	14	74
Totals, 1973	810	53,303	320	307	86	1,644	24	30	455	6,262	11	135
Totals, 1972	603	45,962	305	272	74	1,601	23	30	506	5,723	28	94
Totals, 1971	627	41,635	244	243	68	1,038	21	27	576	5,878	12	51
Totals, 1970	881	40,531	230	202	59	909	20	24	322	3,084	9	29
Totals, 1969	974	40,123	227	194	62	1,101	19	22	309	3,168	17	67
Totals, 1968	902	39,079	186	164	59	1,207	19	22	332	3,933	13	48
Totals, 1967	931	38,967	197	164	62	1,342	17	21	340	5,498	5	27
Ten-year average, 1967–76	784	44,728	275	249	78	1,431	22	26	445	5,056	15	74

Table 23—Export of Logs, 1976 (in Cunits)

Species	Grade 1	Grade 2	Grade 3	Ungraded and Lumber Reject	Total	Exportable[1]	Exported Under Permit[2]
Fir	.....	1,245	9,834	.....	11,079	5,691	5,388
Cedar	4,026	6,486	6,074	.....	16,586	145	16,441
Spruce	3,593	12,526	58,610	.....	74,729	39,721	35,008
Hemlock	2,160	8,150	47,445	.....	57,755	21,975	35,780
Balsam	.....	.....	.....	25,172	25,172	9,002	16,170
Lodgepole pine	.....	14	230	.....	244	130	114
Cypress	328	1,803	11,246	.....	13,377	3,639	9,738
Hardwood	.....	.....	.....	9,289	9,289	8,474	815
Cottonwood	.....	4	4	.....	8	.....	8
Totals, 1976	10,107	30,228	133,443	34,461	208,239	88,777	119,462
Totals, 1975	12,066	29,820	98,397	9,843	150,126	73,447	76,679
Totals, 1974	6,160	31,906	155,541	16,424	210,031	113,267	96,764
Totals, 1973	1,547	6,380	32,747	6,834	47,508	32,680	14,828
Totals, 1972	7,171	23,086	67,532	4,089	101,878	30,058	71,820
Totals, 1971	28,743	60,942	168,171	23,244	281,100	46,304	234,796
Totals, 1970	32,224	76,299	308,002	83,962	500,487	134,558	365,929
Totals, 1969	5,988	30,313	172,708	50,403	259,412	106,553	152,859
Totals, 1968	36,196	44,828	201,118	26,956	309,098	162,651	146,447
Totals, 1967	20,214	68,868	214,992	34,955	339,029	114,189	224,840
Ten-year average, 1967–76	16,042	40,267	155,265	29,117	240,691	90,249	150,442

[1] Export privilege—exported from lands Crown-granted prior to March 13, 1906.

[2] Exported under permit from Crown lands and lands granted after March 12, 1906, under authority of section 97 of the *Ministry of Forests Act*.

Table 24—Exports From the Province of Other Forest Products, 1976

Forest District	Quantity Exported	Approximate Value F.O.B.	Where Marketed		
			Canada	United States	Other Countries
Vancouver—		$			
Poles ... lin. ft.	1,924,305	3,848,610.00	465,505	1,391,155	67,600
Piling ... ,,	33,289	66,578.00	33,289	...	...
Cedar shakes ... pieces	986,708	197,341.60	292,540	694,168	...
Fence-posts ... ,,	4,549	4,549.00	4,549	...	...
Pulp chips ... units, GPU	398,282	14,935,575.00	...	398,282	...
Prince Rupert—					
Poles ... lin. ft.	819,367	990,510.50	675,606	143,761	...
Shakes ... squares	1,670	70,140.00	100	1,570	...
Shingles ... ,,	12,800	563,200.00	...	12,800	...
Posts ... pieces	1,625	3,250.00	1,625	...	...
Cordwood ... cords	27	810.00	27	...	...
Fence-posts ... lin. ft.	800	320.00	800	...	...
Pulp chips—					
BDU ... units	24,506	646,958.00	24,506	...	...
GPU ... ,,	15,398	477,338.00	15,398	...	...
Prince George—					
Poles ... lin. ft.	4,708	19,668,00	4,708	...	...
Fence-posts ... ,,	68,332	81,998.40	68,332	...	...
Fence-posts ... pieces	11,115	15,655.00	...	...	...
Cedar shakes ... squares	4,463	20,170.00	...	...	...
Pulp chips ... units, BDU	88,257	244,430.85	88,257	...	...
Cariboo—Christmas trees ... pieces	33,238	41,550.00	1,662	8,309	23,267
Kamloops—					
Fence-posts ... lin. ft.	10,600	2,120.00	10,600	...	...
Fence-posts ... pieces	78,022	23,337.90	77,540	518	...
Cedar shakes ... ,,	410,267	102,566.75	377,267	33,000	...
Christmas trees ... ,,	13,687	68,435.00	3,309	10,378	...
Cordwood ... cords	47	1,880.00	47	...	...
Shingle bolts ... ,,	157	56,646.00	103	54	...
Pulp chips ... units, BDU	1,216	36,480.00	1,216	...	...
Nelson—					
Poles and piling ... lin. ft.	721,880	1,215,240.00	653,370	68,510	...
Corral rails ... ,,	932,597	93,260.00	49,204	883,393	...
Orchard props ... ,,	67,000	670.00	...	67,000	...
Pickets ... ,,	4,775	239.00	4,775	...	...
Fence-posts ... pieces	127,734	127,734.00	36,751	90,983	...
Cedar shakes ... squares	46,865	2,015,195.00	15,275	31,590	...
Cedar shingles ... ,,	57,795	1,849,440.00	2,683	55,112	...
Shingle bolts ... cords	62	6,200.00	...	62	...
Christmas trees ... pieces	543,127	543,127.00	196,450	346,677	...
Pulp chips, BDU ... units	31,091	870,548.00	...	31,091	...
Total value, 1976 ...	...	29,241,771.00	...	...	...
Total value, 1975 ...	...	10,487,661.41	...	...	...

Table 25—Uses of Crown Range, 1976

Grazing District	Grazing Permits						Hay-cutting		Grazing Special Use Permits		Acres of Useable Crown Range, Including Grazing SUP's
	Permit-tees	Permits Handled	Permitted Livestock			AUM's[1] Use of Crown Range	Permits	Tons	Permits	Acres	
			Cattle	Horses	Sheep						
Kamloops	501	532	75,754	429	750	315,953	2	24	41	11,230	8,224,950
Nelson	320	346	19,379	519	12	77,681	.....	.....	11	1,900	1,429,000
Prince George	305[2]	364	23,413	1,372	1,906	86,551	19	296	1	40	1,920,000
Cariboo	564	613	65,018	1,732	.....	312,466	79	832	2	90	11,926,000
Vancouver	7	8	165	3	.....	401	.....	.....	.....	.....	1,000
Prince Rupert	4	.....	.....	185	.....	1,584	15	98	.....	.....	([3])
Totals, 1976	1,701	1,863	183,729	4,240	2,668	794,636	115	1,250	55	13,260	23,500,950
Totals, 1975	1,727	1,912	181,117	4,907	882	787,406	155	1,931	56	13,145	23,501,000
Totals, 1974	.....	2,000	183,156	5,546	1,821	809,238	.....	.....	.....	.....	.....
Totals, 1973	.....	1,920	177,785	5,748	1,616	783,677	.....	.....	.....	.....	.....
Totals, 1972	.....	1,968	174,617	6,166	1,432	787,589	.....	.....	.....	.....	.....
Totals, 1971	.....	1,920	178,772	6,186	1,484	829,337	.....	.....	.....	.....	.....
Totals, 1970	.....	1,985	178,332	5,651	2,739	822,442	.....	.....	.....	.....	.....
Totals, 1969	.....	2,018	180,579	5,545	5,106	837,405	.....	.....	.....	.....	.....
Totals, 1968	.....	2,053	188,183	6,338	7,090	857,219	.....	.....	.....	.....	.....
Totals, 1967	.....	2,114	188,126	6,837	6,272	866,539	.....	.....	.....	.....	.....

[1] AUM (animal unit month) is the equivalent of one mature cow for one month.

[2]

[3] Figure not available prior to 1967.

Table 26—Fire Occurrences by Months, 1976

Forest District	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Other	Total	Per Cent
Vancouver	....	8	13	10	28	33	19	15	....	126	14.1
Prince Rupert	1	6	11	12	5	3	4	....	....	42	4.7
Prince George	....	39	44	12	15	3	3	2	1	119	13.3
Kamloops	4	38	61	79	103	15	16	19	10	345	38.6
Nelson	....	14	24	21	42	12	11	19	3	146	16.4
Cariboo	....	8	58	3	32	4	7	1	2	115	12.9
Totals	5	113	211	137	225	70	60	56	16	893	100.0
Per cent	0.6	12.7	23.6	15.3	25.2	7.8	6.7	6.3	1.8	100.0	.....
Ten-year average	14	72	339	385	694	726	203	65	3	2,501	.....
Per cent	0.6	2.9	13.5	15.4	27.8	29.0	8.1	2.6	0.1	100.0	.....

Table 27—Number and Causes of Forest Fires, 1976

Forest District	Lightning	Recreational (Campers, Hunters, Fishermen, Etc.)	Railroads Operating	Smokers	Brush-burning (not Railway or Right-of-way Clearing)	Range-burning	Road, Power, Telephone, and Pipeline Construction	Industrial Operations (Logging, Etc.)	Incendiary	Miscellaneous Known Causes	Unknown Causes	Total	Per Cent of Total Fires in Province
Vancouver	11	32	6	25	2	3	2	31	1	13	....	126	14.1
Prince Rupert	11	10	.....	4	2	1	....	5	1	8	....	42	4.7
Prince George	18	12	6	8	8	30	....	16	9	11	1	119	13.3
Kamloops	53	77	26	69	7	14	2	34	12	51	....	345	38.6
Nelson	51	15	16	19	.....	1	1	14	5	24	....	146	16.4
Cariboo	15	11	3	5	5	7	....	16	31	20	2	115	12.9
Totals	159	157	57	130	24	56	5	116	59	127	3	893	100.0
Per cent	17.8	17.6	6.4	14.6	2.7	6.3	0.5	13.0	6.6	14.2	0.3	100.0	.....
Ten-year average	913	234	191	335	102	88	41	202	69	306	20	2,501	.....
Per cent	36.5	9.4	7.6	13.4	4.1	3.5	1.6	8.1	2.8	12.2	0.8	100.0	.....

Table 28—Number and Causes of Forest Fires for the Last 10 Years

Causes	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Total
Lightning	958	708	646	1,803	1,327	583	810	716	1,417	159	9,127
Recreational (campers, hunters, fishermen, etc.)	288	131	188	302	211	188	338	288	249	157	2,340
Railroads operating	455	121	238	246	175	136	218	147	113	57	1,906
Smokers	464	179	374	501	309	267	431	407	289	130	3,351
Brush-burning (not railway or right-of-way clearing)	128	65	133	146	129	70	145	102	83	24	1,025
Range-burning	138	53	128	191	105	59	78	34	42	56	884
Road, power, telephone, and pipe-line construction	93	34	52	30	50	44	38	36	25	5	407
Industrial operations (logging, etc.)	248	126	206	255	205	189	224	319	133	116	2,021
Incendiary	42	23	19	70	70	77	99	133	94	59	686
Miscellaneous known causes	348	193	313	432	303	277	462	355	252	127	3,062
Unknown causes	54	14	21	27	14	13	20	21	16	3	203
Totals	3,216	1,647	2,318	4,003	2,898	1,903	2,863	2,558	2,713	893	25,012

Table 29—Fires Classified by Size and Timber Loss, 1976

Forest District	Total Fires		Under 0.1 Hectare			0.1 to 4.0 Hectares			Over 4 to 200 Hectares			Over 200 Hectares in Extent			Damage		
	Number	Per Cent of Total Fires in Province	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in This Class	Under $100	Between $100 and $1,000	Over $1,000
Vancouver	126	14.1	94	74.6	17.1	24	19.0	9.8	8	6.4	10.1	.....	.....	.....	.....	.....	.....
Prince Rupert	42	4.7	25	59.5	4.6	12	28.6	4.9	5	11.9	6.3	.....	.....	.....	.....	.....	.....
Prince George	119	13.3	28	23.5	5.1	37	31.1	15.0	35	29.4	44.3	19	16.0	100.0	.....	.....	.....
Kamloops	345	38.6	231	67.0	42.0	96	27.8	39.0	18	5.2	22.8	.....	.....	.....	.....	.....	.....
Nelson	146	16.4	93	63.7	17.0	45	30.8	18.3	8	5.5	10.1	.....	.....	.....	.....	.....	.....
Cariboo	115	12.9	78	67.8	14.2	32	27.8	13.0	5	4.4	6.4	.....	.....	.....	.....	.....	.....
Totals	893	100.0	549	.....	100.0	246	.....	100.0	79	.....	100.0	19	.....	100.0	.....	.....	.....
Per cent	100.0	.....	61.5	.....	.....	27.5	.....	.....	8.9	.....	.....	2.1	.....	.....	.....	.....	.....
Ten-year average	2,501	.....	1,476	.....	.....	770	.....	.....	213	.....	.....	42	.....	.....	.....	.....	.....
Per cent	100.0	.....	59.0	.....	.....	30.8	.....	.....	8.5	.....	.....	1.7	.....	.....	.....	.....	.....

Table 30—Loss of Property Other Than Forests, 1976

Forest District	Forest Products Cut, Logs, Lumber, Etc.	Buildings	Railway, Logging, and Sawmill Equipment	Miscel-laneous	Total	Per Cent of Total
	$	$	$	$	$	
Vancouver	24,696	.....	.....	.....	24,696	35.2
Prince Rupert	860	.....	.....	1	861	1.2
Prince George	11,122	5,000	2,300	.....	18,422	26.3
Kamloops	3,890	400	332	1,167	5,789	8.3
Nelson	117	50	20,000	.....	20,167	28.7
Cariboo	.....	200	.....	.....	200	0.3
Totals	40,685	5,650	22,632	1,168	70,135	100.0
Per cent	58.0	8.0	32.3	1.7	100.0	.....
Ten-year-average	201,725	136,436	131,317	64,344	533,822	.....
Per cent	37.8	25.6	24.6	12.0	100.0	.....

Table 31—Loss of Forest Cover Caused by Forest Fires, 1976 (Part 1)[1]

Forest District	Merchantable Timber				Immature Timber	
	Net Area Killed (ha)	Total Volume Killed (m^3)	Salvable Volume of Timber Killed (m^3)	Net Stumpage Loss	Net Area Killed (ha)	Present Value
				$		$
Vancouver	33	15 721	9 741	12,303	23	3,635
Prince Rupert	20	4 240	3 444	424	20	378
Prince George	11 045	1 249 995	342 622	322,999	6 202	1,704,407
Kamloops	186	8 592	6 387	2,633	127	13,471
Nelson	19	34 247	33 509	233	21	.....
Cariboo	32	5 603	2 386	1,957	.....	.....
Totals	11 335	1 318 398	398 089	340,549	6 393	1,721,891
Per cent	19.9	100.0	30.2	13.3	11.2	67.4
Ten-year average	17 048	3 559 583	1 617 528	2,302,864	20 950	1,589,706
Per cent	18.9	100.0	45.5	57.0	23.3	39.5

[1] The dollar value of losses in merchantable and immature timber represents only stumpage loss to the Crown. Loss to the Provincial economy may be estimated at approximately 10 times the loss values shown.

Table 32—Loss of Forest Cover Caused by Forest Fires, 1976 (Part 2)[1]

Forest District	Not Satisfactorily Restocked				Noncommercial Cover		Grazing or Pasture Land		Nonproductive Sites		Under 4 Hectares		Grand Totals		
	Logged, Not Burned (ha)	Logged and Burned (ha)	Old Burn Not Logged) (ha)	Damage	Area Burned (ha)	Damage	Area Burned (ha)	Damage	Area Burned (ha)	Damage	Area Burned (ha)	Damage	Area (ha)	Quantity (m^3)	Damage
				$		$		$		$		$			$
Vancouver	9	.....	.....	113	8	100	.....	.....	.....	.....	39	488	112	5,980	16,639
Prince Rupert	.....	.....	.....	.....	.....	.....	.....	.....	4	45	30	375	74	796	1,222
Prince George	1 347	203	6 142	96,111	6 991	87,391	8 587	107,334	13 385	167,306	2 155	26,938	56,057	907,373	2,512,486
Kamloops	29	.....	.....	366	.....	.....	79	990	50	620	26	325	497	2,205	18,405
Nelson	.....	27	.....	340	5	61	6	75	31	383	50	625	159	736	1,717
Cariboo	10	.....	14	290	.....	.....	14	175	.....	.....	52	650	122	3,217	3,072
Totals	1 395	230	6 156	97,220	7 004	87,552	8 686	108,574	13 470	168,354	2 352	29,401	57,021	920,309	2,553,541
Per cent	2.5	0.4	10.8	3.8	12.3	3.4	15.2	4.3	23.6	6.6	4.1	1.2	100.0	69.8	100.0
Ten-year average	5 732	1 010	3 703	86,785	19 372	35,755	3 864	14,380	17 904	32,013	.....	.....	89,757	1,937,967	4,006,485
Per cent	6.4	1.1	4.1	2.0	22.0	0.7	4.3	0.2	19.9	0.6	.....	.....	100.0	54.5	100.0

[1] The dollar value of losses in merchantable and immature timber represents only stumpage loss to the Crown. Loss to the Provincial economy may be estimated at approximately 10 times the loss values shown.

Table 33—Fire Causes, Area Burned, Forest Service Cost, and Total Damage, 1976

Causes	Number	Per Cent	Acres	Per Cent	Cost	Per Cent	Damage	Per Cent
					$		$	
Lightning	159	17.8	14,592	25.6	95,380	8.8	188,679	7.3
Recreational (campers, hunters, fishermen, etc.)	157	17.6	542	0.9	107,417	10.0	23,625	0.9
Railroads operating	57	6.4	43	0.1	12,551	1.2	1,553	0.1
Smokers	130	14.6	158	0.3	129,998	12.0	26,018	1.0
Brush-burning (not railway or right-of-way clearing)	24	2.7	5,513	9.7	73,446	6.8	87,174	3.3
Range-burning	56	6.3	9,013	15.8	158,333	14.7	129,711	5.0
Road, power, telephone, and pipeline construction	5	0.5	3	.....	1,272	0.1	35	.....
Industrial operations (logging, etc.)	116	13.0	7,528	13.2	207,936	19.3	161,534	6.2
Incendiary	59	6.6	2,361	4.1	143,538	13.3	13,050	0.5
Miscellaneous known causes	127	14.2	17,263	30.3	142,192	13.2	1,967,158	75.7
Unknown causes	3	0.3	5	.....	6,415	0.6	66	.....
Totals	893	100.0	57,021	100.0	1,078,478	100.0	2,598,603	100.0

Table 34—Comparison of Loss Caused by Forest Fires in Last 10 Years, 1976

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Total, 10 Years
Total number of fires	3,216	1,647	2,318	4,003	2,898	1,903	2,863	2,558	2,713	893	25,012
Area burned (hectares)	99 016	13 519	164 739	105 688	351 890	26 087	33 422	21 728	24 911	57 020	898,020
Standing timber destroyed or damaged (cubic metres)	4,775,540	150,108	4,428,116	4,040,036	9,499,980	391,496	1,640,856	2,907,884	6,443,444	1,318,398	35,595,858
Amount salvable (cubic metres)	3,083,808	21,252	601,972	1,581,272	1,962,800	189,812	752,528	2,284,968	5,298,748	398,089	16,175,249
	$	$	$	$	$	$	$	$	$	$	$
Damage to forests	757,017	4,751,919	6,776,020	3,437,205	12,974,582	713,681	5,276,975	1,860,942	1,264,407	2,528,465	40,341,213
Damage to other forms of property	164,352	927,201	663,177	744,901	609,064	459,728	1,056,760	491,422	92,430	70,135	5,279,170
Total damage	921,369	5,679,120	7,439,197	4,182,105	13,583,646	1,173,409	6,333,735	2,352,364	1,356,837	2,598,600	45,620,383

Table 35—Fires Classified by Forest District and Cost per Fire of Fire-fighting, 1976

Forest District	Total Fires	Total Forest Service Cost			Extinguished Without Cost			Extinguished With Cost							
		Amount	Per Cent	Average Expenditure Per Cost Fire	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in Province	Number	Per Cent of Total Fires in District	Per Cent of Total Fires in Province	Cost Less Than $100 per Fire	Cost $100 to $1,000 per Fire	Cost over $1,000 to $5,000 per Fire	Cost Over $5,000 to $10,000 per Fire	Cost Over $10,000 per Fire
		$		$											
Vancouver	126	79,800	7.4	1,425	70	55.6	7.9	56	44.4	6.3	18	31	5	.....	2
Prince Rupert	42	26,081	2.4	1,134	19	45.2	2.1	23	54.8	2.6	8	8	6	1	.....
Prince George	119	573,414	53.2	6,826	35	29.4	3.9	84	70.6	9.4	13	24	26	8	13
Kamloops	345	312,981	29.0	1,527	140	40.6	15.7	205	59.4	23.0	81	77	30	9	8
Nelson	146	6,710	0.6	127	93	63.7	10.4	53	36.3	5.9	35	17	1	.....	.....
Cariboo	115	79,492	7.4	1,282	53	46.1	5.9	62	53.9	6.9	16	29	12	4	1
Totals	893	1,078,478[1]	100.0	12,321	410	.....	45.9	483	.....	54.1	171	186	80	22	24
Per cent	100.0	.....	.....	.....	45.9	.....	.....	.....	.....	.....	19.2	20.7	9.0	2.5	2.7
Ten-year average	2,501	5,426,995	100.0	.....	464	.....	.....	2,037	.....	.....	762	739	353	78	106
Per cent	100.0	.....	.....	.....	18.5	.....	.....	.....	.....	.....	30.5	29.6	14.1	3.1	4.2

Cost to other parties (103 cost fires), $509,606. Cost to Forest Service (483 cost fires), $1,078,478.

[1] Cost correct to date; subject to later revision.

Detailed final costs are published one year in arrears in the table "Forest Protection Expenditures" in each Annual Report.

Table 36—Forest Revenue, Fiscal Year 1975/76

	$
Timber licence rentals and fees	541,503.25
Timber berth rentals and fees	78,068.43
Timber lease rentals and fees	85,655.56
Timber sale rentals and fees	760,481.31
Timber sale stumpage	35,285,844.80
Timber sale cruising and advertising	125,962.52
Timber royalties	5,809,346.53
Grazing permits and fees	509,817.07
Forest-protection tax	1,201,630.16
Miscellaneous	957,352.95
Weight-scaling	3,706,274.44
Indian Affairs Agreement	175,202.08
TSHL fire-fighting costs, standby crews	574,760.91
Wood products	157,078.07
Total	49,968,978.08

Table 37—Forest Revenue, 1972–76

	12 Months to Dec. 31, 1972	12 Months to Dec. 31, 1973	12 Months to Dec. 31, 1974	12 Months to Dec. 31, 1975	12 Months to Dec. 31, 1976
	$	$	$	$	$
Timber licence rentals and fees	623,153.52	585,616.72	569,850.39	551,336.77	536,424.40
Timber berth rentals and fees	95,433.78	87,545.48	81,729.63	75,548.18	74,772.43
Timber lease rentals and fees	91,731.48	84,405.30	86,412.80	85,655.56	80,253.37
Timber sale rentals and fees	674,091.83	736,073.92	696,048.97	693,428.67	841,081.45
Timber sale stumpage	91,180,674.04	230,648,895.04	181,605,129.21	43,437,755.58	43,691,476.49
Timber sale cruising and advertising	140,245.57	132,227.44	144,040.10	113,492.20	199,208.82
Timber royalties	5,336,035.96	6,879,851.39	7,459,614.20	6,142,472.77	6,691,829.70
Grazing permits and fees	532,992.78	542,090.28	661,145.80	514,595.23	412,690.82
Forest protection tax	1,185,179.11	1,149,528.61	1,028,180.35	1,136,279.10	1,421,792.84
Miscellaneous	773,132.95	1,056,014.21	1,654,564.42	1,175,699.59	1,267,600.72
Weight-scaling	2,004,105.62	2,660,410.57	2,772,736.05	3,073,017.84	4,468,124.99
Coast scaling					2,067,742.02
Indian Affairs Agreement			151,585.78	175,202.08	181,848.14
TSHL fire-fighting costs, standby crews		282,596.87	283,095.50	651,038.38	775,716.72
Wood products				154,285.90	2,792.17
Reservoir-waterway improvements					305,101.00
Totals	102,636,776.64	244,845,255.83	197,200,142.26	57,979,807.85	63,018,456.08

Table 38—Amounts Charged Against Logging Operations, Fiscal Year 1975/76

Forest District	Royalty	Miscel-laneous	Scaling Fund		Stumpage	Rentals, Cruising, Advertising, Transfer Fees	Total
			Scaling Expenses	Scaling Fees			
	$	$	$	$	$	$	$
Vancouver	3,995,792.39	689,109.97	396,451.89	2,255,901.02	14,647,615.40	786,268.04	22,771,138.71
Prince Rupert	692,474.08	623,665.26	26,257.39	206,328.54	4,677,145.71	304,143.81	6,530,014.79
Prince George	110,552.23	1,205,307.54	.....	.....	3,439,031.28	351,716.16	5,106,607.21
Kamloops	128,585.56	525,778.67	.....	.....	2,791,581.32	196,407.46	3,642,353.01
Nelson	242,904.50	776,220.96	.....	.....	962,128.31	199,720.15	2,180,973.92
Cariboo	88,108.12	625,874.75	.....	.....	4,112,612.98	174,552.69	5,001,148.54
Totals, 1975/76	5,258,416.88	4,445,957.15	422,709.28	2,462,229.56	30,630,115.00	2,012,808.31	45,232,236.18
Totals, 1974/75	8,954,769.20	4,251,752.40	569,292.49	2,539,384.43	115,853,196.88	2,004,181.95	134,172,577.35
Totals, 1973/74	6,694,810.26	4,031,114.49	514,197.74	2,297,984.55	252,909,645.78	2,018,277.41	268,466,030.23
Totals, 1972/73	5,696,871.79	2,755,671.01	435,656.63	2,179,338.81	135,091,040.33	1,883,747.01	148,042,325.58
Totals, 1971/72	5,502,832.37	2,004,531.00	429,262.36	2,124,679.35	68,137,580.27	2,251,080.00	80,449,965.35
Totals, 1970/71	5,508,498.13	1,717,910.69	382,501.42	1,999,070.86	45,558,857.31	1,914,268.47	57,081,106.88
Totals, 1969/70	7,109,112.86	1,362,256.98	463,629.45	2,393,795.94	77,653,886.17	1,854,858.17	90,817,540.17
Totals, 1968/69	5,606,697.44	531,812.86	430,176.61	1,813,633.15	57,086,138.53	2,053,320.31	67,521,778.90
Totals, 1967/68	3,101,010.90	167,243.61	462,292.44	1,730,158.05	32,528,962.43	1,435,377.37	39,425,014.80
Totals, 1966/67	3,014,116.07	97,618.77	418,649.05	1,633,282.45	38,999,030.55	1,614,407.62	45,777,104.51

Table 39—Amounts Charged Against Logging Operations, 1976

Forest District	Royalty	Miscel-laneous	Scaling Fund		Stumpage	Rentals, Cruising, Advertising, Transfer Fees	Total
			Scaling Expenses	Scaling Fees			
	$	$	$	$	$	$	$
Vancouver	5,239,393.06	1,042,557.49	409,803.89	2,387,438.11	27,832,644.17	1,344,713.43	38,256,550.15
Prince Rupert	869,347.56	721,300.55	35,585.22	290,452.61	5,883,842.81	436,667.54	8,237,196.29
Prince George	131,176.90	1,275,718.25	.....	.....	5,307,227.91	422,650.04	7,136,773.10
Kamloops	229,003.97	667,517.34	.....	.....	5,042,409.87	231,492.82	6,170,424.00
Nelson	292,794.09	807,817.99	.....	.....	863,850.77	267,949.01	2,232,411.86
Cariboo	135,543.28	559,382.37	.....	.....	3,662,326.52	173,841.72	4,531,093.89
Totals, 1976	6,897,258.86	5,074,293.99	445,389.11	2,677,890.72	48,592,302.05	2,877,314.56	66,564,449.29
Totals, 1975	6,074,174.55	4,438,210.28	454,867.22	2,380,053.72	28,389,508.35	1,989,319.46	43,726,133.58
Totals, 1974	8,221,171.52	3,841,145.72	560,404.12	2,506,196.96	169,698,769.51	1,213,664.51	186,041,352.34
Totals, 1973	6,804,683.59	3,876,214.24	506,980.82	2,385,179.87	251,777,437.15	1,917,706.24	267,268,201.91
Totals, 1972	5,231,473.78	2,510,946.56	403,475.31	1,995,941.13	96,595,977.64	1,921,977.20	108,659,791.62
Totals, 1971	5,519,236.50	1,930,657.09	423,107.49	2,107,899.80	55,347,358.35	2,341,636.62	67,669,895.85
Totals, 1970	6,102,283.77	1,480,701.37	430,081.94	2,242,672.37	50,042,114.17	1,998,891.74	62,296,745.36
Totals, 1969	6,394,215.18	1,335,288.66	417,010.41	2,046,118.14	80,270,727.23	1,900,578.27	92,363,937.89
Totals, 1968	5,240,932.73	215,421.57	457,873.04	1,960,676.35	48,292,949.16	1,868,711.35	58,039,564.20
Totals, 1967	3,097,283.30	155,429.93	460,492.24	1,654,526.83	33,111,713.22	1,561,397.57	40,040,843.09

Table 40—Forest Service Expenditures, Fiscal Year 1975/76

	$
General administration, protection, and management of forests (includes SW 10)	44,312,766.96
Reforestation and forest nurseries	13,883,509.71
Forestry and Correction Camp Program	36,432.78
Forest research	1,319,231.56
Public information and education (includes SW 21)	366,200.21
Forest Service Training School	161,529.96
Grant to Canadian Forestry Association	35,000.00
Engineering services and forest-development roads	3,054,862.29
Fire suppression	8,282,894.67
Forest inventory	2,327,285.96
Scaling Fund[1] (includes SW 21)	3,909,166.06
Silviculture	—
Public recreation in forest areas	610,461.58
Grazing Range Improvement Fund	419,182.62
Peace River community pastures	17,278.97
Reservoir Waterway Improvements[1]	2,328,836.99
Salary contingencies	5,156,022.90
Accelerated Reforestation Fund	426,571.76
Total	86,647,234.98

[1] *See* Table 43.

Table 41—Scaling Fund

	$
Deficit, April 1, 1975	1,314,861.61
Collections, fiscal year 1975/76	3,038,981.30
	1,724,119.69
Expenditures, fiscal year 1975/76	3,909,166.06
Less expenditures covered by Special Warrant 21	870,184.76
	3,038,981.30
Deficit, March 31, 1976	1,314,861.61

Fund abolished March 31, 1976, under authority of *Government Reorganization Act,* 1976.

Table 42—Grazing Range Improvement Fund

	$
Deficit, April 1, 1975	85,706.02
Government contribution (sec. 13, *Grazing Act*)	346,229.69
	260,523.67
Expenditures, fiscal year 1975/76	419,182.62
Deficit, March 31, 1976	158,658.95

Fund abolished March 31, 1976, under authority of *Miscellaneous Statutes Amendment Act, 1976.*

Table 43—Reservoir Waterway Improvements

	$
Expenditures, fiscal year 1975/76	2,328,836.99
Recovered from British Columbia Hydro and Power Authority	2,328,836.99
Balance	*Nil*

Table 44—Accelerated Reforestation Fund

	$
Surplus, April 1, 1975	428,048.45
Expenditures, fiscal year 1975/76	426,571.76
Surplus, March 31, 1976	1,476.69
Expenditures, nine months, April to December 1976	*Nil*
Surplus, December 31, 1976	1,476.69

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