Report of the Ministry of Forests

Year Ended December 31, 1980

Province of British Columbia
Ministry of Forests

Honourable T.M. Waterland, Minister
T.M. Apsey, Deputy Minister

March 11, 1981

The Honourable Henry P. Bell-Irving,
D.S.O., O.B.E., E.D.,
Lieutenant-Governor of British Columbia

MAY IT PLEASE YOUR HONOUR:

Herewith I respectfully submit the Annual Report of the Ministry of Forests for the year ended December 31, 1980.

Yours truly,

T.M. Waterland,
Minister

ı 11, 1981

onourable T.M. Waterland,
er of Forests,
nent Buildings,
ia, B.C.

ve the honour to submit the Annual Report of the
ry of Forests for the year ended December 31, 1980.

ruly,

Apsey,
Minister

Directory

Minister
HON. T.M. WATERLAND,
Victoria

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Deputy Minister, Victoria
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Chief Forester and Assistant Deputy Minister, Forestry Division, Victoria
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Assistant Deputy Minister, Operations Division, Victoria
A.C. MACPHERSON,
Assistant Deputy Minister, Timber, Range and Recreation Division, Victoria
R.J. CULLEN,
Assistant Deputy Minister, Finance and Administration Division, Victoria

Staff Consultant
J.A.K. REID,
Victoria

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Director, Inventory Branch, Victoria
R.L. SCHMIDT,
Director, Research Branch, Victoria
C.M. JOHNSON,
Director, Silviculture Branch, Victoria
J. MILROY,
Director, Range Management Branch, Victoria
D.H. OWEN,
Director, Protection Branch, Victoria
J.J. Juhasz,
Director, Timber Management Branc
Victoria
H.N. MARSHALL
Director, Recreation Management Br
Victoria
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Director, Valuation Branch, Victoria
C.P. WILLIAMS,
Director, Engineering Branch, Victor
L.G. UNDERWOOD,
Director, Personnel Services Branch,
R.W. LONG,
Ministry Comptroller, Financial Serv
Branch, Victoria
J.G. HILL,
Director, Systems Services Branch, V
J. SHEPPARD,
Director, Legal and Administrative S
Branch, Victoria
J.H. TAYLOR,
Director, Technical Services Branch,

Regional Managers
J.A.D. MCDONALD,
Cariboo Forest Region, Williams Lak
A.B. ROBINSON,
Kamloops Forest Region, Kamloops
M.G. ISENOR,
Nelson Forest Region, Nelson
J.R. CUTHBERT,
Prince George Forest Region, Prince
J.A. BIICKERT,
Prince Rupert Forest Region, Prince
D. GRANT,
Vancouver Forest Region, Vancouve

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Deputy Minister's Message

The year 1980 was a mixed one for the province's forest industry. The timber harvest declined slightly to 75 million cubic metres, approximately 1 million less than the record harvest of 1979. Forest revenues to the province increased to $514 million, surpassing the 1979 record by $55 million.

The pulp and paper industry prospered as prices increased and operating rates remained at or near capacity through most of the year. In sharp contrast, the lumber and plywood sectors experienced lower prices and reduced production as residential construction activity declined in both Canada and the United States in response to record high interest rates. In foreign markets for pulp, paper and solid wood products, provincial producers continued to benefit substantially from the lower value of the Canadian dollar relative to other currencies, especially the United States dollar.

The demand for lumber and plywood is expected to increase slowly through 1981 as economic conditions improve. The demand for pulp and paper will probably soften somewhat, but a large decline in provincial operating rates is not expected. The longer-term prospects for the provincial forest industry remain favourable and are reflected in the nearly $1.4 billion of capital and repair expenditures undertaken by the industry in 1980 to equip, modernize and expand its production facilities. The increase in investment expenditures was concentrated in the pulp and paper sector where several significant expansions are presently underway.

Provincial revenues from range use rose from $777 000 in 1979 to $1 283 000 in 1980. This rise in revenues was largely attributable to an increase in grazing fees, reflecting an increase in the average price of cattle sold in the previous year. The use of Crown range increased by approximately 22 000 animal unit months (AUMs) to 931 000 AUMs.

Despite poor weather, public recreation Crown forest lands remained at a high rate the summer and, towards year-end, there w noticeable increase of winter recreation act on forest lands.

For the Ministry of Forests, 1980 was a memorable year. The ministry presented th resource analysis and five-year program rep the Legislative Assembly in March 1980. T release of these documents marked the beg of a new era of resource management in th province by establishing a comprehensive program to maintain and enhance the prov forest and range resources. This program w updated annually to reflect revised resourc management goals and other changing conditions.

The five-year resource program cycle, as instituted under the Ministry of Forests Ac not be completed until the spring of 1982. Beginning next year, the Annual Report w present an assessment of the ministry's performance in achieving the goals set fort the program. The presentation of the mini Annual Report will, at that time, be chang fiscal year reporting basis. The statistical ta traditionally contained in the Annual Rep will henceforth be published as a separate statistical supplement, based on a calendar reporting basis.

The ministry expanded its efforts to enc public participation in planning the use of province's forest lands. The ministry used variety of forums, from informal informati meetings to highly structured, ongoing pul advisory groups. Opportunity for public in the ministry's policy-making process was a afforded by the publication of white papers practice of soliciting responses to proposed ministry initiatives was successfully introd 1979 as a means of allowing interested par participate in the formulation of ministry and programs.

In 1980, the ministry made considerabl progress in the regulation of timber harves Timber Supply Area (TSA) basis. Ministr completed yield analyses for 14 TSAs, bri

al completed to 25 out of the 33 TSAs
hed for the province. The chief forester
e results of the yield analyses to set
le annual cuts in 10 of the TSAs.
ministry introduced the Small Business
ise Program in recognition of the
nce of this dynamic segment of the forest
y. The program makes timber available to
perators and is designed to maintain a
between large and small companies in the
ndustry. It also provides a mechanism for
ry of new operators into the industry.
ctoria and in all six forest regions, the
y continued to implement its decentralized
g structure. When this process is
ted in 1981, the ministry will have an
t streamlined structure for carrying out its
e under the Ministry of Forests Act.
e 1980 was an historic year for the
y of Forests, I am looking forward to 1981
coming years when British Columbia
es its leadership role in forest and range
management through the Ministry of

psey,
Minister

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I
The Structure of the Ministry

The ministry established its present structure to decentralize administrative authority. The district, region and headquarters staffs work together to decentralize decision-making. The ministry headquarters staff define policy and provide overall guidance. They also advise the deputy minister and consequently the minister and government on all matters relating to forest and range policy.

Headquarters Organization

As shown in the organization chart on page 11, the ministry headquarters staff is organized into the following four divisions:

— Forestry;
— Timber, Range and Recreation;
— Finance and Administration;
— Operations.

Each of the four divisions is headed by an assistant deputy minister who reports to the deputy minister. These four officials, together with the deputy minister, constitute the ministry's executive. In addition to the four assistant deputy ministers, the directors of the Information Services Branch and the Strategic Studies Branch report directly to the deputy minister.

The functions of each division are summarized below.

The *Forestry Division* ensures that all Crown forest and rangelands are managed to provide the greatest long-term benefits for British Columbia. The assistant deputy minister of this division is also the chief forester. The Forestry Division maintains a comprehensive inventory of all the province's forest and range resources and assesses these lands in terms of their present and potential uses. The division comprises the following five branches:

— Planning;
— Inventory;
— Research;
— Silviculture;
— Protection.

The *Timber, Range and Recreation Division* responsible for formulating comprehensive timber, range and recreation programs and resource management policies. It also advis executive on all matters involving engineer and valuation activities. The division is cor of the following five branches:

— Range Management;
— Timber Management;
— Recreation Management;
— Valuation;
— Engineering.

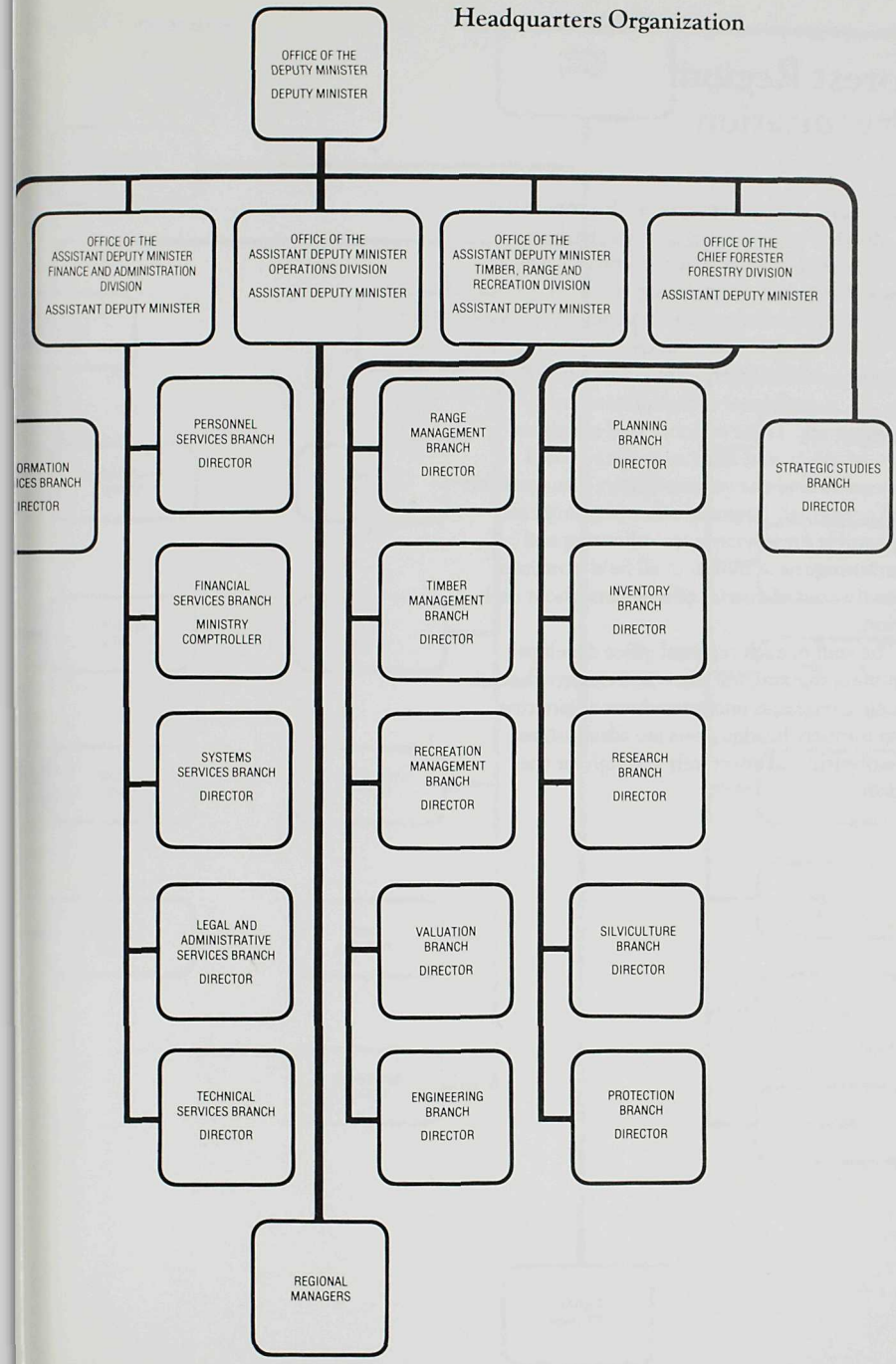
The *Finance and Administration Division* i responsible for advising the executive in all administrative matters and for developing p and procedures pertaining to the ministry's general administration. The division is com of the following five branches:

— Personnel Services;
— Financial Services;
— Systems Services;
— Legal and Administrative Services;
— Technical Services.

The *Operations Division* is responsible for ensuring that the ministry's policies, progra procedures are promptly and effectively implemented in the province's six forest re and 46 districts. The assistant deputy minis operations functions as the deputy minister immediate assistant in administering and coordinating all field operations. The six fo regions are:

— Cariboo;
— Kamloops;
— Nelson;
— Prince George;
— Prince Rupert;
— Vancouver.

Headquarters Organization

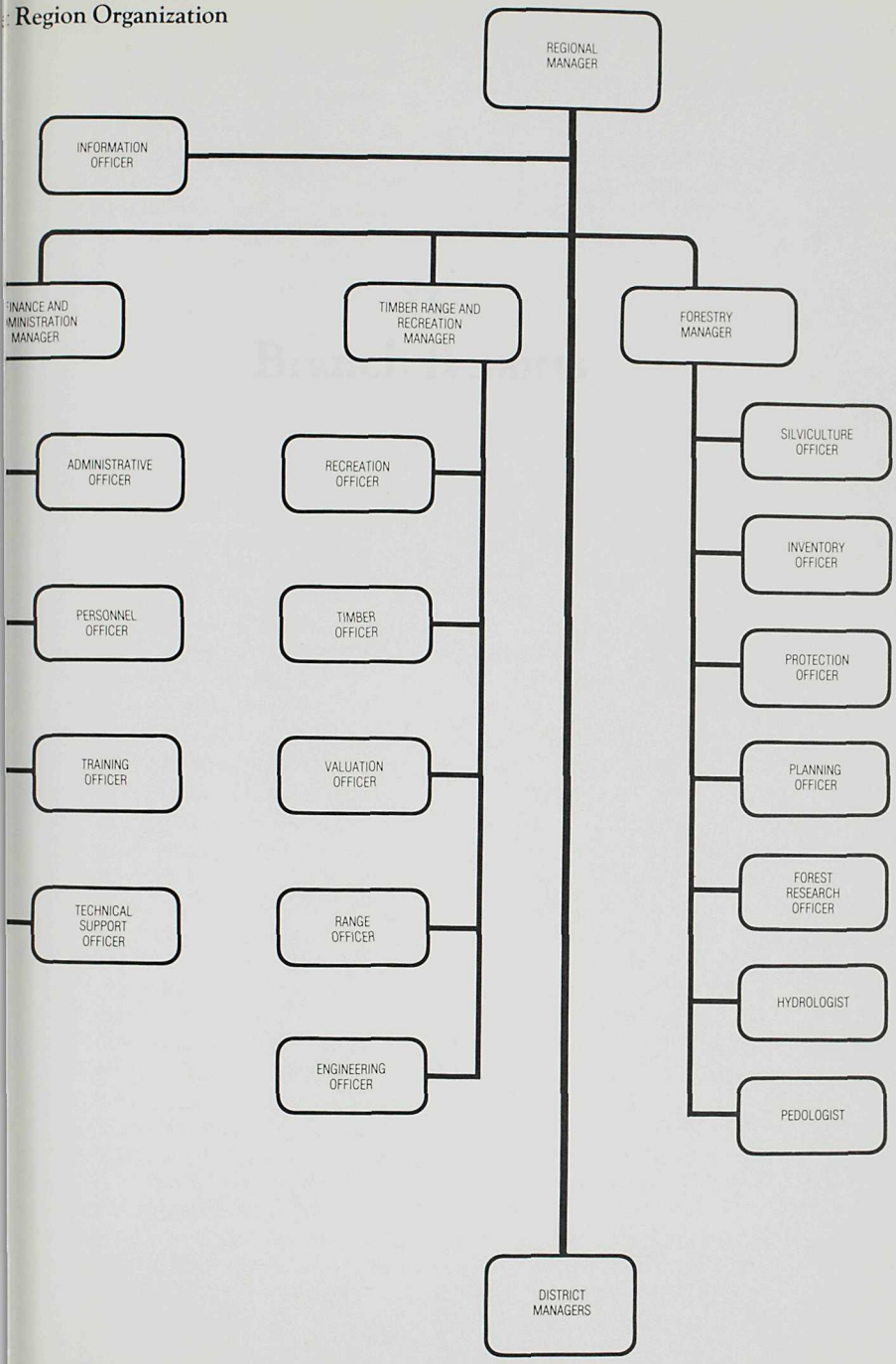


Forest Region Organization

For administrative purposes, the province is divided into six forest regions. Each is administered from its own regional office by a regional manager. Each region is further subdivided into forest districts which are under the direction of district managers. The internal organization of each regional office, shown on page 13, is analogous to that of ministry headquarters. Three regional staff managers provide advice and services to the regional manager and to the various district managers and field personnel. Regional office personnel are responsible for servicing, coordinating and monitoring the activities of all field personnel operating out of district offices throughout each region.

The staff of each regional office develops regional programs and plans and ensures that all policies, programs and procedures originating from ministry headquarters are administered consistently and effectively throughout the region.

Region Organization



II
Branch Reports

Information Services

Information Services Branch creates public awareness, understanding and support for the goals and programs of the ministry by informing the news media, industry, educational institutions, ministry employees and the community. The branch's four operating sections advise and assist the deputy minister, the executive, branch directors, regional managers and other staff with internal and external communications.

The editorial services section helps plan and produce a wide variety of print materials. Working in cooperation with other ministry branches, this section's major projects in 1980 included the preparation of a comprehensive information package on the ministry's five-year resource program, a 36-page colour brochure on forest fire and pest protection, the 1979 *Annual Report*, numerous news releases to the province's media, and a monthly employee newsletter. This section is also responsible for the popular quarterly magazine, *ForesTalk*. The B.C. chapter of the Graphic Designers of Canada, in 1980, gave the magazine an award for design excellence.

The public affairs section handles enquiries, promotes community relations, and coordinates tours and special events. In 1980, these projects included the 50th anniversary celebrations at the Green Timbers Nursery and displays in Princeton, Vernon, Vancouver and Victoria.

The audio visual section provides still pictures, films and photographic laboratory services. During the year, it released "Chewers of Wood", a half-hour film on the mountain pine beetle, and began production of two new films on backlog reforestation and tree improvement. Slide productions with accompanying narration were also created for the Protection and Silviculture Branches.

The ministry library serves ministry staff throughout the province. In 1980, these services were improved through the expansion of facilities in new and larger quarters, the acquisition of a computer terminal for on-line literature sea and the creation of an in-house data base r system.

Six regional information officers provide f range of communications services at the re and district operating levels. During the ye most were active in the presentation and discussion of numerous Timber Supply Are reports and a growing number of public involvement programs.

Strategic Studies

Strategic Studies Branch advises the deputy minister and other members o the ministry executive on matters pertaini

- forest and range policies and progra
- the state of the forest and ranching industries;
- issues/interactions between ministry programs and those of other govern agencies.

In 1980, the branch maintained its role ministry representative on inter-agency committees assessing resource managemen policies in the province. The branch was a active in the work currently carried out by number of national organizations such as t Canadian Council of Resource and Enviro Ministers (CCREM) and the Forest Indust Development Committee (FIDC).

The branch prepared the ministry's secc five-year resource program. This first upda included a modified program structure to b consistent with the ministry's budgeting a staffing process; an expanded silviculture p to reflect projected increases in timber har several regions; increased expenditures on r research; and a proposal for the accelerate treatment of forest lands which have not b returned to a productive state after loggin conjunction with this update, branch staff developed a reporting system to monitor t progress and effectiveness of the five-year program. The reporting system is schedule

by mid-1981. It will serve as a basis for ed annual report to the Legislature and nit ministry officials and other interested assess the ministry's achievements.

h staff evaluated wood supplies for l pulp mill expansion throughout the . In particular, during the first half of the branch, in cooperation with Timber nent Branch, was involved in evaluating cations for Pulpwood Area No. 6 (PA 6) oviding information to ministry officials ublic hearings. As a consequence of these , the ministry moved to deregulate chip d chip direction in the interior of the .

orest Act provides for timberland es whereby parcels of forest land may be ated to facilitate management. The responsible for reviewing all timberland proposals and making appropriate ndations. In 1980, the branch assisted in ration of a policy statement indicating exchanges would be undertaken.

teractions between timber and range and est resource uses are monitored and as part of the continuing responsibilities nch. As in previous years, much effort ted to the reconciliation of multiple ource use policies, especially those wildlife. One such project was to whether a more costly silviculture in the Sayward Forest would increase the deer population sufficiently to warrant ional expenditure. In part, this required igation of the methods used to compare ent types of values attributable to wildlife nber. The results were published in a titled *An Evaluation of Wildlife ent Through Silvicultural Changes in the Forest.*

anch reviewed proposed federal and l legislation for their implications on nagement and negotiated changes with ting agencies. With the addition of staff e year, the branch expanded tly its economic analyses of forest ent practices.

Planning

Planning Branch develops forest management planning systems to implement the ministry's five-year resource program. The branch is also responsible for coordinating ministry resource planning systems with those of other resource ministries.

In 1980, major activities of the branch included completion of 14 Timber Supply Area (TSA) analyses, development and refinement of computer planning systems, delineation of additional sites for provincial forests, development of a ministry program for public involvement, and review and amendment of Tree Farm Licence (TFL) inventory and allowable cut calculation procedures. These activities are summarized as follows:

Timber Supply Areas: The branch has now completed 25 of the 33 TSA yield analyses. The remainder will be completed in 1981.

Computer Planning Systems: The branch has investigated and is currently testing several simulation and optimization systems for predicting forest growth. These planning systems, namely MUSYC (Multiple Use Sustained Yield Calculations), TREES (Timber Resource Economic Estimation Systems), and IPS (Interactive Planning System) are being tested in cooperative studies with industry foresters. The results of such studies will be used to assist the branch in future analyses of forest resource use and management opportunities throughout the province.

Provincial Forests Program: The objective of the provincial forests program is to designate the land base required to maintain provincial forest and range resource production. This program has been in existence for many years and some 97 provincial forests had already been established over nearly half of the province. The current phase of the program is to review the remainder of

the province and to establish approximately 50 additional provincial forests.

Public Involvement Program: The branch developed a program for public involvement in the resolution of conflicting forest resource uses. As part of this program, the branch prepared a handbook and convened a seminar on public involvement. The seminar was attended by representatives of resource agencies, universities, industry and members of the general public. As a result, the branch amended the handbook and commenced training of ministry staff.

Allowable Cut Calculations: A task force, comprising ministry staff and representatives of TFL holders, was struck to review procedures for allowable cut calculations and inventory estimates to ensure that techniques used in such calculations were compatible with those used in TSAs. The task force submitted its report to the chief forester in December 1980.

Inventory

During 1980, Inventory Branch continued its role of providing forest and range maps and statistics required for the management of these resources and for the determination of the rate of timber harvest in the province.

During the field season, regional inventory crews, assisted by the branch, conducted Timber Supply Area (TSA) re-inventory surveys in the following areas:

FOREST REGION	AREA SURVEYED
Cariboo	Williams Lake TSA (western portion of Stum Public Sustained Yield Unit, PSYU)
	Quesnel TSA (Bowron, Cottonwood, and the southern half of Big Valley PSYUs)
Kamloops	Merritt TSA (Similkameen PSYU portion)
Nelson	Kootenay Lake TSA (Lardeau PSYU portion)
Prince George	Fort Nelson TSA (Fort Ne PSYU portion)
Prince Rupert	North Coast TSA (Hecate portion)
Vancouver	Quadra TSA (Bute Inlet a

Other specific activities included the fo

Inventory Methodology Section

— produced manuals required to cond forest and range inventory at the re and district levels;
— acquired and installed specialized equipment in each region to facilit measurements based on air photogr images;
— completed the initial design of the provincial range inventory;
— acquired and evaluated satellite an airborne multi-spectral scanner ima inclusion in provincial inventory procedures.

Inventory Statistics Section

— continued systems development an entry into the Mark IV Data Base a the Interactive Graphics Design Sy (IGDS);
— entered into the data base informat TSA re-inventory attribute list, th ministry's more than 7 000 forest c maps, and other related forest inve statistics. Progress made in IGDS d is shown in Table E.5;
— provided numerous area/volume su for other ministry staff.

Growth and Yield Section

— technical support for the remeasure 171 permanent plots in natural star
— technical support for the remeasure 314 productivity samples related to Managed Stand Yield Program;
— technical support for the installatic plots to measure growth response ir Intensive Forestry Program;

:m analyses of 50 trees in the Nelson
rest Region to assist in refining site
aluation techniques;
odification of basic volume-age equations
permit estimations of volume per hectare
d average tree diameter by site class, site
dex, crown closure and site class, crown
osure and site index, and basal area and
e index.

and Update Section
:ay studies were carried out in five of six
ions involving about 1 300 trees in 11
nmercial species;
entory classification manuals were
pared: one for the identification of major
C. forest insect pests, and the other for
interpretation of 70 mm photographs
forest disturbances;
re than 400 history maps from the
ions were processed;
maps for 32 proposed provincial forests
e prepared and distributed to regions for
nment and verification.
ghout 1980, Inventory Branch
d to provide staff assistance, technical
and advice to other branches in the

arch

rch Branch provides research and
elopment services required to support the
forest and range programs. The branch
ges problems in silviculture, tree
y, tree improvement, biometrics,
d earth sciences. In 1980 the ministry's
program was strengthened considerably
he construction of additional facilities,
ase of new equipment and the addition
rial and research specialist staff. Major
in 1980 included:
elopment of a research information and
mmunication system;
paration of a five-year forest fertilization
and juvenile spacing research program for the interior;
— continued testing of grass-legume mixes and shrub species for soil stabilization along logging roads and gulleys;
— evaluation of the impact of damaging factors upon immature lodgepole pine stands to help determine optimum spacing densities;
— construction of a laboratory, greenhouse and service complex near Vernon to accommodate forest geneticists, tree physiologists and other staff;
— continued expansion of large-scale progeny testing in the coastal Douglas-fir tree improvement program, and initiation of similar tests in western hemlock;
— collaboration with the Fish and Wildlife Branch of the Ministry of Environment and with Canada Department of Fisheries and Oceans in studies on the interactions between fish habitat and logging of unstable areas on the Queen Charlotte Islands;
— collaboration with the Fish and Wildlife Branch of the Ministry of Environment on investigations of the interactions between intensive silviculture and wildlife populations on Vancouver Island;
— development of a humus form classification to aid the ecological classification system;
— expansion of research to enhance cone production and seed set;
— development of container-shelterhouse seed orchard systems.

Each year the branch publishes the results of its experiments and field studies in the *Forest Research Review*.

Silviculture

Silviculture Branch is responsible for developing and monitoring silviculture programs throughout the province.

Major activities in 1980:
— tree planting by both the ministry and

forest companies reached an all-time high of almost 75 million trees on over 63 000 hectares;

— site preparation to ensure regeneration by natural seedfall or by planting increased to over 121 000 hectares;

— the ministry's tree nursery program in 1980 utilized all available field and greenhouse capacity, sowing for 110.5 million seedlings and raising 16 million transplants. For the first time private nurseries, both commercial and licencee, participated in the production of seedlings for reforestation on Crown land. Private nurseries sowed 8.8 million container seedlings and produced approximately 1.5 million transplanted trees. Private nurseries involvement in the production of planting stock will expand significantly over the next few years;

— a total of 2 517 hectolitres of cones, yielding 1 559 kilograms of seed were processed during 1980. Coastal seed orchards produced enough seed to provide approximately 600 000 seedlings.

Approval in principle has been received to greatly expand the interior tree improvement and seed orchard programs. Four interior spruce orchards were established at Skimikin. Parent tree selection activities continued and, to date, over 2 350 spruce parent trees have been selected throughout the interior of the province. Other ministry activities in silviculture in 1980 included:

— establishment of about 10 000 new survival plots on 1980 plantations, and the remeasurement of close to 17 000 plots from previous years' plantations;

— examination of more than 220 000 hectares, by ministry and licencees staff, of previously denuded forest land to determine the extent of natural restocking;

— treatment of close to 4 500 hectares of forest land for conifer release and juvenile spacing of more than 21 000 hectares. A major portion of these activities were carried out under the Subsidiary Agreement for Intensive Forest Management, in which the federal government and the province share the cost of the program. Such stand tending activities are expected to accelerate appreciably once regions and distric their full complement of staff.

Other details of branch activities are p in Tables A.1 to A.7, and B.1 to B.7.

Protection

Protection Branch is responsible for minimizing timber losses from fires, i and diseases. It is also responsible for dev and applying new equipment and technic forest fire and pest control.

Fire Management

Extreme drought conditions were alrea prevalent in many parts of B.C. before th season started in mid-April. Serious fores occurred in most regions, but were especi numerous in the Fort Nelson/Peace River the Prince George Forest Region. Fortun drought conditions did not persist, as high average rainfall occurred in June, July an throughout most of the province. Lightni the main cause of forest fires, starting mo 650 or about 38% of the provincial total to 1 750. The total area burned by forest more than 65 000 hectares, below the pr annual loss of 69 000 hectares as identifie five-year resource program. Details of cau forest fires, areas burned, fire-fighting co damages are presented in Tables C.1 to C

The branch's air support services conti play a major role in forest fire control. Of note is the branch's recently developed R Program which employs a strategy of air t for initial strike and helicopters in suppor specialized initial attack crews in dealing forest fires. Airborne infra-red fire mappi systems are also being used effectively to the final stages of fires which burn over e areas.

The province provided fire-fighting as to Ontario, Northwest Territories and A Fire-fighting resources including fire crew

nt, aircraft and other personnel were
a ilable to help fight forest fires in these

anch completed plans for a
ensive fire suppression training program.
ontent is now being developed and will
he subject of basic fire suppression. The
program will be directed toward fire
nd first line supervisors. The branch
develop a series of basic, intermediate
nced courses for this training program.
anch's prescribed burning program, used
ty of forestry purposes such as site
on, land rehabilitation and fire hazard
continued, with more than 76 000
urned under supervised conditions.

nd Development
9), this section undertook several major
lnd development projects, including:
dy of forest fire hazard and potential fire
aviour created by juvenile stand
nning practices and preparation of
delines to minimize the wildfire problem
uch an environment;
luation of the effectiveness of a
tning location system which has been
blished in the Kamloops Forest Region;
estigation of forest fire ecology in lands
th of 57° N latitude, and the
elopment of guidelines for fire
nagement practices in boreal and
-boreal biogeoclimatic regions of the
vince.

gement
., timber losses due to forest pests
nd diseases) have been estimated to
million cubic metres annually.
t reduction of these losses with a
t increase in potential timber
n can be achieved through the initiation
iate forest pest management programs.
e this objective the branch now has on
st pest manager, a forest entomologist
gional pest management coordinators.
9), the branch undertook several pest
ent projects:

— timber salvage operations for mountain pine beetle and spruce bark beetle attacked stands. Throughout the province, more than 200 000 hectares of pine and spruce forests are under attack. This particular pest problem is most severe in the Nelson and Cariboo Forest Regions;
— task force report on the beetle problem in the Cariboo Forest Region. A study of the severe beetle problem in this region was completed and recommendations were made to coordinate timber salvage and pest control operations;
— control measures to minimize dwarf mistletoe damage in infected stands;
— task force report on management of undesirable vegetation. An inter-branch study group completed a report on the management of undesirable vegetation. The report identified several areas of concern, including the need for chemical herbicides in intensive forest management.

Range Management

Range Management Branch develops policies and guidelines for the management of the province's rangelands. The ministry's complement of professional and technical specialists are responsible for the inventorying, planning and managing of more than 10 million hectares of Crown rangelands in the province.

Major branch activities in 1980 included:

— the establishment of administrative procedures to accommodate the transfer of rights to Crown range. Last year, about 60 ranches were sold to new owner-operators. Under the Range Act, the transfer of the rights to Crown range associated with such sales requires the consent of the Minister;
— an inventory of more than one million hectares of rangelands in parts of five forest regions. This inventory will provide valuable information for rangeland management and planning;

— negotiations with Ministries of Agriculture, Environment, and Lands, Parks and Housing, regarding jurisdictional responsibilities for managing the province's range resource;
— the establishment of administrative procedures to treat appeals under the Range Act, and other representations addressed to the branch which are not within the statutory appeal process.

The branch continued its activity in the Coordinated Resource Management Program (CRMP) with close to 90 plans in the Cariboo, Kamloops and Nelson Forest Regions completed or under review. More than $4 million of Agriculture and Rural Development Subsidiary Agreement (ARDSA) funds were spent on approved developments within the planned areas.

Other branch activities are presented in Table F.1.

Timber Management

Timber Management Branch is responsible for the development of policies and the administration of programs relating to timber tenures, timber apportionment, timber harvesting, timber marking, the granting of rights to harvest Crown timber and the administration of land use within provincial forests.

In 1980, major accomplishments of the branch included:

— the implementation and refinement of the Small Business Enterprise Program to promote the growth of this sector of the forest industry;
— the drafting of the standard agreements for the forest licence and timber sale licence tenures in accordance with the requirements of the Forest Act;
— the establishment of the cut control policy for forest licences and timber sale licences to promote the ministry's policy of full timber utilization;
— the formation of advisory committees in the interior to make recommendations Minister of Forests regarding contra clause compliance by licencees;
— the negotiation of a memorandum agreement between the Ministry of Parks and Housing, and the Ministr Forests to provide for the authorizat non-forestry uses of lands within pr forests by the Ministry of Lands, Pa Housing. All responsibilities conce roads are retained by the Ministry o under this agreement.

The 1980 provincial scale was 75 millic metres, slightly below the record establish 1979. Details of the provincial harvest ar presented in Tables D.1 to D.6. Activitie the ministry's Small Business Enterprise P are shown in Tables H.4 and H.5.

Recreation Manageme

Recreation Management Branch is re for developing and managing recrea programs on Crown forest land. The prog originated in 1971 and has since grown st Reflecting this growth, the ministry estab the branch in 1979, and appointed recrea officers and recreation coordinators in all offices during 1980. District resource offic (recreation) positions have been establish all positions are expected to be filled short will give the ministry a full complement o with specific responsibilities in forest recr management.

Other major branch activities included

— a recreation analysis to serve as a pr for future planning studies;
— the designation of recreation sites a to allow for the application of use regulations in accordance with the Act. By year end, 142 sites had bee designated and notices published in *Provincial Gazette;*
— the continuation of the Recreation Brochure Map Program. There are

:as throughout the province for which ıps are available. These brochures are ıtributed to visitors through local ministry ıices.

:0, the ministry maintained 1 127 ın sites and 2 301 km of recreation trails. :n unusually damp and cold summer, ı use of these sites and trails was slightly ım last year, particularly in the ıer and Kamloops Forest Regions. Visits ıry recreation sites were about 1.3 million ;, a decrease of 300 000 from the previous lwards year-end, there was a noticeable ıin winter recreational use of forest lands. tails are listed in Tables G.1 and G.2.

ation

ıation Branch is responsible for ensuring t the Crown receives a fair and equitable ım the sale of timber. The branch is also ıle for scaling procedures and the review ılications for the export of unmanu- ′orest products, such as chips and logs.

; 1980, branch staff concentrated on the ıent and implementation of policies and ıes to enable each region and district to its assigned responsibilities efficiently ıtively under the new ministry ion. As provincial timber pricing and ılicies have a strong effect on the l economy, communications between try and the private sector are maintained p valuation and related regulatory ıes that are efficient, fair and equitable to ies.

c projects completed or in progress 80 included:

ılication of a white paper, *Alternatives for ɔwn Timber Pricing*. The response to this ıer indicates a great deal of interest in ı issue by both the forest industry and the eral public;

ısultation with other branches and the ıustry in developing policies and procedures for the granting of credits against stumpage payable, as provided by Section 88 of the Forest Act;

— updating the terms of reference for two advisory committees on export, namely the Log Export Advisory Committee and the Chip Export Advisory Committee;
— drafting of a new log salvage regulation following an extensive review of the responses to the ministry white paper, *Log Salvage in the Vancouver Log Salvage District*;
— review of ministry timber appraisal policies and related regulatory procedures to prepare a consolidated province-wide appraisal manual. Work on the manual will be completed during 1981;
— cooperative studies between industry and the ministry to improve cruising, scaling and appraisal procedures;
— completion of a new schedule of log grades for coastal B.C. This work, undertaken by a committee of officials from the ministry and the forest industry, has taken more than two years. The new schedule was implemented on January 1, 1981.

Engineering

Engineering Branch is responsible for surveying, designing, constructing and maintaining provincial forest roads and related structures; negotiating the acquisition of road rights-of-way and other major land purchases by the ministry; developing improved equipment for timber harvesting and silvicultural treatments; and assisting other agencies in studies regarding various operational phases of the forest industry. In order to carry out many of these functions, the branch provides advice and assistance to staff in the regions or in other headquarters branches.

Engineering activities undertaken by the ministry in 1980 included:

— in conjunction with the British Columbia Systems Corporation, the development of computer simulation systems to design roads

and to estimate log-haul times;

— completion of a study of alternatives for timber development on the west side of the Skeena River, north of Terrace;
— continuation of the clearing program in the Revelstoke Reservoir;
— completion of design and commencement of construction on the Anstey River Forest Road, phase one of the Hurley River Forest Road, and a bridge across the Nicola River;
— the completion of a bridge across the Coglistiko River on the Michelle-Coglistiko Forest Road;
— the acquisition of rights-of-way for 15 forest roads throughout the province;
— the purchase of land for district headquarters in Queen Charlotte City, and of residential properties in other communities;
— the provision of engineering services to the British Columbia Debris Board regarding the operation of the Fraser River debris catchment basin.

Personnel Services

Personnel Services Branch is responsible for the establishment and administration of the ministry's personnel policies and programs. These responsibilities include staff recruitment, job classification, labour relations, staff development, job safety programs and employee compensation and benefit administration.

During 1980, branch activities were directed towards the implementation of the ministry's new organizational structure and the integration of the Forest Service Training School into the branch as a part of its expanded staff development function.

In employee relations, major activities included:

— the development, in cooperation with the British Columbia Government Employees' Union (BCGEU) and the Government Employee Relations Bureau (GERB), of a policy concerning BCGEU members affected by ministry reorganization, formation of a joint ministry-BCGE Staffing Committee to review indiv cases;
— negotiation with the Professional Employees' Association (PEA) and BCGEU to derive a list of ministry which are to be excluded from unio professional association membershi

The branch made considerable progress the year in the staffing of positions resultin reorganization. Positions were filled in Vi the regions and districts. All district mana positions were filled by early 1980 and, by November, selections were made for all re operations superintendent positions.

By the end of 1980, classification of the majority of positions within the ministry a three organizational levels had been comp major task in 1981 will be to review the ne structure for possible improvements.

The licenced science officer plan, which some 400 positions in the ministry, was completed. Under this program, all scient specialists such as agriculturalists, enginee forest agrologists and foresters are rated un new and more consistent compensation classification system.

A new section was added to the branch with human resource planning and develo and also to coordinate ministry training. M than 600 employees attended courses at th Service Training School during 1980. A decentralized program coordinated by the also provided training courses at convenie locations throughout the province. The continuing implementation of the ministr reorganization provided the greatest dema the services of the school, with training pr required for newly appointed district mana regional staff managers and operations superintendents. In addition to managem training, the school continued to offer bas training in supervisory skills and instructio techniques.

;ems Services

:ms Services Branch is responsible for
naging, defining and administering the
procedures and overall planning of the
's information and data processing

stent with the changing business and
il environment, the ministry continued to
ts use of computer and allied technology
rt of its business and operational
s. In 1980, this increase was reflected by a
rease in expenditures at the British
ia Systems Corporation (BCSC) and by a
rease in volume handled by the data entry
ations section of the branch. Given this
ment, the branch began the development
-range systems plan, identifying the
's projected information requirements
to the ministry's new organization and the
resource program.
branch activities in 1980 included:
preliminary review of the ministry's
stributed Data Processing (DDP)
quirements, including an assessment of
ctronic word processing needs for 13
anches and two regional offices;
e preparation of an inventory of ministry
ta processing systems which will be
ected by the decommission of the BCSC
oneywell computer scheduled for
ptember 1981. By year-end, the branch,
conjunction with BCSC, had identified
e affected systems and prepared
nversion schedules;
ining programs for appropriate ministry
ff in many areas related to information
ocessing, such as systems development
thodologies and project control
chniques;
e establishment of Systems Steering
mmittees to aid in setting development
orities and to ensure the development of
mpatible systems within the ministry.
day-to-day function, branch staff were engaged in all phases of systems development and operation. During 1980, the branch was actively involved in development of new systems to handle such tasks as:

- accounts receivable/interest calculation;
- automated library retrieval system;
- Section 88 reporting and improvements to the Billing and Harvest Data Base System;
- automated organization chart preparation;
- nursery costing system;
- participation with the Office of Comptroller General (OCG) in development of a payroll and personnel system and a Financial Systems Network;
- provision of additional statistical analysis systems;
- automated lightning location network;
- interactive modelling systems.

Legal and Administrative Services

Legal and Administrative Services Branch is responsible for providing a range of specialized support services, such as para-legal services, general administrative services, and reproduction and graphic illustrative services for the ministry.

In 1980, the branch:

- processed 90 appeals which were made under the Forest Act, 88 of which related to stumpage determination under Section 84;
- processed other formal representations made to the ministry. The majority of these representations were from the Provincial Ombudsman;
- prepared and distributed the ministry's information package pertaining to forest and range legislation and associated regulations;
- reviewed, and prepared for publication, the ministry's manual of policy statements. The three volumes of the policy manual will be available to the public by mid-1981.

Throughout the year, the branch was actively

involved in providing support services to other branches within the ministry.

Technical Services

Technical Services Branch is responsible for providing and maintaining accommodation, marine craft and equipment, and for providing mechanical, electronic and related technical services for the ministry's activities throughout the province.

Building Services Section maintains the ministry's more than 1 700 building and mobile accommodation units. This section also prepares architectural plans and specifications, and cost estimates for a large number of building and engineering works. In 1980, more than 60 major projects were completed, including greenhouses, irrigation systems, laboratory buildings and air tanker bases.

Marine Services Section maintains motor launches for the ministry's coastal activities in timber management, forest inventory and timber scaling. In 1980, this section made several major acquisitions, including a steel barge to accommodate the increasing use of barge-based helicopter operations. This section also undertook modifications to several motor launches to coincide with the changing needs of the ministry's coastal activities.

Electronics Services Section designs and maintains mobile and stationary electronic equipment and communications systems for forestry operations throughout the province. To accommodate the ministry's restructured field organization, this section modified and improved radio coverage to all districts. At the same time, this section reviewed field staff communication requirements and recommended modifications to the present systems. Another major accomplishment was the installation of additional solar (photo-voltaic) arrays to power ministry repeater stations at preselected mountain-top sites. There are, at present, more than 130 mountain-top repeater stations in use by the ministry throughout the province.

Property and Warehousing Section coordinat equipment inventory and storage functions f ministry. In 1980, three ministry warehouses the lower mainland were consolidated into o facility to provide a more efficient service to ministry operations in the Vancouver Forest Region and at headquarters branches. The n facility shipped out more than 3 000 separate orders last year.

Mechanical Services Section is responsible fo acquiring motor vehicles and other types of related mechanical equipment for the entire ministry. In 1980, this section acquired more 200 vehicles, including tractors and forklifts. the same time, this section disposed of more 200 unserviceable vehicles at public auctions throughout the province.

Maintenance Depot maintains, prepares, an repairs a wide range of vehicles, equipment a machinery used in ministry operations. In addition to the regular maintenance and upk of its own facilities, the Maintenance Depot in 1980:

- maintained and repaired more than 80 launches, in addition to the preparatio two new ministry boats;
- assembled and tested more than 2 000 of equipment including tool boxes, sol panels, fire hose fittings;
- prepared and tested about 500 units of power equipment and vehicles;
- maintained and repaired about 800 uni power equipment (chainsaws, pumps, compasses) and vehicles (trucks, grade forklifts).

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A. Silviculture Activity

Table A.1 Summary of Planting, 1971-1980

	Forest Service on Crown Land		Forest Service on Crown-Granted Land		Companies on Tree Farm Licences		Companies on Timber Sale Harvesting Licences		Other Private		T
Year	Trees in Thousands	Ha	Trees in Thousands	Ha	Trees in Thousands	Ha	Trees in Thousands	Ha	Trees in Thousands	Ha	Trees in Thousanc
Coast											
1980	5 342.0	4 870.	0.	0.	8 032.1	9 423.	3 891.7	3 621.	3 180.4	2 813.	20 446.2
1979	5 426.9	5 098.	0.	0.	10 112.1	13 085.	3 634.4	3 746.	3 551.8	3 864.	22 725.2
1978	5 922.7	5 202.	0.	0.	10 672.7	12 801.	3 290.2	3 804.	2 857.9	3 425.	22 743.5
1977	7 174.8	6 467.	0.	0.	13 159.0	15 646.	3 082.0	2 605.	4 772.7	5 122.	28 188.5
1976	6 549.3	5 973.	0.	0.	11 779.7	13 496.	2 937.8	2 610.	7 190.2	5 620.	28 457.0
1975	8 725.9	7 243.	0.	0.	9 522.9	10 357.	1 768.2	1 527.	4 123.5	4 142.	24 140.5
1974	8 352.1	8 147.	0.	0.	11 921.3	12 805.	1 374.2	1 223.	3 501.4	3 604.	25 149.0
1973	13 855.7	12 614.	0.	0.	12 769.1	13 757.	1 550.3	1 393.	4 046.0	4 053.	32 221.1
1972	12 998.8	12 326.	0.	0.	12 176.0	13 760.	187.6	153.	4 872.6	4 515.	30 235.0
1971	9 627.0	9 185.	55.0	52.	11 603.8	12 843.	82.4	96.	4 756.0	4 601.	26 124.2
Previous Planted	121 083.9	74 885.	15 413.9	11 202.	110 164.5	118 836.	0.	0.	43 794.6	48 660.	290 456.9
Totals to Date	205 059.1	152 010.	15 468.9	11 254.	221 913.2	246 809.	21 798.8	20 778.	86 647.1	90 419.	550 887.1
Interior											
1980	19 191.7	14 782.	0.	0.	4 216.0	3 545.	30 422.8	24 097.	695.0	525.	54 525.5
1979	13 266.2	10 530.	0.	0.	3 605.3	3 138.	22 983.5	18 256.	753.0	552.	40 608.0
1978	13 799.5	10 515.	0.	0.	4 192.4	3 718.	18 213.3	15 683.	806.0	593.	37 011.2
1977	17 503.4	13 995.	0.	0.	3 697.9	3 012.	16 156.9	13 107.	285.0	209.	37 643.2
1976	23 801.9	18 602.	0.	0.	3 526.0	2 947.	16 469.9	13 242.	566.4	502.	44 364.2
1975	24 712.8	21 054.	21.0	16.	3 129.7	2 751.	12 588.8	10 050.	355.0	344.	40 807.3
1974	16 128.2	12 938.	0.	0.	3 076.8	3 199.	9 380.3	7 535.	82.8	36.	28 668.1
1973	14 371.1	10 954.	0.	0.	3 551.1	3 034.	5 521.1	4 284.	541.6	362.	23 984.9
1972	14 256.0	10 765.	0.	0.	1 692.0	1 506.	2 066.0	1674.	145.0	138.	18 159.0
1971	15 449.2	12 565.	0.	0.	1 461.0	1 340.	743.0	606.	69.0	67.	17 722.2
Previous Planted	26 405.7	23 078.	0.	0.	5 094.3	6 057.	40.0	27.	1 007.8	845.	32 547.8
Totals to Date	198 885.7	159 778.	21.0	16.	37 242.5	34 247.	134 585.6	108 561.	5 306.6	4 173.	376 041.4
All Planted to Date	403 944.8	311 788.	15 489.9	11 270.	259 155.7	281 056.	156 384.4	129 339.	91 953.7	94 592.	926 928.5
All Planted This Year	24 533.7	19 652.	0.	0.	12 248.1	12 968.	34 314.5	27 718.	3 875.4	3 338.	74 971.7

Table A.2 Planting by Forest Region, 1980

(Number of trees in thousands) (Hectares in parentheses below)

Forest Region	Forest Service on Crown Land	Companies on TSHLs, TSLs on Crown Land	Companies on Tree Farm Licences: Crown Land	Companies on Tree Farm Licences: Crown-Granted Land	Companies on Tree Farm Licences: Totals	Tree Farm not Within Tree Farm Licences	Companies on Other Private
Cariboo	2 699.1	4 285.8	208.0	—	208.0	—	—
	(1 980.6)	(3 649.8)	(141.9)	—	(141.9)	—	—
Kamloops	3 708.3	3 847.4	710.8	—	710.8	—	10.0
	(2 819.8)	(3 214.4)	(448.8)	—	(448.8)	—	—
Nelson	3 607.0	1 944.0	1 344.0	—	1 344.0	587.0	98.0
	(3 200)	(1 610)	(1 097)	—	(1 097)	(450)	(75)
Prince George	7 819.7	15 762.6	1 629.4	—	1 629.4	—	—
	(5 730)	(12 433)	(1 612.3)	—	(1 612.3)	—	—
Prince Rupert	1 613.4	4 960.2	851.6	34.3	885.9	—	—
	(1 277.7)	(3 557.8)	(754.8)	(165.5)	(920.3)	—	—
Vancouver	5 086.2	3 514.5	6 917.2	552.8	7 470.0[1]	1 608.7	1 571.7
	(4 643.7)	(3 253.3)	(8 114.9)	(632.7)	(8 747.6)	(1 553)	(1 260)
Totals	24 553.7	34 314.5	11 661.0	587.1	12 248.1	2 195.7	1 679.7
	(19 651.8)	(27 718.3)	(12 169.7)	(798.2)	(12 967.9)	(2 003)	(1 335.0)

[1] Subject to revision for late reports.

Area Clearcut and Area Planted in Public Sustained Yield Units, by Forest Region, 1976-1980

	1976	1977	1978	1979	1980	Total Five-Year Period	Cumulative Totals Since 1971	Per Cent Cutover Planted Since 1971
arcut	14 570	15 529	17 311	19 266	19 973	86 649	148 147	—
nted	5 382	5 612	5 301	5 252	5 630	27 177	45 998	31.1
arcut	17 968	16 770	15 374	15 516	15 011	80 639	145 202	—
nted	4 840	3 782	7 231	5 361	6 034	27 248	40 999	28.2
arcut	14 233	12 124	7 613	8 755	8 310	51 035	109 457	—
nted	5 276	2 942	3 861	3 962	4 890	20 931	41 727	38.1
arcut	30 267	40 791	35 620	57 909	42 748	207 335	358 582	—
nted	12 116	13 545	7 301	10 617	19 652	63 231	85 886	24.0
arcut	11 293	12 462	13 968	16 884	17 157	71 764	119 957	—
nted	6 253	3 282	3 408	3 719	4 836	21 498	44 068	36.7
arcut	12 414	12 977	14 793	13 138	12 650	65 972	123 486	—
nted	6 581	7 753	8 103	8 047	7 897	38 381	86 154	69.8
arcut	100 745	110 653	104 679	131 468	115 849	563 394	1 004 831	—
nted	40 448	36 916	35 205	36 958	48 939	198 466	344 812	34.3

Site Preparation, by Ministry of Forests and by Licencees on all Tenures, 1980

Treatment	Natural Regeneration Preparation (ha)	Planting Preparation (ha)	Totals (ha)	Per Cent
Bed	689.2	21 566.9	22 256.1	18
urned	2 838.6	6 823.6	9 662.2	8
ned	2 246.8	2 540.7	4 787.5	4
Treatment and Burn	0	0	0	
	10 550.7	237.0	10 787.7	9
	3 015.5	5 453.3	8 468.8	7
On	219.0	352.0	571.0	1
Treatment Only	54.0	77.7	131.7	—
Fell Only				
ing ags)	2 668.5	3 781.2	6 449.7	5
ing ly	0	212.0	212.0	—
eatment	3 515.0	3 940.4	7 455.4	6
Treatment	30 039.2	20 407.9	50 447.1	42
	55 836.5	65 392.7	121 229.2	100

Table A.5 Stand Tending and Improvement, by Ministry of Forests and by Licencees on all Tenures, 198(

(Hectares)

Forest Region	Conifer Release (Brushing)		Stocking Control: Juvenile Spacing		Stocking Control: Commercial Thinning		Stocking Control: Sanitation Spacing		Mistletoe Control		Site Rehab.		Fertilization		Other (Pruning Seedlot)		Totals	
	FS	LIC	FS	LIC	FS	LIC	FS	LIC	FS	LIC	FS	LIC	FS	LIC	FS	LIC	FS	
Cariboo	53	40	2 192.5	—	—	—	50.9	—	908.9	441	20	—	—	—	—	—	3 225.3	4
Kamloops	40.4	—	1 504.6	353.9	42	8	316	205.9	155.7	130	519.5	51.6	11	—	4	—	2 593.2	7
Nelson	—	—	1 253.4	—	—	—	153	—	—	—	45	—	—	—	—	—	1 451.4	
Prince George	57	—	939	—	—	—	413	—	8	3	816	1 827	—	—	—	—	2 233	1 8
Prince Rupert	51.2	215.7	1 585.5	1 128	—	—	—	37.2	36.4	—	7.9	26.5	—	—	—	18	1 681	1 4
Vancouver	510.7	3 480.6	7 168.1	5 139.9	—	107	—	31	285	319.1	22.2	2	2 203	3 988.3	—	327	10 189	13 3
Totals	712.3	3 736.3	14 643.1	6 621.8	42	115	932.9	274.1	1 394	893.1	1 430.6	1 907.1	2 214	3 988.3	4	345	21 372.9	17 8
Grand Totals	4 448.6		21 264.9		157		1 207		2 287.1		3 337.7		6 202.3		349		39 253.8	

Table A.6 Surveys of Natural Regeneration, by Ministry of Forests and by Licencees in PSYUs, 1980

Forest Region	Total Examined (ha)	Satisfactorily Stocked (ha)	Not Satisfactorily Stocked (ha)	Per C Stoc
Cariboo				
Forest Service	44 068	38 154	5 914	86.
Licencee	875	696	179	79.
Totals	44 943	38 350	6 093	86.
Kamloops				
Forest Service	17 521	8 338	9 183	47.
Licencee	11 321	5 120	6 201	45.
Totals	28 842	13 458	15 384	46.
Nelson				
Forest Service	13 145	7 821	5 324	59.
Licencee	17 120	10 342	6 778	60.
Totals	30 265	18 163	12 102	60.
Prince George				
Forest Service	27 052	18 224	8 828	67.
Licencee	8 626	5 472	3 154	63.
Totals	35 678	23 696	11 982	66.
Prince Rupert				
Forest Service	11 919	7 878	4 041	66.
Licencee	19 538	11 995	7 543	61.
Totals	31 457	19 873	11 584	63.
Vancouver				
Forest Service	17 896	13 202	4 694	73.
Licencee	31 990	19 281	12 709	60.
Totals	49 886	32 483	17 403	65.
Totals				
Forest Service	131 601	93 617	37 984	71
Licencee	89 470	52 906	36 564	59.
Totals	221 071	146 523	74 548	66

Note: Date of denudation varies considerably on areas examined, hence time for establishment of natural regeneration also varies. This is indication of natural stocking and no inference can be made between regions or agencies under stocking columns.

Table A.7 Accelerated Reforestation Fund, Fiscal Year 1979/80

Surplus, April 1, 1979	$1 476.69
Expenditures, Fiscal Year 1979/80	$1 476.69
Surplus, March 31, 1980	Nil

Cone Collection and Estimated Seed Recovery, by Ministry of Forests and Licencees, 1980

(Hectolitres)

	Forest Region								
	Cariboo	Kamloops	Nelson	Prince George	Prince Rupert	Vancouver	Species Totals	Per Cent of Totals	Est. Seed Recovered (kg)
.....	—	—	—	—	1.8	—	1.8	0.1	1.305
Red	—	—	13.6	—	—	—	13.6	0.5	20.538
.....	—	—	—	—	1.0	—	1.0	Negl.	1.600
.....	—	151.0	671.5	—	—	0.1	822.6	32.7	755.703
.....	—	—	7.8	—	—	—	7.8	0.3	18.174
.....	—	—	—	—	—	45.8	45.8	1.8	99.844
.....	—	—	—	—	—	—	—	—	—
tain	—	—	—	—	—	—	—	—	—
ern	—	—	1.0	—	—	—	1.0	Negl.	1.410
.....	—	—	179.3	—	—	—	179.3	7.1	139.065
.....	—	552.0	58.0	12.5	499.2	—	1 121.7	44.6	298.746
.....	—	11.8	—	—	—	—	11.8	0.5	24.426
.....	—	—	17.6	—	—	—	17.6	0.7	5.380
.....	—	—	—	1.8	—	—	1.8	0.1	0.227
.....	—	44.5	246.6	0.5	—	—	291.6	11.6	192.535
.....	—	—	—	—	—	—	—	—	—
.....	—	759.3	1 195.4	14.8	502.0	45.9	2 517.4	100.0	1 558.953

interior species such as white spruce.

Table B.2 Seed Orchards Established, as of 1980

Seed Orchard No.	Agency	Date(s) Est. i.e. Planted	Orchard Location	Spp.	Seed Orchard Seed Utilization Area Planning Zone[3]	Elevation (metres)	Type of Orchard[4]	Present Orchard Area (ha)	Seed I 1980
Coastal Region									
101	BCFS-Quinsam[1]	1963	Campbell R.	F	EVI	450-610	Clonal; Seedlings (O.P., C.P.)	7.8	2.09
109	Pacific Logging[2]	1964	Saanich	F	EVI	0-450	Clonal; Seedlings (O.P.)	1.8	.58
110	Pacific Logging[2]	1964	Saanich	F	EVI	550	Clonal	3.4	25.03
111	Tahsis "C"[1]	1969-75	Saanich	F	WVI	0-450	Clonal; Seedlings (O.P., C.P.)	3.5	8.55
114	BCFS-Koksilah[1]	1970	Duncan	F	SCM, CIT	450-640	Seedlings (O.P.)	3.2	5.10
115	BCFS-Snowdon[1]	1971	Campbell R.	F	JS	0-300	Seedlings (O.P.); Clonal	4.0	4.90
116	CFP[1]	1971	Sechelt	F	EVI, JS	450-610	Clonal	2.4	–
118	Tahsis[1]	1973	Saanich	Ss	WVI	0-450	Clonal	0.9	.62
119	MB[2]	1977	Yellow Pt.	F		High	Clonal	1.6	–
120	BCFS-Dewdney[1]	1975	Saanich	F	CIT	760-1070	Seedlings (O.P.); Clonal	7.2	2.20
121	Pacific Logging[2]	1976	Saanich	F	EVI	550	Seedlings (C.P.)	6.0	.89
122	MB[2]	1976-78	Harmac	F	Dry	Mid	Clonal	1.2	–
123	MB[2]	1976-78	Harmac	F	Wet	Mid	Clonal	1.0	–
124	MB[2]	1976	Harmac	F	Dry	Low	Clonal	0.5	–
125	MB[2]	1976	Harmac	F	Wet	Low	Clonal	1.0	–
					Totals - Coastal Region Orchards			45.5	49.96
Central Interior Region									
201	BCFS	1974	Red Rock	Pl	Omenica-Pinchi		Clonal	4.4	–
202	BCFS	1978	Red Rock	Pl	Dawson-Peace		Clonal	1.7	–
203	BCFS	1978	Red Rock	Pl	Willow-Bowron		Clonal	3.2	–
204	BCFS	1979	Red Rock	Pl	Smithers		Clonal	5.5	–
205	BCFS	1979	Skimikin	Si	Central Plateau Low		Clonal	4.0	–
206	BCFS	1979	Skimikin	Si	Central Plateau High		Clonal	3.2	–
207	BCFS	1980	Skimikin	Si	Bulkley Low		Clonal	2.9	–
208	BCFS	1980	Skimikin	Si	Bulkley High		Clonal	3.3	–
					Totals - Central Interior Region Orchards			28.2	–
Southern Interior Region									
301	BCFS	1980	Skimikin	Si	West Kootenay Low		Clonal	1.2	–
302	BCFS	1980	Skimikin	Si	West Kootenay High		Clonal	3.0	–
					Totals - Southern Interior Region Orchards			4.2	–
							GRAND PROVINCIAL TOTALS	77.9	49.96

[1]Cooperative orchard.
[2]Private orchard.
[3]Planning zone: EVI - Eastern Vancouver Island
WVI - Western Vancouver Island
SCM - South coast mainland
CIT - Coast-interior transition
JS - Johnstone Strait

Seed species: F - Douglas-fir
Ss - Sitka spruce
Pl - Lodgepole pine
Si - Interior spruce

[4] O.P. - Seedlings resulting from open pollination.
C.P. - Seedlings resulting from controlled pollination.

Note: Pacific Logging orchards are for reforestation on private lands. This table excludes orchards deemed by the Coastal Tree Improvem (CTIC) as unsuitable for intensive management.

Inventory of Seed in Storage, by Forest Region, 1980

(Grams)[1]

on name)	Cariboo	Kamloops	Nelson	Prince George	Prince Rupert	Vancouver	Total Grams
			Forest Region				
Red	870	78 279	55 328	885	62 065	149 266	346 693
	—	—	—	—	1 600	14 383	15 983
	962 189	2 245 957	3 087 735	128 511	132 798	5 194 694	11 751 884
	8 475	187 290	500 765	79 295	14 000	3 230	793 055
	—	—	—	—	323 800	4 204 198	4 527 998
	—	—	245 330	—	—	154 776	400 106
tain	—	—	—	—	76 540	21 241	97 781
rn	—	4 742	10 111	—	140 515	389 179	544 547
	—	19 245	103 946	—	—	—	123 191
	310 805	976 611	1 153 991	688 317	704 865	5 515	3 840 104
	4 665	521 475	93 377	—	—	2 050	621 567
ann	41 335	1 103 627	441 133	346	960	128 640	1 716 041
	—	—	—	—	963 190	204 469	1 167 659
	33 054	—	—	2 407 101	946 367	—	3 386 522
	1 904 380	698 970	1 046 556	2 168 316	1 173 091	—	6 991 313
	—	23 603	212 364	7 245	1 450	7 276	251 938
	3 265 773	5 859 799	6 950 636	5 480 016	4 541 241	10 478 917	36 576 382

e species (grams) 36 576 382
: species (grams) 135 522
in storage (grams) 36 711 904

collected by forest companies.

Seed Withdrawals for Nursery Sowing and Other Uses, 1980

(Kilograms)

	Forest Service Nurseries							
	Bareroot	Containers	Other Nurseries	Research Requests	H.Q. Requests	Direct Seeding	Other Uses	Totals
	306.188	69.215	—	—	—	—	—	375.403
Red	7.462	5.145	2.550	—	—	—	—	15.157
	0.450	0.063	—	—	—	—	—	0.513
	541.615	53.903	86.750	—	—	—	—	682.268
rn	—	49.400	5.385	—	—	—	—	54.785
ain	—	3.385	0.240	—	—	—	—	3.625
	1.340	6.350	—	—	—	—	—	7.690
	37.370	54.320	0.165	—	—	—	—	91.855
	4.140	35.255	—	—	—	—	—	39.395
pp.	317.310	77.605	5.530	—	—	—	—	400.445
	26.935	5.135	6.950	—	—	—	—	39.020
nclassified	—	—	25.013	23.514	14.829	5.366	76.079	144.801
	2.495	2.290	—	—	—	—	—	4.785
	1 245.305	362.066	132.583	23.514	14.829	5.366	76.079	1 859.742

Table B.5 Ministry of Forests Nurseries, Inventory of Seedlings, by Nursery and Forest Region, August 1980

(Thousands of Trees)

Nursery	Stock Type: Bareroot 1+0	Bareroot 2+0	Transplants	Con Styroblocks
Campbell River	10 244	6 181	1 783	548
Chilliwack	10 237	10 851	1 898	—
Green Timbers	7 195	2 886	1 703	5 478
Harrop	—	—	—	329
Koksilah	3 442	2 035	535	6 819
Red Rock	11 523	8 149	5 143	831
Skimikin	7 577	7 932	855	2 715
Surrey	33 400	13 972	3 058	11 530
Telkwa	791	925	255	41
Vernon	—	—	—	3 445
Forest Region				
Cariboo	9 941	7 744	1 940	3 374
Kamloops	9 170	6 269	810	6 487
Nelson	3 614	3 067	259	4 612
Prince George	34 380	22 697	8 433	3 918
Prince Rupert	8 696	4 667	1 147	4 211
Vancouver	17 944	8 256	2 585	9 098
Miscellaneous	664	231	56	36
Totals	84 409	52 931	15 230	31 736

[1]Other containers include Spencer Lemaire trays and Walters' bullets.

Table B.6 Ministry of Forests Nurseries, Inventory of Seedlings, by Species and Stock Type, August 1980

(Thousands of Trees)

Species	Stock Type: Bareroot 1+0	Bareroot 2+0	Transplants	Co Styroblocks
Cedar, Western Red	1 673	890	164	—
Cedar, Yellow	—	22	26	52
Douglas-fir, Coast	14 384	5 444	1 227	251
Douglas-fir, Interior	7 463	3 319	381	1 061
Fir, Alpine	119	224	9	109
Fir, Amabilis	1 293	1 459	612	260
Fir, Grand	535	284	212	105
Hemlock, Mountain	—	—	51	535
Hemlock, Western	—	—	177	7 219
Larch, Western	48	80	—	560
Pine, Lodgepole	6 095	1 557	1 122	7 777
Pine, Ponderosa	47	470	—	308
Spruce, Interior spp.[1]	49 060	37 334	11 050	12 600
Spruce, Sitka	3 640	1 843	199	885
Other Species	52	5	—	14
Totals	84 409	52 931	15 230	31 736

[1] Includes black spruce and white spruce.

Ministry of Forests Nurseries, Summary of Spring Sowing, 1980

(Thousands of Trees)

	Stock Type						
	Bareroot			Containers			
	1+0	2+0	Transplants	Styroblocks	Others	Totals	Per Cent
Red	197.0	1 595.6	125.0	1.5	1 556.0	3 475.1	3.2
	—	—	—	1.5	22.1	23.6	0.02
st	4 573.5	7 717.5	1 496.6	272.3	—	14 059.9	12.7
ior	2 356.1	4 730.1	472.6	1 160.7	—	8 719.5	7.9
	—	143.0	6.0	197.0	—	346.0	0.3
	—	1 590.1	277.8	376.8	—	2 244.7	2.0
	—	413.0	78.0	102.3	—	593.3	0.5
ain	—	—	—	568.3	—	568.3	0.5
n	—	—	280.0	7 630.0	—	7 910.0	7.2
	—	87.2	—	694.0	—	781.2	0.8
	363.0	2 478.0	3 023.9	7 674.0	1.0	13 539.9	12.2
	—	—	46.0	288.5	0.5	335.0	0.3
pp.	17.0	27 333.9	13 477.0	11 864.6	36.0	52 728.5	47.7
	—	2 825.6	1 637.0	745.5	—	5 208.1	4.7
	3.0	23.0	—	23.7	—	49.7	0.04
	7 509.6	48 937.0	20 919.9	31 600.7	1 615.6	110 582.8	
	6.8	44.2	18.9	28.6	1.5	—	100.0

Table C.1 Fire Occurrences by Months, by Forest Region, 1980

Forest Region	March	April	May	June	July	August	September	October	Other	Totals
Cariboo	0	132	52	16	19	9	5	0	2	235
Kamloops	6	73	52	57	129	78	14	19	0	428
Nelson	3	21	32	26	137	75	17	18	2	331
Prince George	0	69	160	64	38	28	3	11	2	375
Prince Rupert	1	13	17	51	29	24	26	0	0	161
Vancouver	0	11	30	14	32	96	22	7	1	213
Totals	10	319	343	228	384	310	87	55	7	1 743
Per Cent	0.6	18.2	19.7	13.1	22.1	17.8	5.0	3.2	0.3	100.0
Ten-Year Average	13	120	279	326	634	702	191	82	11	2 358
Per Cent	0.6	5.1	11.8	13.8	26.9	29.8	8.1	3.4	0.5	100.0

Table C.2 Number and Causes of Forest Fires, by Forest Region, 1980

Forest Region	Lightning	Recreational (Campers, Hunters, Fishermen, etc.)	Railroads	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	[illegible]
Cariboo	35	8	6	17	29	40	2	15	46	37	0	2
Kamloops	170	42	20	41	21	4	2	37	31	60	0	4
Nelson	174	24	10	29	15	0	6	28	3	42	0	3
Prince George	148	20	7	17	41	33	5	29	37	38	0	3
Prince Rupert	45	29	2	16	14	1	1	30	6	17	0	1
Vancouver	87	29	13	20	6	0	3	37	1	17	0	2
Totals	659	152	58	140	126	78	19	176	124	211	0	17
Per Cent	37.9	8.7	3.3	8.1	7.2	4.5	1.1	10.0	7.1	12.1	0.0	1
Ten-Year Average	931	228	116	297	99	55	31	195	114	281	11	23
Per Cent	39.5	9.7	4.9	12.6	4.2	2.3	1.3	8.3	4.8	11.9	0.5	1

Table C.3 Number and Causes of Forest Fires, 1971-1980

Causes	1971	1972	1973	1974	1975	1976	1977	1978	1979	19
Lightning	1 327	583	810	716	1 417	159	551	1 141	1 943	6
Recreational (Campers, Hunters Fishermen, etc.)	211	188	338	288	249	157	237	189	274	1
Railroads	175	136	218	147	113	57	63	65	131	
Smokers	309	267	431	407	289	130	302	277	418	1
Brush Burning (Not Railway or Right-of-Way Clearing)	129	70	145	102	83	24	83	93	138	1
Range Burning	105	59	78	34	42	56	34	27	36	
Road, Power, Telephone and Pipeline Construction	50	44	38	36	25	5	27	32	35	
Industrial Operations (Logging, etc.)	205	189	224	319	133	116	154	136	298	1
Incendiary	70	77	99	133	94	59	128	138	212	1
Miscellaneous Known Causes	303	277	462	355	252	127	270	205	353	2
Unknown Causes	14	13	20	21	16	3	5	5	11	
Totals	2 898	1 903	2 863	2 558	2 713	893	1 854	2 308	3 849	17

Fires Classified by Size and Timber Loss, by Forest Region, 1980

	Total Fires		0.1 Ha and Under			Over 0.1 to 4.0 Ha			Over 4.0 to 200 Ha			Over 200 Ha in extent			Damage[1]		
	Number	Per Cent of Total Fires in Province	Number	Per Cent of Total Fires in Region	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in Region	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in Region	Per Cent of Total Fires in This Class	Number	Per Cent of Total Fires in Region	Per Cent of Total Fires in This Class	Under $100	Between $100 and $1 000	Over $1 000
.....	235	13.5	91	38.7	8.6	107	45.5	23.9	36	15.3	17.6	1	0.4	2.8	203	14	18
.....	428	24.6	300	70.1	28.4	97	22.7	21.7	30	7.0	14.7	1	0.2	2.8	408	12	8
.....	331	19.0	264	79.8	25.0	50	15.1	11.2	17	5.1	8.3	0	0.0	0.0	319	8	4
.....	375	21.5	139	37.1	13.2	122	32.5	27.3	81	21.6	39.7	33	8.8	91.7	271	38	66
.....	161	9.2	92	57.1	8.7	40	24.8	8.9	28	17.4	13.7	1	0.6	2.8	135	11	15
.....	213	12.2	170	79.8	16.1	31	14.6	6.9	12	5.6	5.9	0	0.0	0.0	205	2	6
.....	1 743	100.0	1 056	—	100.0	447	—	100.0	204	—	100.0	36	—	100.0	1 541	85	117
.....	100	—	60.6	—	—	25.6	—	—	11.7	—	—	2.1	—	—	88.5	4.8	6.7
.....	2 358	—	1 583	—	—	574	—	—	173	—	—	28	—	—	2 103	134	121
.....	100	—	67.1	—	—	24.3	—	—	7.4	—	—	1.2	—	—	89.2	5.7	5.1

s lamage are based on timber loss in stands of mature, immature and other forest cover.
6 other details.

5 Loss of Property Other Than Forest, by Forest Region, 1980[1]

	Forest Products Cut, Logs, Lumber, etc.	Buildings	Railway, Logging, and Sawmill Equipment	Miscellaneous	Totals	Per Cent of Totals
.....	$ 8 579	$ 68 000	$ 23 500	8 678	$108 757	18.1
.....	6 400	107 700	263 000	3 800	380 900	63.5
.....	5 100	—	—	—	5 100	0.9
.....	2 080	15 500	10 000	7 075	34 655	5.8
.....	43 016	—	1 000	1 666	45 682	7.6
.....	14 700	—	9 364	600	24 664	4.1
.....	$ 79 875	$191 200	$306 864	$ 21 819	$599 758	100.0
.....	13.3	31.9	51.2	3.6	100.0	
Average	$299 313	$156 339	$277 326	$ 59 344	$792 322	
.....	37.8	19.7	35.0	7.5	100.0	

[1] Damage made by field staff in region.

Table C.6 Loss of Forest Cover Caused by Forest Fires, by Forest Region, 1980[1]

Forest Region		Merchantable Timber			Immature Timber		Not Satisfactorily Restocl		
	Area Burned Over	Total Volume Killed	Salvable Volume of Timber Killed	Net Stumpage Loss	Area Burned Over	Est. Damage Value	Logged, Not Burned	Logged and Burned	Old Burn (Not Logged)
	(ha)	(m^3)	(m^3)	($)	(ha)	($)	(ha)	(ha)	(ha)
Cariboo	516	129 459	109 408	238 948	101	37 230	17	0	0
Kamloops	201	73 429	6 640	177 993	63	9 064	6	1	24
Nelson	93	18 751	9 238	18 001	44	14 551	88	11	0
Prince George	8 268	754 877	285 241	2 538 390	22 829	17 334 237	456	0	979
Prince Rupert	318	52 804	30 571	80 911	15	2 977	188	15	70
Vancouver	237	37 094	31 694	34 777	62	29 750	12	0	0
Totals	9 633	1 066 414	472 792	3 089 020	23 114	17 427 809	767	27	1 073
Per Cent	15.0	100.0	44.3	14.7	35.2	83.2	1.1	0.1	1.6
Ten-Year Average	13 350	789 011	365 780	3 702 366	15 335	2 911 552	3 815	367	3 491
Per Cent	20.1	100.0	46.4	54.3	23.1	42.7	5.7	0.5	5.3

Non-Commercial Cover		Grazing or Pasture Land		Non-Productive Sites		Under 4 Ha		Grand Totals		
Area Burned	Damage	Area Burned	Damage	Area Burned	Damage	Area Burned	Damage	Area	Quantity	
(ha)	($)	(ha)	($)	(ha)	($)	(ha)	($)	(ha)	(m^3)	
5	56	1 190	14 871	250	3 129	169	2 059	2 248	20 051	
1	13	422	5 301	151	1 893	136	1 583	1 005	66 789	
6	71	18	220	230	2 874	81	929	571	9 513	
6 981	87 261	405	5 078	19 960	249 500	169	2 037	60 047	469 636	2(
470	5 871	59	738	0	0	50	591	1 185	22 233	
5	75	0	0	163	2 034	43	480	522	5 400	
7 468	93 347	2 094	26 208	20 754	259 430	648	7 679	65 578	593 622	2(
11.3	0.4	3.1	0.2	31.6	1.2	1.0	0.1	100.0	55.7	
11 310	49 454	2 311	19 353	15 778	65 109	601	7 270	66 358	423 231	(
17.0	0.7	3.5	0.2	23.8	1.0	1.0	0.1	100.0	53.6	

[1] Dollar estimates of damage:
- for merchantable timber, based on monthly stumpage charges, by region, by species;
- for immature timber, based on dollar values, by age-class per hectare, for damage or destruction to young or immature trees, as publi B.C. Regulation 561/78;
- for other forest cover, based on approximate value of $12.50 per hectare.

Fire Causes, Area Burned, Ministry of Forests Fire-fighting Costs, and Total Damage, 1980

	Number of Fires		Area Burned		Ministry of Forests Fire-fighting Costs		Estimated Total Damage	
	No.	Per Cent	Ha	Per Cent	Cost ($)	Per Cent	Damage ($)	Per Cent
.....	659	37.9	38 887	59.3	4 755 512	51.9	19 026 905	88.4
l (Campers, Hunters, Fishermen, etc.)	152	8.7	329	0.5	119 295	1.3	16 046	0.1
.....	58	3.3	199	0.3	94 364	1.0	136 149	0.6
.....	140	8.1	567	0.9	570 073	6.2	85 654	0.4
ng (Not Railway or Right-of-Way Clearing)	126	7.2	3 101	4.7	1 427 726	15.6	376 617	1.7
ng	78	4.5	16 253	24.7	745 419	8.2	705 683	3.3
, Telephone, and Pipeline Construction	19	1.1	111	0.2	80 168	0.9	5 065	0.0
erations (Logging, etc.)	176	10.0	2 871	4.4	640 891	7.0	855 768	4.0
.....	124	7.1	2 738	4.2	434 258	4.8	241 243	1.1
us Known Causes	211	12.1	522	0.8	286 958	3.1	77 450	0.4
uses	0	0.0	0	0.0	0	0.0	0	0.0
.....	1 743	100.0	65 578	100.0	9 154 664[1]	100.0	21 526 580	100.0

costs are those incurred through direct fire suppression action. Total costs for the fire suppression vote include direct and indirect costs tanker availability) and are estimated at $18 024 000.

Comparison of Loss Caused by Forest Fires, 1971-1980[1]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Total 10 Years
r of Fires	2 898	1 903	2 863	2 558	2 713	893	1 854	2 308	3 849	1 743	23 582
(ha)	351 890	26 087	33 422	21 728	24 911	57 020	3 796	50 081	29 447	65 578	663 960
ber or (000 m³)	9 500.0	391.5	1 640.9	2 907.9	6 443.4	1 318.4	203.3	4 783.1	2 035.6	1 066.4	30 290.5
able	1 962.8	189.8	752.5	2 285.0	5 298.7	398.1	115.4	1 009.2	992.4	472.8	13 476.7
mage to 000)	12 974.6	713.7	5 277.0	1 860.9	1 264.4	2 528.5	369.5	11 435.9	10 177.9	20 926.8	67 529
mage to s of 000)	609.1	459.7	1 056.8	491.4	92.4	70.1	173.5	1 335.0	3 035.4	599.8	7 923
ted 000)	13 583.6	1 173.4	6 333.8	2 352.4	1 356.8	2 598.6	543.0	12 770.9	13 213.4	21 526.6	75 452

amage expressed in historical dollars.

Table C.9 Fire-fighting Costs per Fire, by Forest Region, 1980

Forest Region	Total Fires	Total Forest Service Cost			Extinguished Without Cost to Forest Service			Distribution of Fires by Cost to Extinguish						
		Dollars	Per Cent	Average Expenditure Per Cost Fire (Dollars)	Number	Per Cent of Total Fires in Region	Per Cent of Total Fires in Province	Number	Per Cent of Total Fires in Region	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
Cariboo	235	649 823	7.1	2 967	16	6.8	0.9	219	93.2	12.6	7	110	64	19
Kamloops	428	398 894	4.4	970	17	4.0	1.0	411	96.0	23.6	34	266	86	14
Nelson	331	488 978	5.3	1 592	24	7.3	1.4	307	92.7	17.6	26	173	87	12
Prince George	375	6 489 629	70.9	18 756	29	7.7	1.7	346	92.3	19.9	10	133	88	37
Prince Rupert	161	805 319	8.8	5 793	22	13.7	1.3	139	86.3	8.0	12	67	31	9
Vancouver	213	322 021	3.5	2 038	55	25.8	3.2	158	74.2	9.1	6	75	49	10
Totals	1 743	9 154 664[1]	100.0	5 794	163	—	9.4	1 580	—	90.6	95	824	405	101
Per Cent	100.0	—	—	—	9.4	—	—	90.6	—	—	5.4	47.3	23.2	5
Ten-Year Average	2 358	7 778 884	100.0	—	417	—	—	1 941	—	—	416	793	461	127
Per Cent	100.0	—	—	—	17.7	—	—	82.3	—	—	17.6	33.6	19.6	5

Cost to other parties (163 cost fires) $1 579 616. Cost to Forest Service (1 580 cost fires) $9 154 664.

[1] The above costs are those incurred through direct fire suppression action. Total costs for the fire suppression vote include direct and indirect costs (such as air ta *availability) and are estimated at $18 024 000.*

Costs are correct to date, but are subject to later revision.

Final costs are published one year in arrears in the table "Ministry of Forests Expenditures".

Table C.10 Hazard Abatement, by Ministry of Forests and by Licencees on all Tenures, 1980

Method of Treatment	Forest Region: Cariboo (ha)	Kamloops (ha)	Nelson (ha)	Prince George (ha)	Prince Rupert (ha)	Vancouver (ha)	Totals (ha)
Broadcast Burn	1 396	19	8	0	951	2 365	4 739
Bunched and Burned	1 086	411	403	285	279	72	2 536
Spot Burned	348	5	999	78	380	1 677	3 487
Landings Only Burned	16 172	170	19 674	13 910	12 479	3 264	65 669
Snag Falling Only	19	0	0	0	20	0	39
Other	655	73	1 958	0	132	0	2 818
Totals	19 676	678	23 042	14 273	14 241	7 378	79 288
Per Cent	24.8	0.9	29.1	18.0	17.9	9.3	100.0

1 Total Amount of Timber Scale Billed in British Columbia, 1979 and 1980

(Includes Firmwood Rejects)
(Cubic Metres)

on	1979	1980	Increase	Decrease	Net Decrease
	—	322	322	—	—
rt (C)	4 858 347	5 397 306	538 959	—	—
C)	25 707 861	25 315 408	—	392 453	—
t	30 566 208	30 713 036	146 828	—	—
	6 503 757	6 948 279	444 522	—	—
	8 812 840	8 519 126	—	293 714	—
	6 903 662	6 566 205	—	337 457	—
ge	15 984 819	14 201 377	—	1 783 442	—
rt (I)	6 668 587	7 214 318	545 731	—	—
I)	754 206	491 935	—	262 271	—
or	45 627 871	43 941 240	—	1 686 631	—
	76 194 079	74 654 276	—	—	1 539 803

2 Total Volume of All Products Billed, by Land Status and Forest Region, 1980

(Includes Volumes Charged to Cut Control and Excludes Firmwood Rejects)
(Cubic Metres)

	Forest Region						
	Cariboo	Kamloops	Nelson	Prince George	Prince Rupert	Vancouver	Totals
cences	105 834	815 096	1 600 556	497 904	3 147 167	7 201 003	13 367 560
S Harvesting Licences	2 918 784	3 475 587	2 467 325	8 358 577	6 603 680	5 424 938	29 248 891
S Licences	3 323 330	3 716 854	1 700 001	4 522 611	1 563 016	1 553 522	16 379 334
ot Licences	4 399	342	393	—	3 314	1 660	10 108
Cut	172 016	41 985	107 975	356 176	239 069	64 576	981 797
y	6 001	361	1 267	5 822	5 680	614	19 745
nces	—	—	13 156	49 028	23 365	337 490	423 039
es	—	—	—	—	—	717 787	717 787
s	—	—	246	—	—	354 808	355 054
er Licences	—	154 786	83 323	85 221	445 725	5 165 793	5 934 848
s	—	—	—	—	285 099	80 011	365 110
s	—	—	—	—	121 772	255 853	377 625
r Trespass	—	24 322	—	—	9 403	155 701	189 426
s	53 124	59 946	12 630	6 193	3 929	63 124	198 946
s own Lands	6 583 488	8 289 279	5 986 872	13 881 532	12 451 219	21 376 880	68 569 270
s to 1887	3 097	160 423	158 462	253	3 109	4 086 707	4 412 051
s 1887-1906	21 232	29 004	348 411	—	106 430	203 135	708 212
s 1906-14	66 802	96 854	51 373	51 502	101 584	202 216	570 331
s to Date	420 988	191 447	276 885	618 071	332 352	398 671	2 238 414
rserves	—	595	133	—	—	1 837	2 565
ves	20 302	18 444	5 008	44 683	178 107	72 658	339 202
	7 115 909	8 786 046	6 827 144	14 596 041	13 172 801	26 342 104	76 840 045

Table D.3 Species Cut, All Products, 1980

(Includes Firmwood Rejects)
(Cubic Metres)

Forest Region	Balsam	Cedar	Cypress	Fir	Hemlock	Larch	Lg
Cariboo (C)	—	—	—	315	—	—	
Prince Rupert (C)	689 251	1 082 516	134 072	123 043	2 461 625	—	1
Vancouver (C)	4 898 049	5 339 135	759 700	4 345 936	9 494 350	—	
Totals, Coast	5 587 300	6 421 651	893 772	4 469 294	11 955 975	—	2
Cariboo (I)	258 722	184 829	—	1 484 715	34 630	10	8
Kamloops	933 668	516 360	11	1 639 466	389 177	83 797	0
Nelson	564 153	863 444	—	709 182	771 855	283 885	9
Prince George	1 364 696	78 088	—	273 006	27 465	61	4
Prince Rupert (I)	1 185 067	327 600	—	274	1 500 120	—	7
Vancouver (I)	135 697	56 968	3 163	99 076	124 532	—	1
Totals, Interior	4 442 003	2 027 289	3 174	4 205 719	2 847 779	367 753	12
Grand Totals	10 029 303	8 448 940	896 946	8 675 013	14 803 754	367 753	14

Forest Region	Spruce	White Pine	Yellow Pine	Other Conifer	Cottonwood	Other Hardwoods	o
Cariboo (C)	1	—	—	1	—	—	
Prince Rupert (C)	852 619	82	—	3 034	34 099	503	39
Vancouver (C)	255 876	84 587	13	9 896	69 184	53 990	23
Totals, Coast	1 108 496	84 669	13	12 931	103 283	54 493	27
Cariboo (I)	1 560 560	251	5 208	30 532	351	902	34
Kamloops	2 267 395	41 139	71 158	68 946	206	2 384	5
Nelson	1 261 707	219 629	44 653	36 401	16 824	2 541	56
Prince George	7 833 237	14	5	240 093	28 412	9 305	20
Prince Rupert (I)	1 830 596	4	—	57 364	33 658	4 382	2
Vancouver (I)	46 619	5 287	386	261	202	566	49
Totals, Interior	14 800 114	266 324	121 410	433 597	79 653	20 080	94
Grand Totals	15 908 610	350 993	121 423	446 528	182 936	74 573	65

Table D.4 Timber Cut and Billed from Timber Sales and Timber Sale Harvesting Licences, 1980

(Includes Volumes Charged to Cut Control
and Excludes Firmwood Rejects)
(Cubic Metres)

Forest Region	Logs	Special Forest Products[1]
Cariboo	6 230 783	11 331
Kamloops	7 164 132	28 309
Nelson	4 157 521	9 805
Prince George	12 827 148	54 040
Prince Rupert	8 044 046	122 650
Vancouver	6 951 564	26 896
Totals	45 375 194	253 031

[1] Special Forest Products are defined as poles, posts, pilings, shakes, shingle bolts, Christmas trees and other similar products designated in the regulations as special forest products.

5 Area Logged, 1980[1]

(Hectares)

on	Clear Cutting	Selective Cutting	Totals
.....	20 938	10 690	31 628
.....	16 342	10 754	27 096
.....	13 741	6 839	20 580
ge	52 701	66	52 767
rt	23 139	1 279	24 418
.....	30 534	524	31 058
80	157 395	30 152	187 547
79	168 820	27 713	196 533
78	140 169	25 912	166 081
77	147 897	28 055	175 952
76	133 277	23 699	156 976
75	100 501	19 070	119 571
74	130 849	18 004	148 853
73	149 250	23 926	173 176
72	132 965	19 428	152 393
71	135 572	29 559	165 131

l Crown land and excludes all private lands except those in Tree Farm Licences, s and Farm Woodlot Licences.

6 Total Scale of Christmas Trees Billed, 1971-1980

(Segregated by Land Status and Forest Region)
(Number of Trees)

Cariboo		Kamloops		Nelson		Prince George		Prince Rupert		Vancouver		Totals		
Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Private	Crown	Totals
569	2 473	21 176	11 855	324 753	142 577	120	1 000	—	600	—	—	346 618	158 505	505 123
2 460	4 852	32 933	8 572	309 336	175 620	1 525	1 300	—	600	83 876	7 026	430 130	197 970	628 100
1 201	6 301	17 864	500	320 871	207 926	833	—	—	1 600	81 527	10 173	422 296	226 500	648 796
6 020	3 866	32 011	12 723	433 841	195 341	60	500	—	600	90 129	14 119	562 061	227 149	789 210
9 558	23 680	35 360	12 290	496 343	217 072	444	—	—	495	77 554	7 217	,619 259	260 754	880 013
8 020	19 634	63 057	13 829	505 372	334 010	677	—	—	500	71 617	6 926	648 743	374 899	1 023 642
2 860	31 486	76 884	10 709	557 240	210 764	645	800	—	500	85 413	4 124	733 042	258 383	991 425
1 677	28 588	61 401	25 467	603 533	225 036	185	—	—	—	81 743	7 348	758 539	286 439	1 044 978
—	3 366	34 883	66 716	457 940	367 056	3 868	280	—	500	72 067	10 985	568 758	448 903	1 017 661
—	—	83 188	77 783	752 079	448 423	188	900	60	375	65 043	2 775	900 558	530 256	1 430 814

E. Forest Resource Basic Data

Table E.1 Summary of Basic Data for Certified Tree Farms, 1980 (Private Sustained Yield Units Over Crown-Granted Lands)

Forest Region	Number of Tree Farms	Productive Area (ha) Mature	Immature	NSR and NCC	Totals	Total Area (ha)	Appr
(a) Included Within Tree Farm Licences							
Nelson	2	248	1 706	1 933	3 887	4 110	2
Prince George	1	13	422	59	494	518	1
Vancouver	14	21 777	115 059	14 860	151 696	166 255	4
Totals	17	22 038	117 187	16 852	156 077	170 883	8
(b) Not Included Within Tree Farm Licences							
Nelson	10	53 770	91 321	26 447	171 538	234 141	4
Vancouver	25	70 549	198 065	20 706	289 320	329 735	0
Totals	35	124 319	289 386	47 153	460 858	563 876	75
Grand Totals	52	146 357	406 573	64 005	616 935	734 759	14

[1]Number of Christmas trees.

Table E.2 Summary of Basic Data for Farm Woodlot Licences, 1980 (Private Sustained Yield Units)

Forest Region	Number of Farm Woodlot Licences	Productive Area (ha) Crown	Private	Totals	Total Area (ha)
Cariboo	11	1 278	292	1 570	2 279
Kamloops	2	150	39	189	189
Nelson	4	550	250	800	838
Prince George	6	551	—	551	601
Prince Rupert	4	516	59	575	986
Vancouver	10	580	64	644	839
Totals	37	3 625	704	4 329	5 732

3 Summary of Basic Data for Tree Farm Licences, 1980 (Private Sustained Yield Units)

on and icence No.	Licencee	Productive Area (Hectares) Schedule A	Schedule B	Totals	Total Area (ha)	Allowable Annual Cut (m^3)
ion						
	Weldwood of Canada Limited	281	32 860	33 141	34 419	124 396
egion						
	Crown Zellerbach Canada Limited	682	72 252	72 934	79 293	210 394
	Weyerhaeuser Canada Ltd.	65	45 785	45 850	48 670	73 057
	Crown Zellerbach Canada Limited	—	48 634	48 634	51 842	127 992
	Clearwater Timber Products Limited	—	67 549	67 549	74 224	209 544
	Crown Zellerbach Canada Limited	—	12 678	12 678	13 555	33 980
	Federated Co-operatives Limited	—	8 323	8 323	8 512	28 480
	Weyerhaeuser Canada Ltd.	—	37 246	37 246	40 051	89 664
tals 7		747	292 467	293 214	316 147	773 111
on						
	Slocan Forest Products Ltd.	—	39 558	39 558	79 687	119 618
	Pope & Talbot Ltd.	—	72 672	72 672	77 757	150 787
	Galloway Lumber Company Limited	196	20 685	20 881	37 342	26 900
	Crestbrook Forest Industries Ltd.	405	47 772	48 177	139 520	115 533
	Canadian Cellulose Company, Limited	14 744	555 460	570 204	1 006 437	1 227 000
tals 5		15 345	736 147	751 492	1 340 743	1 639 838
ye Region						
	Northwood Pulp and Timber Limited	698	158 209	158 907	181 284	441 000
t Region						
	Canadian Cellulose Company, Limited	4 866	1 211 760	1 216 626	2 425 121	1 291 560
	Crown Zellerbach Canada Limited	11 494	14 563	26 057	27 522	209 630
	Western Forest Products Limited	2 967	74 781	77 748	112 470	436 079
	Western Forest Products Limited	15 480	50 848	66 328	308 244	125 520
	MacMillan Bloedel Limited	41 104	176 186	217 290	297 431	1 502 520
	Eurocan Pulp & Paper Company Limited	—	271 937	271 937	1 019 989	628 960
als 6		75 911	1 800 075	1 875 986	4 190 777	4 194 269
icences 2, 25 and 39 are partly within the Vancouver Region.						
egion						
	Crown Zellerbach Canada Limited	57 603	110 732	168 335	189 833	780 000
	Western Forest Products Limited	24 430	119 455	143 885	170 028	1 180 811
	MacMillan Bloedel Limited	23 477	47 558	71 035	78 755	523 861
	Timberland Development Co. Ltd.	265	61 559	61 824	231 116	219 000
	Crown Zellerbach (Hardwicke Island) Limited	402	8 414	8 816	9 479	69 540
	British Columbia Forest Products Limited	234	47 727	47 961	275 777	223 210
	Tahsis Company Ltd.	7 570	105 260	112 830	191 479	989 672
	MacMillan Bloedel Limited	55 155	88 447	143 602	172 271	984 260
	MacMillan Bloedel Limited	102 642	115 482	218 124	258 942	1 845 450
	British Columbia Forest Products Limited	21 326	130 123	151 449	166 870	1 110 586
	Western Forest Products Limited	26 404	64 633	91 037	146 213	527 660
	Corporation of the District of Mission	1 187	5 367	6 554	7 672	32 281
	British Columbia Forest Products Limited	1 096	11 883	12 979	14 517	115 077
	British Columbia Forest Products Limited	2 322	8 662	10 984	11 597	93 446
	Canadian Forest Products Ltd.	37 318	98 162	135 480	188 198	1 095 980
	Empire Mills Limited	190	52 237	52 427	219 014	263 380
	MacMillan Bloedel Limited	71 854	183 557	255 411	428 993	1 836 410
ils 17		433 475	1 259 258	1 692 733	2 760 754	11 890 624
cences 2, 25 and 39 are partly within the Prince Rupert Region.						
t 34		526 457	4 279 016	4 805 473	8 824 124	19 063 238

is land over which the Tree Farm Licence holder has cutting rights in addition to those conveyed by the Tree Farm Licence Agreement. This may include land held in fee simple, and temporary tenure land such as timber leases, timber licences, pulp leases, pulp licences and timber berths. Following removal of the mature timber, the temporary tenure lands are transferred to Schedule "B".
is Crown land.

Table E.4 Summary of Basic Data for Public Sustained Yield Units, 1980

Forest Region and Unit Name	Date of Survey	Mature Volume (m^3)	Productive Area: Mature (ha)	Productive Area: Immature (ha)	Total Productive (Includes NSR & NCC)	Total Area Including Non-Forest (ha)	Commitmen (m^3)
Cariboo							
Big Bar (Partial)	1976	38 412 540	282 097	159 249	450 158	546 521	438 500
Big Valley Blk. 2	1969	17 011 740	59 822	9 882	73 851	78 085	194 130
Bowron	1967	11 366 030	38 039	19 903	60 983	68 302	146 140
Chilko	1966	81 133 090	592 259	625 844	1 263 036	2 077 870	200 130
Cottonwood	1969	40 551 860	126 478	42 581	183 251	194 354	589 760
Lac la Hache	1972	64 993 210	320 669	264 769	616 951	720 001	954 490
Narcosli	1974	70 564 440	442 678	349 519	813 237	881 021	1 087 530
Quesnel Lake	1971	115 977 370	363 425	219 501	621 965	839 063	1 220 600
Stum	1963, 66	65 691 750	603 378	595 450	1 234 094	1 453 156	892 750
Williams Lake	1973	35 068 910	150 405	92 208	271 708	302 379	405 320
Regional Totals		540 770 940	2 979 250	2 378 906	5 589 234	7 160 752	6 129 350
Kamloops							
Adams	1968	26 801 400	91 183	99 633	200 867	236 622	413 470
Ashnola	1969	23 429 140	107 445	57 267	170 880	212 839	255 420
Barriere	1967	13 583 060	48 621	63 588	118 249	132 307	254 270
Barton Hill	1970	12 419 850	50 820	8 022	60 720	65 631	117 990
Big Bar (Partial) [1]	1976	9 010 320	67 226	42 827	111 063	130 789	—
Botanie	1970	36 884 250	212 895	111 185	348 711	525 468	371 240
Eagle	1971	23 581 890	59 034	35 526	102 999	142 395	271 980
Kamloops	1977	21 287 500	132 043	119 472	270 680	329 389	332 190
Nehalliston	1973	16 902 080	70 479	64 945	140 775	157 984	283 200
Nicola	1970	29 119 330	149 913	143 047	330 046	384 822	380 890
Niskonlith	1968	9 687 340	38 702	66 777	112 193	119 410	227 850
North Thompson	1967	46 029 520	142 054	34 375	190 365	398 092	284 100
Okanagan	1975	43 177 950	198 826	215 243	428 023	513 600	661 240
Raft	1967	21 742 140	77 757	111 538	204 533	225 594	358 090
Salmon Arm	1975	4 588 490	17 663	49 416	72 492	90 280	98 190
Shuswap	1975	38 133 140	96 548	87 780	209 453	306 026	385 470
Similkameen	1969	41 463 110	140 590	153 487	316 356	353 107	639 460
Spallumcheen	1972	46 364 400	141 831	158 250	316 918	396 842	824 040
Yalakom	1977	53 396 930	229 915	119 556	364 751	746 715	511 720
Regional Totals		517 601 840	2 073 545	1 741 934	4 070 074	5 467 912	6 670 810
Nelson							
Arrowhead	1977	19 786 100	46 649	32 517	82 841	218 883	132 470
Cranbrook	1964	32 756 780	121 349	310 411	493 492	698 431	652 400
Creston	1973	12 767 930	49 514	146 621	209 027	274 678	291 700
Edgewood	1977	11 215 200	44 707	52 047	102 337	120 260	200 300
Fernie	1973	20 186 130	90 337	185 424	305 681	541 288	542 940
Granby	1967	10 442 630	39 128	154 668	203 972	260 297	249 530
Kettle	1977	20 468 700	106 260	167 062	290 147	331 067	383 640
Kinbasket	1968	66 647 720	165 827	132 772	318 707	925 647	726 610
Lardeau	1969	53 884 630	151 089	202 430	377 126	739 692	466 830
Nakusp	1977	10 854 000	28 304	38 392	70 745	125 322	139 340
Salmo	1974	9 080 020	29 276	142 162	181 979	254 973	290 740
Slocan	1977	11 307 500	35 450	76 636	116 818	209 641	202 550
Upper Kootenay	1965	34 370 200	138 817	150 228	306 457	510 171	471 540
Windermere	1974	13 130 630	53 739	93 546	152 894	326 284	183 600
Regional Totals		326 898 170	1 100 446	1 884 916	3 208 223	5 536 633	4 934 190

(continued

MINISTRY OF FORESTS INVENTORY BRANCH

PUBLIC SUSTAINED YIELD UNITS

P.S.Y.U.'s — Inside Pulpwood Harvesting Areas

P.H.A.

No. 1 Prince George Pulp and Paper Limited

9. Big Valley
15. Carp
20. Crooked River
43. Naver
44. Nechako
52. Parsnip
71. Stuart Lake
77. Westlake
79. Willow River

No. 2 Kamloops Pulp & Paper Co. Ltd.

1. Adams
5. Barriere
6. Barton Hill
11. Botanie
23. Eagle
45. Nehalliston
46. Nicola
47. Niskonlith
49. North Thompson
59. Raft
63. Salmon Arm
64. Shuswap
70. Spallumcheen

No. 3 Northwood Pulp Limited

12. Bowron
37. Longworth
39. Monkman
55. Purden
61. Robson

No. 5 Cariboo Pulp & Paper Company Limited

17. Cottonwood
42 Narcosli
58 Quesnel Lake

No. 7 Intercontinental Pulp Company Ltd.

53. Peace
73. Takla

P.S.Y.U.'s — Outside Pulpwood Harvesting Areas

2. Arrowhead
3. Ashnola
4. Babine
7. Bell-Irving
8. Big Bar
10. Blueberry
13. Burns Lake
14. Canoe
16. Chilko
18. Cranbrook
19. Creston
21. Dean
22. Dewdney
24. Edgewood
25. Fernie
26. Finlay
86. Fontas
87. Fort Nelson
29. Granby
30. Hecate
31. Kamloops
32. Kettle
33. Kinbasket
34. Kingcome
95. Kluskus
35. Lac La Hache
36. Lardeau
38. Moberly
40. Morice
41. Nakusp
48. Nootka
50. Okanagan
51. Ootsa
56. Quadra
57. Queen Charlotte
60. Rivers Inlet
62. Salmo
68. Smithers
92. Sikanni
65. Similkameen
66. Skeena
67. Slocan
69. Soo
72. Stum
96. Sustut
74. Upper Kootenay
75. Vancouver
76. Wapiti
78. Williams Lake
80. Windermere
81. Yalakom
90. Kotcho
91. Liard

SPECIAL SALE AREAS

27. Fort St. James (O-I-C 1888/65)
28. Furry Creek (O-I-C 3909/67)
54. Prince George (O-I-C 2811/62)

TREE FARM LICENCES

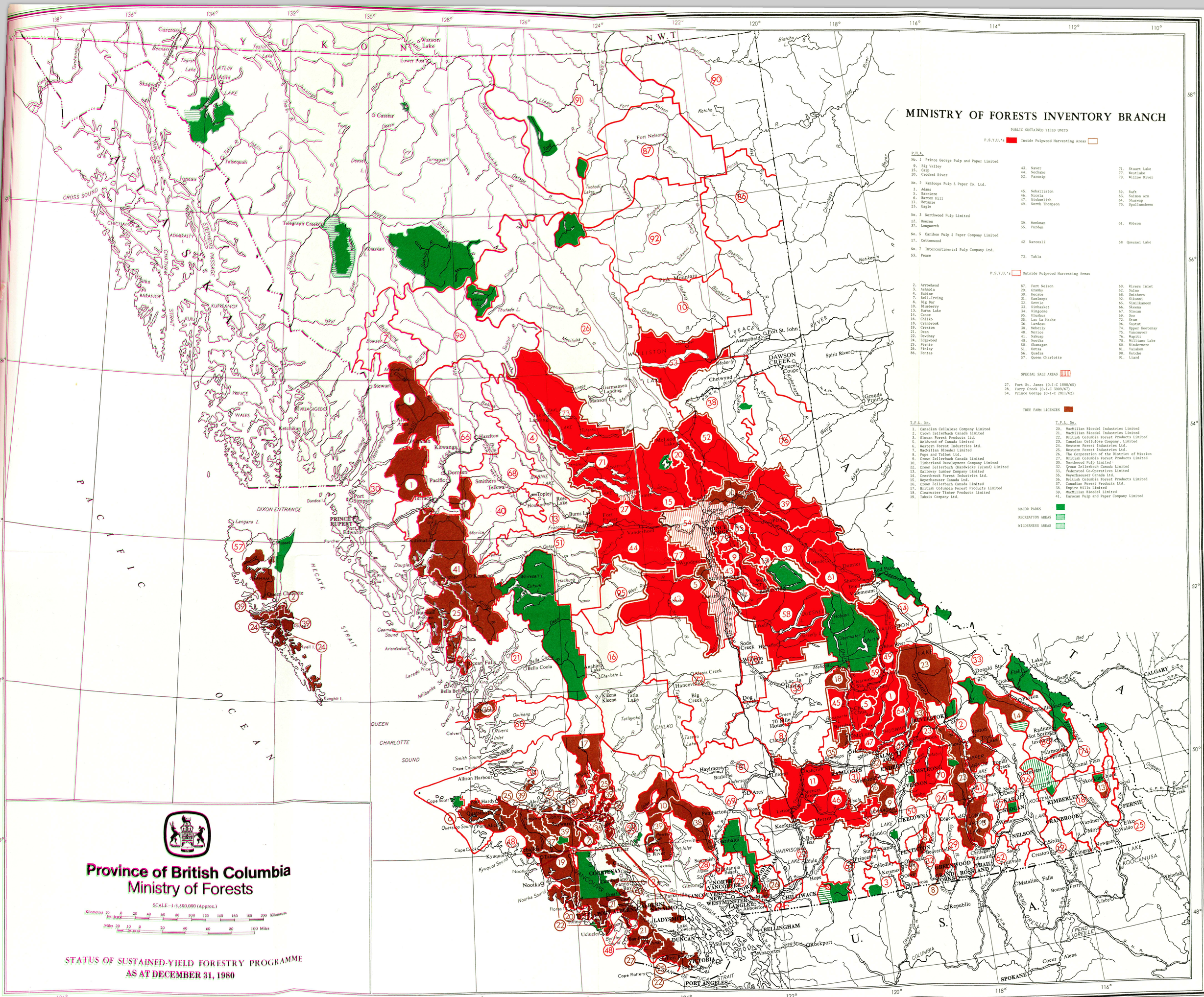
T.F.L. No.

1. Canadian Cellulose Company Limited
2. Crown Zellerbach Canada Limited
3. Slocan Forest Products Ltd.
5. Weldwood of Canada Limited
6. Western Forest Industries Ltd.
7. MacMillan Bloedel Limited
8. Pope and Talbot Ltd.
9. Crown Zellerbach Canada Limited
10. Timberland Development Company Limited
12. Crown Zellerbach (Hardwicke Island) Limited
13. Galloway Lumber Company Limited
14. Crestbrook Forest Industries Ltd.
15. Weyerhaeuser Canada Ltd.
16. Crown Zellerbach Canada Limited
17. British Columbia Forest Products Limited
18. Clearwater Timber Products Limited
19. Tahsis Company Ltd.
20. MacMillan Bloedel Industries Limited
21. MacMillan Bloedel Industries Limited
22. British Columbia Forest Products Limited
23. Canadian Cellulose Company, Limited
24. Western Forest Industries Ltd.
25. Western Forest Industries Ltd.
26. The Corporation of the District of Mission
27. British Columbia Forest Products Limited
30. Northwood Pulp Limited
32. Crown Zellerbach Canada Limited
33. Federated Co-Operatives Limited
35. Weyerhaeuser Canada Ltd.
36. British Columbia Forest Products Limited
37. Canadian Forest Products Ltd.
38. Empire Mills Limited
39. MacMillan Bloedel Limited
41. Eurocan Pulp and Paper Company Limited

MAJOR PARKS

RECREATION AREAS

WILDERNESS AREAS


Province of British Columbia
Ministry of Forests
SCALE – 1:3,500,000 (Approx.)
Kilometres 20 0 20 40 60 80 100 120 140 160 180 200 Kilometres
Miles 20 10 0 20 40 60 80 100 Miles
STATUS OF SUSTAINED-YIELD FORESTRY PROGRAMME
AS AT DECEMBER 31, 1980
Y U K O N
N.W.T.
A L A S K A
P A C I F I C O C E A N
QUEEN CHARLOTTE SOUND
HECATE STRAIT
DIXON ENTRANCE
PRINCE OF WALES I.
Prince Rupert
Kitimat
Terrace
Smithers
Prince George
Fort St. John
Dawson Creek
Fort Nelson
Vancouver
Victoria
Kamloops
Kelowna
Penticton
Nelson
Cranbrook
Kimberley
Trail
Rossland
Grand Forks
Greenwood
Revelstoke
Salmon Arm
Williams Lake
Quesnel
Chetwynd
Mackenzie
Port Alberni
Nanaimo
Duncan
Ladysmith
Chilliwack
Abbotsford
Langley
Bellingham
Port Angeles
Spokane
Calgary
Banff
Lake Louise
Golden
Invermere
Fernie
Elkins
Pincher Creek
Cranbrook
Kimberley
Nelson
Castlegar
Trail
Rossland
Grand Forks
Greenwood
Penticton
Kelowna
Vernon
Salmon Arm
Revelstoke
Golden
Invermere
Fernie
Elkins
Pincher Creek
Williams Lake
Quesnel

MINISTRY OF FORESTS INVENTORY BRANCH

UNIT SURVEYS 1961 +

COMPLETED (1961-74 Fieldwork)

1. Adams
3. Ashnola
4. Babine
5. Barriere
6. Barton Hill
7. Bell-Irving
9. Big Valley
10. Blueberry
11. Botanie
12. Bowron
14. Canoe
15. Carp
16. Chilko
17. Cottonwood
18. Cranbrook
19. Croston
20. Crooked River
21. Dean
23. Eagle
26. Finlay
27. Fort St. James S.S.A.
28. Furry Creek S.S.A.
29. Granby
30. Hecate
33. Kinbasket
34. Kingcome
35. Lac La Hache
36. Lardeau
37. Longworth
38. Moberly
39. Monkman
40. Morice
43. Naver
46. Nicola
47. Niskonlith
48. Nootka
49. North Thompson
52. Parsnip
53. Peace
54. Prince George S.S.A.
55. Purden
56. Quadra
57. Queen Charlotte
58. Quesnel Lake
59. Raft
60. Rivers Inlet
61. Robson
65. Similkameen
70. Spallumcheen
71. Stuart Lake
72. Stum
73. Takla
74. Upper Kootenay
75. Vancouver
76. Wapiti
78. Williams Lake
79. Willow River
82. Alsek Proposed
83. Boundary Proposed
84. Dawson Creek S.S.A. Proposed
85. Dease Proposed
86. Fontas
87. Fort Nelson
88. Kechika Proposed
89. Klappan Proposed
90. Kotcho
91. Liard
92. Sikanni
93. Stikine Proposed
94. Taku Proposed

UNIT SURVEY RE-INVENTORY 1973 – 1977

COMPLETED (1973-77 Fieldwork)

2. Arrowhead
8. Big Bar
13. Burns Lake
22. Dewdney
24. Edgewood
25. Fernie
31. Kamloops
32. Kettle
95. Kluskus
41. Nakusp
42. Narcosli
44. Nechako
45. Nehalliston
50. Okanagan
51. Ootsa
62. Salmo
63. Salmon Arm
64. Shuswap
66. Skeena
67. Slocan
68. Smithers
69. Soo
96. Sustut
77. Westlake
80. Windermere
81. Yalakom

T.S.A. SURVEYS 1979 & 1980

NSR Surveys

History Update Surveys

T.S.A. Inventory Surveys

TREE FARM LICENCES

MAJOR PARKS

RECREATION AREAS

WILDERNESS AREAS

Province of British Columbia

Ministry of Forests

SCALE–1:3,500,000 (Approx.)

Kilometres 20 0 20 40 60 80 100 120 140 160 180 200 Kilometres

Miles 20 10 0 20 40 60 80 100 Miles

PROGRESS OF FOREST-COVER MAPPING
BASED ON UNIT SURVEYS
OF AREAS UNDER PUBLIC MANAGEMENT
AS AT DECEMBER 31, 1980

Summary of Basic Data for Public Sustained Yield Units, 1980 (continued)

and	Date of Survey	Mature Volume (m³)	Productive Area Mature (ha)	Productive Area Immature (ha)	Total Productive (Includes NSR & NCC)	Total Area Including Non-Forest (ha)	Commitment (m³)	Volume Scaled (m³)
k. 1	1969	20 445 960	63 235	6 565	74 324	80 796	232 780	321 571
y	1964	37 962 590	187 825	441 331	777 012	1 112 274	537 090	406 499
	1974	29 290 390	84 592	34 954	127 598	355 028	192 200	295 195
	1973	90 833 800	272 077	224 771	523 438	601 628	824 430	602 410
er	1973	45 211 320	130 451	90 107	240 135	271 037	505 440	910 142
	1972	265 096 070	1 443 392	755 510	2 386 591	4 715 902	3 003 620	2 416 101
	1969, 70	9 352 140	40 634	297 427	436 687	1 092 292	220 870	152 558
	1968	41 644 080	193 300	584 590	885 586	1 922 737	717 920	624 590
	1975	33 663 300	179 125	136 862	316 310	385 601	180 750	131 330
	1970	11 051 650	58 845	755 052	1 246 321	2 231 182	—	—
	1972, 73	130 671 090	741 349	731 082	1 735 080	3 037 441	407 910	334 781
	1971	90 568 520	300 602	29 145	345 438	491 749	627 050	361 507
	1970	58 731 210	283 568	263 387	603 604	764 637	482 030	265 068
	1966	67 264 670	280 704	13 240	302 346	547 808	443 380	517 410
	1969	18 886 780	58 756	48 876	122 827	131 622	328 240	294 361
	1975	104 914 330	487 276	311 475	827 815	934 460	1 417 420	1 505 200
	—	—	—	—	—	—	—	113 416
	1965	65 060 360	318 532	67 256	444 328	597 310	612 760	476 483
	1972	63 658 090	298 875	155 781	490 089	706 154	366 330	441 747
	1967	46 075 280	168 855	30 289	215 819	238 960	473 160	298 751
	1974	35 254 800	121 221	65 804	200 780	533 384	254 520	299 672
	1971	33 666 900	255 399	709 524	1 059 355	1 939 697	148 690	70 353
k	1970	72 476 290	267 189	200 799	487 517	611 421	536 700	633 056
	1970, 71	137 510 480	526 916	339 714	904 573	1 238 629	1 053 540	880 360
	1969	49 521 370	246 595	522 118	854 492	1 162 118	294 670	188 364
	1975	33 645 830	133 372	73 592	224 140	237 975	458 780	491 389
	1969	17 823 310	56 836	51 044	121 925	129 426	334 760	370 377
s		1 610 280 610	7 199 521	6 940 295	15 954 130	26 071 268	14 655 040	13 402 691
e Coast)								
	1962, 63, 68	176 786 440	356 595	32 394	391 860	1 585 204	646 100	623 894
	1964, 65	285 530 910	630 656	40 719	685 977	1 711 167	446 780	643 932
hotte	1967	171 674 760	382 549	30 963	415 573	545 054	587 380	593 509
	1968	192 234 800	340 409	21 311	369 871	795 711	906 200	608 731
		826 226 910	1 710 209	125 387	1 863 281	4 637 136	2 586 460	2 470 066
e Interior)								
	1974	105 170 250	428 049	160 712	640 449	849 094	645 540	383 875
g	1973	51 394 940	112 944	6 018	132 165	639 826	—	42 366
k	1976	49 737 120	235 057	150 587	394 092	440 519	747 730	622 528
	1972	79 529 160	233 771	89 296	348 595	575 029	556 340	315 136
	1976	129 649 850	515 370	270 785	797 902	1 080 748	1 503 210	1 476 197
	1976	309 494 070	674 737	148 945	847 600	1 584 362	1 628 590	1 873 707
	1976	89 615 760	307 309	99 587	412 769	582 513	745 450	1 161 904
	1975	153 710 060	566 447	48 630	628 504	1 562 060	—	—
		968 301 210	3 073 684	974 560	4 202 076	7 314 151	5 826 860	5 875 713
s		1 794 528 120	4 783 893	1 099 947	6 065 357	11 951 287	8 413 320	8 345 779
	1974	123 610 740	209 310	154 217	400 951	725 581	1 378 300	1 168 238
	1966, 69, 71, 74	253 622 450	423 177	98 617	535 241	1 095 137	1 226 810	1 186 679
	1969	170 198 270	234 500	25 942	268 671	318 349	1 169 620	1 219 802
	1962, 66, 67, 68	139 203 730	227 351	276 377	540 889	1 155 511	2 097 870	2 176 637
	1975	74 842 120	128 243	76 396	212 692	597 515	584 810	611 801
	1970	37 607 090	55 007	61 623	129 332	222 734	345 760	301 585
s		799 084 400	1 277 588	693 172	2 087 776	4 114 827	6 803 170	6 664 742
nce		5 589 164 080	19 414 243	14 739 170	36 974 794	60 302 679	47 605 880	45 062 182

r commitment.

ert (Interior) for remaining details.

Table E.5 Summary of Forest Cover Map Production, 1980

Forest Region	Project Name	Number of Maps						
		Totals	Updated	Polygon Numbered	Forest Cover Digitized	Area Calculated	Forest Cover Plotted	Base Digitized
Cariboo	100 Mile House TSA	75	—	—	—	—	—	—
	Quesnel TSA	127	87	25	23	20	20	20
	Williams Lake TSA	330	72	67	49	13	1	67
	Lillooet TSA N. Portion	3	3	3	—	—	—	—
	Total TSA Maps	535	162	95	72	33	21	87
Kamloops	Kamloops TSA	160	—	—	—	—	—	—
	Lillooet TSA	75	75	75	48	2	2	1
	Merritt TSA	74	62	—	—	—	—	—
	Okanagan TSA	141	103	52	21	16	3	104
	East Canoe Sub Unit	5	5	5	5	5	5	5
	McNulty Cr. Sub Unit	12	12	12	12	—	—	12
	Trinity Valley Sub Unit	18	18	18	18	—	18	18
	Upper Yalakom Sub Unit	32	32	32	32	—	—	32
	Total Sub Unit Maps	67	67	67	67	5	23	67
	Total TSA Maps	450	240	127	69	18	5	105
Nelson	Arrow TSA	66	20	18	—	—	—	—
	Boundary TSA	47	44	44	—	—	—	—
	Cranbrook TSA	129	129	129	126	21	—	116
	Golden TSA	88	—	—	—	—	—	—
	Invermere TSA	77	9	9	—	—	—	—
	Kootenay Lake TSA	72	—	—	—	—	—	—
	Okanagan TSA	8	8	8	—	—	—	—
	Revelstoke TSA	24	—	—	—	—	—	—
	Total TSA Maps	511	210	208	126	21	—	116
Prince George	Peace TSA	538	—	—	—	—	—	—
	Fort Nelson TSA	669	188	—	—	—	—	—
	Mackenzie TSA	382	—	—	—	—	—	—
	McBride TSA	62	—	—	—	—	—	—
	Quesnel TSA	14	14	4	—	—	—	—
	Prince George TSA	475	168	151	110	7	1	103
	Total TSA Maps	2 140	370	155	110	7	1	103
Prince Rupert	Bulkley TSA	40	—	—	—	—	—	—
	Cassiar TSA	1 211	—	—	—	—	—	—
	Kalum TSA	111	—	—	—	—	—	—
	Kispiox TSA	103	—	—	—	—	—	—
	Lakes TSA	90	49	49	37	—	—	—
	Mid-Coast TSA	226	—	—	—	—	—	—
	Morice TSA	119	63	38	—	—	—	—
	North Coast TSA	225	76	76	60	—	—	223
	Prince George TSA	92	—	—	—	—	—	—
	Queen Charlotte TSA	122	122	122	—	—	—	—
	Total TSA Maps	2 339	310	285	97	—	—	223
Vancouver	Fraser TSA	85	10	6	6	—	—	—
	Kingcome TSA	158	24	—	—	—	—	—
	Nootka TSA	104	—	—	—	—	—	—
	Quadra TSA	211	106	46	46	1	—	11
	Soo TSA	60	—	—	—	—	—	—
	Ahta R. Sub Unit	6	6	6	6	—	—	5
	Mehatl Cr. Sub Unit	12	12	12	12	—	—	1
	Nahatlatch Cr. Sub Unit	13	13	12	12	—	—	1
	Pemberton Cr. Sub Unit	3	3	3	3	—	—	[illegible]
	Potlatch Cr. Sub Unit	5	5	5	5	—	—	1
	TFL 37	55	55	55	55	55	55	5
	Total Sub Unit and TFL	94	94	93	93	55	55	9
	Total TSA Maps	618	140	52	52	1	—	11
Totals	Total Sub Unit and TFL	161	161	160	160	60	78	16
	Total TSA Maps	6 593	1 432	922	526	80	27	74
	All Projects	6 754	1 593	1 082	686	140	105	90

Uses of Crown Range, 1980

	Grazing Authorizations						Hay Cutting Authorizations		Grazing Special Use Permits		
			Authorized Livestock								
	Operators	Permits/ Licences Handled	Cattle	Horses	Sheep	Use of Crown Range (AUMs)[1]	Permits/ Licences Issued	Tonnes	Permits	Hectares	Land Base for Crown Range Administration (ha)
.....	580	586	74 774	1 457	86	367 408	69	727	1	172	4 770 400
.....	491	529	75 449	312	1 006	321 302	1	10	13	619	3 393 177
.....	273	293	17 908	534	—	74 971	2	30	—	—	598 636
.....	379	394	38 147	3 441	110	140 538	10	156	—	—	886 950
.....	129	134	8 745	818	—	26 415	8	83	2	132	731 986
.....	8	8	185	—	—	608	—	—	6	471	1 941
.....	1 860	1 944	215 208	6 562	1 202	931 242	90	1 006	22	1 394	10 383 090
.....	1 856	1 747	206 918	5 581	1 358	908 966	76	1 023	33	1 754	10 403 293
.....	1 911	1 743	204 293	5 163	1 313	871 608	85	1 057	48	2 839	10 256 289
.....	1 779	1 738	192 040	5 232	1 985	828 173	85	1 149	57	5 930	10 186 762
.....	1 801	1 863	183 729	4 240	2 668	794 636	115	1 250	55	5 368	9 514 555
.....	1 727	1 912	181 117	4 907	882	787 406	155	1 931	56	5 322	9 514 575
.....	—	2 000	183 156	5 546	1 821	809 238	—	—	—	—	—
.....	—	1 920	177 785	5 748	1 616	783 677	—	—	—	—	—
.....	—	1 968	174 617	6 166	1 432	787 589	—	—	—	—	—
.....	—	1 920	178 772	6 186	1 484	829 337	—	—	—	—	—

[1] th (AUM) is the amount of forage required for one month by an average cow, aged 6 months or older.

Table G.1 Visits to Recreation Sites, 1980

Forest Region	(000 User Days)
Cariboo	195
Kamloops	320
Nelson	165
Prince George	180
Prince Rupert	115
Vancouver	340
Totals	1 315

Table G.2 Recreation Projects, 1980

Forest Region	No. of Sites Established During Year	No. of Sites Removed During Year	No. of Active Sites at Year End	Trails Constructed 1980 (km)	Total Trails to Date (km)
Cariboo					
Type A	10	—	124	—	—
Type B	2	4	18	—	—
Totals	12	4	142	39	138
Kamloops					
Type A	13	—	234	—	—
Type B	14	3	98	—	—
Totals	27	3	332	26	412
Nelson					
Type A	20	10	216	—	—
Type B	3	16	24	—	—
Totals	23	26	240	94	977
Prince George					
Type A	5	—	153	—	—
Type B	—	—	19	—	—
Totals	5	—	172	12	252
Prince Rupert					
Type A	4	—	65	—	—
Type B	8	—	17	—	—
Totals	12	—	82	8	88
Vancouver					
Type A	14	4	138	—	—
Type B	—	—	21	—	—
Totals	14	4	159	4	434
Total B.C.					
Type A	66	14	930	—	—
Type B	27	23	197	—	—
Totals	93	37	1 127	183	2 301

Type A facilities: table, litter can, ground toilet.
Type B facilities: litter can only.

Timber Processing Facilities, 1980

	Operating								Shutdown			
	Sawmills				Shingle Mills				Sawmills		Shingle Mills	
	Number	Eight-Hour Daily Production (m³)	Number of Attached Chippers	Number of Attached Barkers	Number	Eight-Hour Daily Production (m³)	Number of Pulp Mills	Number of Veneer and Plywood Plants	Number	Eight-Hour Daily Production (m³)	Number	Eight-Hour Daily Production (m³)
	58	16 042	38	48	2	7	1	3	43	344	1	6
	95	19 121	60	63	10	195	1	6	80	1 117	2	—
	108	15 069	49	40	14	157	2	6	70	851	3	51
	135	17 075	73	77	2	8	5	3	120	1 454	1	3
	121	15 412	26	26	6	87	3	—	91	1 281	3	24
	185	57 419	160	88	126	5 601	12	13	63	725	24	237
	702	140 138	406	342	160	6 055	24	31	467	5 772	34	321
	815	151 687	385	354	171	6 923	24	31	487	7 107	34	1 179
	716	179 025	381	319	144	5 879	24	31	551	9 552	29	96
	705	138 743	365	335	114	7 406	25	31	566	12 013	25	14 514
	659	141 303	365	326	99	5 197	25	30	543	13 639	25	238
	661	147 949	354	318	106	5 712	25	30	575	15 046	19	374
	787	128 972	326	304	103	4 574	25	27	495	19 510	14	210
	810	150 954	320	307	86	4 656	24	30	455	17 734	11	382
	603	130 164	305	272	74	4 534	23	30	506	16 208	28	266
	627	117 910	244	243	68	2 940	21	27	576	16 646	12	144
...age												
	709	142 685	345	312	112	5 388	24	29	522	13 323	23	1 772

Export of Logs, 1980

(Cubic Metres)

	Grade No. 1	Grade No. 2	Grade No. 3	Ungraded and Firmwood Reject	Totals	Exportable [1]	Exported [2] Under Permit
	—	—	—	127 979.2	127 979.2	6 523.3	121 455.9
	27 288.9	42 144.8	95 123.2	—	164 556.9	35 071.1	129 485.8
	8 694.9	21 528.8	10 839.6	—	41 063.3	15 842.7	25 220.6
	1 121.5	8 095.6	79 348.3	—	88 565.4	40 461.1	48 104.3
	1 799.1	29 578.6	69 141.4	—	100 519.1	59 549.0	40 970.1
	—	—	—	26 340.9	26 340.9	17 827.7	8 513.2
	5 124.7	21 197.3	319 371.9	—	345 693.9	104 053.9	241 640.0
...ne	71.4	342.8	29 262.9	—	29 677.1	1 804.1	27 873.0
	7 490.2	32 573.4	171 112.5	—	211 176.1	105 110.1	106 066.0
	51 590.7	155 461.3	774 199.8	154 320.1	1 135 571.9	386 243.0	749 328.9
	53 035.0	123 405.4	409 723.6	143 962.0	730 126.0	120 212.0	609 914.0
	43 493.8	118 592.8	467 280.0	57 073.3	686 439.9	87 701.3	598 738.6
	54 578.3	176 597.9	594 020.5	207 942.4	1 033 139.1	277 731.4	755 407.7
	28 623.0	85 605.7	377 912.6	97 593.6	589 732.9	251 416.5	338 316.4
	34 170.9	84 450.2	278 660.3	27 875.4	425 156.8	208 001.9	217 154.9
	17 445.1	90 357.8	440 492.1	46 512.8	594 807.8	320 772.1	274 035.7
	4 381.1	18 068.2	92 739.5	19 353.9	134 542.7	92 549.8	41 992.9
	20 308.3	65 379.6	191 250.6	11 580.0	288 518.5	85 124.3	203 394.2
	81 400.2	172 587.7	476 260.3	65 827.0	796 075.2	131 132.9	664 942.3
...rage							
	38 902.6	109 050.6	410 253.9	83 204.0	641 411.1	196 088.5	445 322.6

...ege - Exported from lands Crown-granted prior to March 13, 1906.

...der permit from Crown lands and lands granted after March 12, 1906 under authority of Section 135 of the **Forest Act**.

Table H.3 Export of Wood Residues, 1980

(Bone Dry Units)

Forest Region	Destination: Other Canada	U.S.A.	Japan	Other	Totals
Cariboo					
Chips	—	—	167 267	—	167 267
Kamloops					
Chips	—	130 764	228 670	—	359 434
Nelson					
Chips	—	59 013	11 739	—	70 752
Sawdust	—	10 430	—	—	10 430
Prince George					
Chips	60 490	—	39 723	—	100 213
Prince Rupert					
Chips	—	—	9 377	551	9 928
Vancouver					
Chips	—	318 664	45 194	—	363 858
Sawdust	—	15 502	3 738	—	19 240
Hog Fuel	—	6 571	—	—	6 571
Totals					
Chips	60 490	508 441	510 970	551	1 071 452
Sawdust	—	25 932	3 738	—	29 670
Hog Fuel	—	6 571	—	—	6 571
Totals					
All Items	60 490	540 944	505 708	551	1 107 693

Source: Ministry of Forests, Valuation Branch, monthly export reports.

Table H.4 Registrants in the Small Business Enterprise Program, Number of Sales Awarded to Date, and Total Volume Scaled in 1980

Forest Region	No. of Registrants to Dec. 31, 1980: Cat. 1	Cat. 2	Totals	No. of Sales Awarded to Dec. 31, 1980: Cat. 1	Cat. 2	Totals	Total Scale in 1980 (000 m³)
Cariboo	250	78	328	35	22	57	174.2
Kamloops	435	196	631	40	43	83	79.1
Nelson	310	197	507	27	46	73	11.0
Prince George	362	62	424	11	12	23	78.1
Prince Rupert	453	185	638	225	43	268	123.6
Vancouver	741	168	909	55	3	58	60.3
Totals	2 551	886	3 437	393	169	562	526.3

Category 1: Registrants who, at time of application, did not own any timber processing facility.
Category 2: Registrants who, at time of application, owned timber processing facilities.

Table H.5 Summary of Activity in Small Business Enterprise Program, 1980

Forest Region	No. of Sales Awarded in 1980: Cat. 1	Cat. 2	Totals	Tendered Volume (000 m³)	Total Estimated Value ($000)
Cariboo	30	18	48	452.0	1 998.0
Kamloops	31	28	59	275.6	1 672.8
Nelson	15	25	40	191.2	865.2
Prince George	9	9	18	119.0	1 263.3
Prince Rupert	159	36	195	504.7	1 898.2
Vancouver	58	3	61	350.1	3 351.8
Totals	302	119	421	1 892.6	11 049.3

Category 1: Registrants who, at time of application, did not own any timber processing facility.
Category 2: Registrants who, at time of application, owned timber processing facilities.

Average Stumpage Prices Received on Timber Scaled from Tree Farm Licence Cutting Permits, by Species and Forest Region, 1980[2]

	Balsam			Cedar			Cypress			Douglas-fir		
	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)
.....	15 525	2.64	0.92- 6.40	—	—	—	—	—	—	42 471	13.41	3.15-31.24
.....	92 983	2.26	0.39-13.05	22 513	3.27	0.39-25.54	—	—	—	85 686	6.17	0.39-42.33
.....	132 349	2.28	0.80- 9.95	283 324	5.31	0.80-34.05	—	—	—	96 546	5.74	1.01-26.65
.....	101 211	3.92	0.94- 9.30	1	2.27	2.27	—	—	—	6 819	16.27	0.98-32.64
.....	366 592	2.83	0.89- [1]	411 100	6.36	0.74- [1]	58 565	63.89	54.89- [1]	—	—	—
.....	1 546 135	13.24	3.51-14.20	1 569 768	10.92	3.06-15.99	193 952	70.50	[1] -83.02	585 482	19.05	3.38-25.79
.....	2 254 795	9.96	0.39-14.20	2 286 706	9.33	0.39-34.05	252 517	54.15	54.89-83.02	817 004	15.81	0.39-42.33

	Hemlock			Larch			Lodgepole Pine			Spruce		
	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)
.....	38	1.05	0.96-9.43	—	—	—	10 023	3.90	1.05-10.93	34 013	8.03	1.10-15.89
.....	14 744	1.22	0.39-9.99	12 408	17.79	0.91-25.87	268 444	2.31	0.39-15.74	279 279	5.90	0.39-17.93
.....	337 280	0.29	0.23-2.86	26 712	3.37	0.31-20.38	163 558	1.57	0.89- 8.73	264 139	4.78	0.96-19.33
.....	1 093	2.54	0.90-9.30	—	—	—	20 812	4.72	1.00-10.33	342 173	11.36	1.09-19.20
.....	1 556 699	5.26	[1]	—	—	—	54 865	1.42	[1]	397 976	31.30	[1]
.....	3 036 118	12.70	[1]	—	—	—	46	12.85	[1]	67 806	44.10	[1]
.....	4 945 972	9.46	0.23-9.99	39 120	7.94	0.31-25.87	517 748	1.61	0.39-15.74	1 385 386	16.25	0.39-19.33

	White Pine			Other Species			All Species		
	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)	Volume (m^3)	Price (per m^3)	Price Range (per m^3)
.....	—	—	—	206	0.99	0.50- 1.23	102 276	9.04	0.50-31.24
.....	1 709	14.99	0.39-48.71	836	2.96	0.39-27.90	778 602	4.30	0.39-48.71
.....	90 537	12.39	1.88-45.22	531	2.93	0.44-23.55	1 394 976	3.72	0.23-45.22
.....	—	—	—	13	3.89	0.50	472 122	9.52	0.50-32.64
.....	5	7.15	[1]	11 112	2.04	[1]	2 856 914	9.85	[1]
.....	16 915	9.35	[1]	3 360	6.27	[1]	7 019 582	14.84	[1]
.....	109 166	11.96	0.39-48.71	16 058	2.89	0.39-27.90	12 624 472	11.59	0.39-48.71

[1] t available.
[2] vood rejects and waste.

Table I.2 Average Bid Stumpage Prices on Cutting Permits of Timber Sale Harvesting Licences and Timber Sales, by Species and Forest Region, 1980

Forest Region	Balsam Volume (m³)	Balsam Price (per m³)	Balsam Price Range (per m³)	Cedar Volume (m³)	Cedar Price (per m³)	Cedar Price Range (per m³)	Cypress Volume (m³)	Cypress Price (per m³)	Cypress Price Range (per m³)	Dou Volume (m³)	Dou Pr (per
Cariboo (C)	23 287	1.16	1.16	—	—	—	—	—	—	—	
Cariboo (I)	317 302	1.69	0.92-61.03	270 164	1.87	0.95- 6.21	—	—	—	1 036 379	6
Kamloops	867 860	1.90	0.92-13.98	771 304	3.31	0.40-19.15	—	—	—	1 063 537	6
Nelson	545 866	1.27	0.28-12.99	880 343	4.49	0.37-16.86	—	—	—	373 471	4
Prince George	2 396 475	2.56	0.81-12.24	121 628	1.62	1.03-12.47	—	—	—	210 317	11
Prince Rupert (C)	354 480	3.05	1.99- 6.09	795 090	8.30	0.74-32.43	55 103	59.61	4.35-105.65	142 080	15
Prince Rupert (I)	1 059 390	2.42	0.40-16.95	68 040	2.66	1.18-14.00	—	—	—	—	
Vancouver (C)	944 962	11.76	0.75-22.47	853 205	11.02	0.71-40.00	250 266	77.13	1.09-111.14	628 242	17
Vancouver (I)	85 672	6.64	1.06-14.32	20 587	6.12	1.60-15.30	—	—	—	36 523	9
Totals	6 595 294	3.69	0.28-61.03	3 780 361	6.22	0.37-40.00	305 369	73.69	1.09-111.14	3 490 549	8

	Hemlock Volume (m³)	Hemlock Price (per m³)	Hemlock Price Range (per m³)	Larch Volume (m³)	Larch Price (per m³)	Larch Price Range (per m³)	Lodgepole Pine Volume (m³)	Lodgepole Pine Price (per m³)	Lodgepole Pine Price Range (per m³)	Spr Volume (m³)	Spr Pr (per
Cariboo (C)	—	—	—	—	—	—	1 394	0.26	0.26- 0.27	912	1
Cariboo (I)	50 709	1.11	0.82- 1.32	—	—	—	3 337 737	1.97	0.25-21.47	1 413 507	5
Kamloops	492 754	1.28	0.26-16.20	64 501	3.77	0.95-17.37	2 166 074	1.60	0.30-15.72	1 948 918	4
Nelson	671 792	0.36	0.21- 7.93	99 522	2.70	0.43-18.95	2 215 332	1.27	0.23-18.75	1 180 872	3
Prince George	75 364	1.02	0.39- 1.35	—	—	—	3 640 238	2.46	0.83-14.03	8 990 331	6
Prince Rupert (C)	1 231 690	9.17	0.62-29.04	—	—	—	—	—	—	392 580	36
Prince Rupert (I)	899 024	1.12	0.65- 5.72	—	—	—	2 117 030	2.35	0.23-12.19	1 211 620	4
Vancouver (C)	2 667 990	9.17	0.71-27.49	—	—	—	1 077	2.21	1.82- 3.86	90 330	49
Vancouver (I)	87 204	5.31	1.80-10.06	—	—	—	12 760	1.01	1.00- 1.22	20 380	6
Totals	6 176 527	6.19	0.21-29.04	264 023	2.96	0.43-18.95	13 491 642	1.98	0.23-21.47	15 249 450	6

	White Pine Volume (m³)	White Pine Price (per m³)	White Pine Price Range (per m³)	Other Species Volume (m³)	Other Species Price (per m³)	Other Species Price Range (per m³)	All Species Volume (m³)	All Species Price (per m³)	All Species Price Range (per m³)
Cariboo (C)	—	—	—	—	—	—	25 593	1.10	0.26- 1.16
Cariboo (I)	—	—	—	12 510	2.27	0.50-19.15	6 438 308	3.43	0.25- 77.60
Kamloops	67 128	13.14	0.50- 32.73	63 369	14.97	1.05-30.15	7 505 445	3.48	0.26- 32.73
Nelson	189 354	18.40	0.44-101.96	25 138	4.29	0.39-11.30	6 281 690	2.81	0.21-101.96
Prince George	—	—	—	24 469	0.50	0.50	15 458 822	4.93	0.39- 31.68
Prince Rupert (C)	1 940	1.35	0.32- 1.93	—	—	—	2 972 963	13.09	0.32-118.82
Prince Rupert (I)	—	—	—	81 500	0.50	0.50	5 436 604	2.55	0.23- 17.65
Vancouver (C)	1 317	2.39	1.56- 3.71	50 505	2.53	1.00-12.25	5 487 894	14.60	0.71-154.06
Vancouver (I)	—	—	—	—	—	—	263 126	6.19	1.00- 16.63
Totals	259 739	16.83	0.32-101.96	257 491	4.92	0.39-30.15	49 870 445	5.54	0.21-154.06

Table I.3 Forest and Range Revenue, Fiscal Year 1979/80

Timber Licence Rentals and Fees	$ 566 375.93
Timber Berth Rentals and Fees	66 940.99
Timber Lease Rentals and Fees	129 926.25
Timber Sale Rentals and Fees	10 924 533.93
Timber Sale Stumpage	527 717 545.78
Timber Royalties	15 014 550.03
Grazing Permits and Fees	1 051 118.73
Miscellaneous	1 436 382.06
Weight Scaling	4 886 778.50
Coast Scaling	3 632 721.99
Indian Affairs Agreement	127 864.00
Federal-Provincial Agreement - DREE Forestry	5 700 000.00
Total	$571 254 738.19

Forest and Range Revenue, 1976 - 1980

	12 Months to Dec. 31 1976 ($)	12 Months to Dec. 31 1977 ($)	12 Months to Dec. 31 1978 ($)	12 Months to Dec. 31 1979 ($)	12 Months to Dec. 31 1980 ($)
e Rentals and Fees	536 424.40	512 757.29	505 263.82	499 494.68	657 910.07
tentals and Fees	74 772.43	70 324.86	64 221.92	63 023.25	62 719.74
Rentals and Fees	80 253.37	74 757.20	72 248.95	129 285.75	105 333.75
entals and Fees	841 081.45	806 406.86	724 629.24	14 173 405.67	14 605 061.83
umpage	43 691 476.49	62 314 958.73	159 913 091.94	416 933 571.53	465 729 055.92
uising and Advertising	199 208.82	275 650.62	275 878.44	40 280.74	—
es	6 691 829.70	8 628 049.98	7 530 386.48	12 831 789.96	14 914 990.46
ts and Fees	412 690.82	503 775.34	556 696.15	777 007.71	1 282 816.26
on Tax	1 421 792.84	1 198 161.44	986 043.00	123 460.27	—
	1 267 600.72	1 203 475.27	750 862.73	1 316 904.30	1 462 754.88
	4 468 124.99	4 637 871.16	4 656 807.15	5 048 616.45	5 458 040.63
	2 067 742.02	587 913.39	2 529 089.93	3 314 657.95	3 590 762.63
Agreement	181 848.14	143 357.00	136 850.00	264 714.00	—
on Agreements	—	—	—	—	358 403.60
ting Costs Standby Crews	775 716.72	163 909.94	2 349.64	502.00	—
s	2 792.17	—	—	—	—
er Improvements	305 101.00	2 378 800.00	5 211 567.00	2 442 702.00	—
cial DREE Agreement	—	—	—	2 054 000.00	3 646 000.00
	—	—	—	—	3 776 353.21
	$63 018 456.08	$83 500 169.08	$183 915 976.39	$460 013 416.26	$515 650 202.98

Amounts Charged Against Logging Operations, Fiscal Year 1979/80

	Royalty ($)	Miscellaneous ($)	Scaling Expenses ($)	Scaling Fees ($)	Stumpage ($)	Rentals, Cruising, Advertising, Transfer Fees ($)	Totals ($)
	(cr)1 430.37	699 108.49	—	2 113.50	46 461 074.72	1 187 265.83	48 348 132.17
	430 395.93	1 273 619.22	—	5 772.60	67 770 362.96	1 609 641.97	71 089 792.68
	222 892.77	904 201.31	—	2 533.40	45 617 990.34	904 625.43	47 652 243.25
	6 633.84	1 409 876.24	—	3 708.37	123 029 367.65	3 295 965.87	127 745 551.97
	2 428 704.95	778 191.40	57 764.60	646 818.47	67 619 970.68	2 144 407.36	73 675 857.46
	12 133 010.25	663 357.23	268 300.36	2 677 842.93	182 636 730.02	1 601 750.80	199 980 991.59
9	15 220 207.37	5 728 353.89	326 064.96	3 338 789.27	533 135 496.37	10 743 657.26	568 492 569.12
8	8 028 314.32	5 380 583.46	290 342.15	2 312 044.75	262 079 652.53	7 676 817.32	285 767 754.53
7	8 983 879.87	5 230 845.18	300 416.09	2 302 628.03	88 553 379.15	2 157 066.44	107 528 214.76
6	7 083 088.95	4 956 050.33	435 514.55	2 665 562.58	48 707 785.36	1 976 118.79	65 824 120.56
5	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
4	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
3	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
2	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
1	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
0	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

Table I.6 Amounts Charged Against Logging Operations, 1980

Forest Region	Royalty ($)	Miscellaneous ($)	Interest ($)	Scaling Fees and Expenses ($)	Stumpage ($)	Rentals, Cruising, Advertising, Transfer Fees ($)	
Cariboo	(cr)112.38	735 997.63	628 411.67	3 797.48	16 847 093.57	735 695.82	18
Kamloops	281 228.12	943 231.75	429 013.69	4 961.80	25 595 329.45	1 086 998.65	28
Nelson	130 014.67	904 900.73	417 085.21	4 958.52	11 261 385.43	1 330 974.94	14
Prince George	120 634.12	1 575 761.31	2 125 526.71	6 303.15	42 796 149.75	2 778 703.77	49
Prince Rupert	2 732 918.10	998 314.28	449 165.72	622 042.05	61 270 681.53	2 722 876.93	68
Vancouver	10 422 690.80	866 464.87	443 774.53	2 713 890.63	175 688 133.32	6 088 586.71	196
Totals 1980	13 687 373.43	6 024 670.57	4 492 977.53	3 355 953.63	333 458 773.05	14 743 836.82	375
1979	12 910 812.09	5 961 595.21	—	3 092 979.96	489 801 319.60	15 582 570.31	527
1978	8 306 627.30	5 107 149.26	—	2 984 821.78	214 617 486.97	1 283 656.11	232
1977	8 610 617.36	5 064 910.21	—	2 728 373.79	67 074 287.41	2 066 412.85	85
1976	6 897 258.86	5 074 293.99	—	3 123 279.83	48 592 302.05	2 877 314.56	66
1975	6 074 174.55	4 438 210.28	—	2 834 920.94	28 389 508.35	1 989 319.46	43
1974	8 221 171.52	3 841 145.72	—	3 066 601.08	169 698 769.51	1 213 664.51	186
1973	6 804 683.59	3 876 214.24	—	2 892 160.69	251 777 437.15	1 917 706.24	267
1972	5 231 473.78	2 510 946.56	—	2 399 416.44	96 595 977.64	1 921 977.20	108
1971	5 519 236.50	1 930 657.09	—	2 531 007.29	55 347 358.35	2 341 636.62	67

Ministry of Forests Expenditures, Fiscal Year 1979/80

ce[1]		$ 121 250.25
nistration Program		
ster and Executive	$ 371 182.03	
Services	891 767.34	
udies	451 655.64	1 714 605.01
ces Program		
's Staff	1 459 862.56	
nd Staff Training	1 105 367.89	
ion and Legal	1 120 952.92	
rvices	596 909.39	4 283 092.76
ram		
	5 413 707.55	
	9 768 593.73	
	2 682 926.26	
	1 882 607.40	
n	21 728 573.54	
ssion	27 534 149.97	69 010 558.45
nge Management Program		
	3 111 683.99	
nagement	2 829 116.04	
agement	2 206 610.47	
r[2]	10 315 693.28	
lopment Roads Maintenance	6 271 741.20	
lopment Roads Capital[3]	1 767 809.70	
	11 598 399.36	38 101 054.04
ns Program		18 849 159.94
uring Program		4 414 553.59
n of New Legislation		
orests Act[4]	3 435 007.43	
	573 006.96	
	164 296.99	
Mgmt. Information System	31 535.98	
ing	174 017.00	4 377 864.36
stry Program		
n Operations[5]	8 231 270.98	
perations	198 842.56	
Operations	120 704.63	
Operations	10 222.92	
ars	300.00	
n 100 M Trees	1 032 845.00	
earch Centre	164 187.63	9 758 373.72
pancy Charges		3 218 688.79
l Consulting Charges		2 383 377.38
Forestry		
Operations	2 083 797.05	
perations	1 210 489.41	
perations	63 569.93	
operations	—	
ment	6 552 221.13	9 910 077.52
reforestation Fund[6]		1 476.69
		$166 144 132.50

cial Warrant 59 - $10 000.
cial Warrant 15 - $213 430.
cial Warrant 19 - $450 000.
cial Warrant 20 - $4 500 000.
is advanced under Section 20 Financial Control Act - $5 000 000.
e 7.