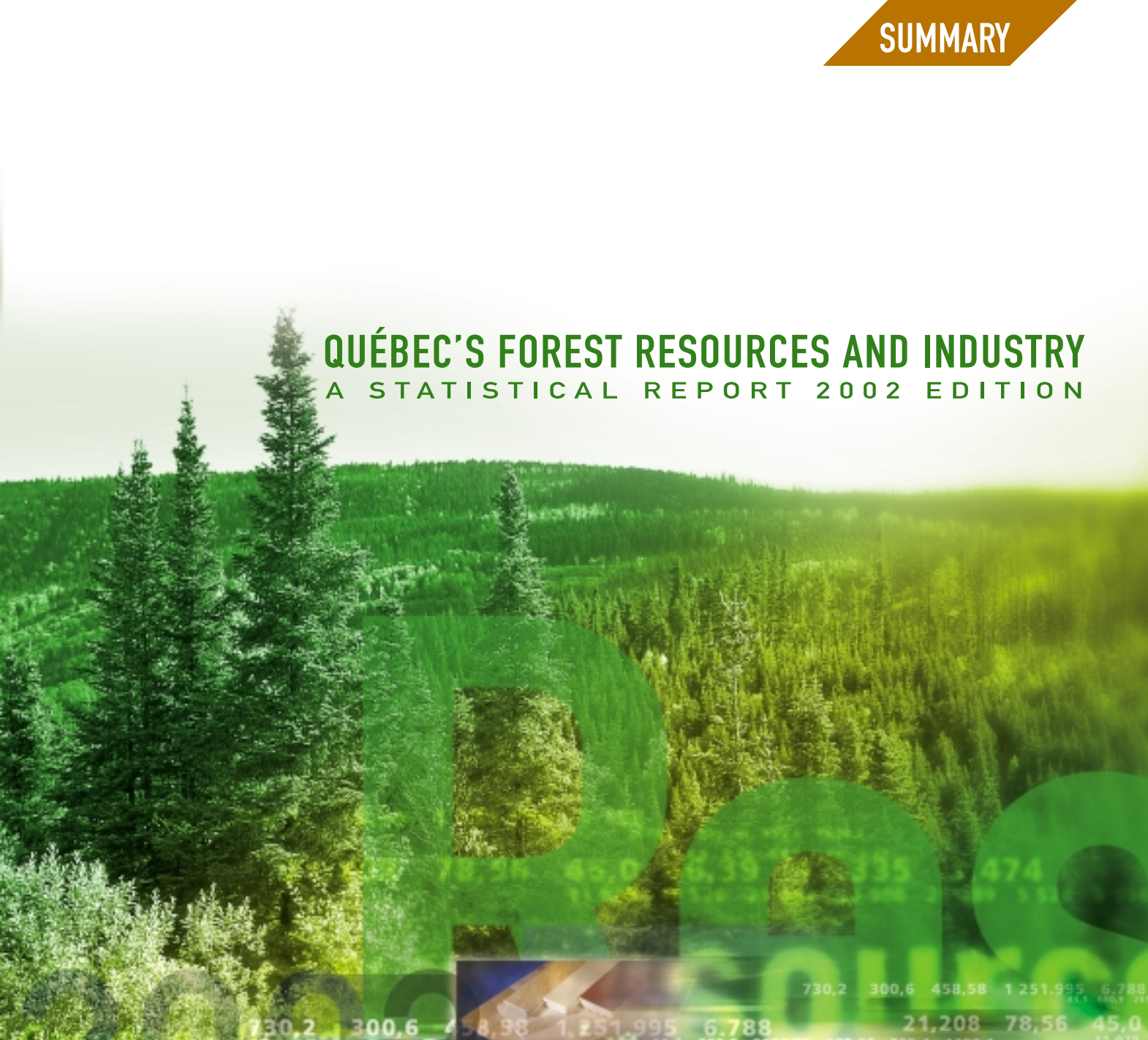


# QUÉBEC'S FOREST RESOURCES AND INDUSTRY

A STATISTICAL REPORT 2002 EDITION



STATISTICS

730,2	300,6	458,58	1 251,995	6,788	21,208	78,56	45,0	66,39	12,335	3,474
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730,2 300,6 458,58 1 251,995 6,788 21,208 78,56 45,0 66,39 12,335 3,474



Côte-Nord  
Estrie

**QUÉBEC'S FOREST RESOURCES AND INDUSTRY**  
A STATISTICAL REPORT 2002 EDITION

## DESIGN, RESEARCH AND TEXT

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We also invite you to visit the Ministère's Internet site at:  
[www.mrn.gouv.qc.ca](http://www.mrn.gouv.qc.ca)

## NOTE

The preparation of this report required the collaboration of all the administrative units within the Secteur des forêts and Forêt Québec. Unless otherwise indicated, the data are provided by the administrative unit of the ministère des Ressources naturelles with responsibility for the sector in question.

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Since Québec's forest system was first adopted in December 1986, the ministère des Ressources naturelles (MRN) has taken a number of concrete steps to consolidate its shift towards sustainable forest management. For example, in 1996 it amended the **Forest Act** and the **Regulation respecting standards of forest management for forests in the public domain**, and it also adopted various measures to ensure the protection of forest biodiversity. This ongoing process is vitally important, because Québec's forests are evolving constantly.

With the amendment of the **Forest Act** in June 1996, Québec confirmed its commitment to the principle of sustainable forest development in order to meet the economic, environmental and social needs of present and future generations while giving proper consideration to the other potential uses of the forest. Public and private forests must now be managed in a way that preserves biological diversity, conserves soil and water resources, and maintains or improves the condition and productivity of forest ecosystems.

The **Regulation respecting standards of forest management for forests in the public domain** was also overhauled to enable the MRN to comply with the resolutions formulated in its **Forest Protection Strategy**. For example, the revised regulation, in force since May 1996, prohibits all forms of logging except cutting with protection of regeneration and soils (CPRS) and substantially reduces the size of single-block cutting areas. The new regulation will facilitate the environmental certification of Québec's forest products, which is vital to our industry.

The MRN has also published a report on Québec's forest biodiversity, in which it undertook to enhance knowledge of the forests, provide better protection for fragile and exceptional ecosystems, and continue to apply the **Forest Protection Strategy**. To meet these commitments, it is currently developing a new approach to the maintenance of biodiversity in forest landscapes. The next five-year report on the state of Québec's forests will provide an update on the progress made in each of these areas.

## F O R E W O R D

The MRN has recently taken another crucial step in the development of its methods, with its review of the current forest system (Bill 136, **An Act to amend the Forest Act and other legislative provisions**, was adopted by the National Assembly on May 21, 2001). The proposed amendments were formulated following extensive public consultations and reflect the contributions of all players with an interest in sound forest management. The Act substantially improves forestry practices by addressing two components of forestry policy for which improvements had been promised, namely public participation and cooperation between different users of the forests.

Furthermore, in keeping with its mission, the MRN continues to make different tools available to anyone interested in the forests, including this document. As in past years, the 2000 edition of **Québec's Forest Resources and Industry** contains a **succinct statistical report** on Québec's forest sector. However, this year we have made some minor changes to the content. Except in chapters 7, 9, 10 and 11, the information is now structured according to the North American Industry Classification System (NAICS) rather than the Standard Industry Classification (SIC) used in the past. The paper edition presents a summary version of the full report, which is available exclusively in **PDF** and **Excel** formats on the MRN's Internet site (<http://www.mrn.gouv.qc.ca/english/forest>)<sup>1</sup>. The shorter version summarizes the report text and contains highlights from each chapter, as well as some of the more important maps and detailed tables.

We hope you find this year's report as useful as past editions and, as always, we welcome your comments.

<sup>1</sup> The full version is updated regularly, and we invite you to obtain the most recent data by consulting it on a regular basis.

## NOTE TO READERS

The full version of this document can be obtained from the Internet site of the ministère des Ressources naturelles ([www.mrn.gouv.qc.ca](http://www.mrn.gouv.qc.ca)) by clicking on the **Forest, Forestry in Québec** and **Statistical Portrait** tabs and then selecting **Québec's Forest Resources and Industry**. In the Excel version, the tabs appearing at the bottom of the screen provide access to the various sheets.

Readers wishing to use the data contained in this publication should bear in mind the changes made to some of the tables illustrating statistical trends. An attempt to compare this year's tables with those of previous years may be difficult and lead only to confusion. In the Excel version, some data may appear to be cut off, due to on-screen column widths. To remedy this problem, use the PDF version or simply print the file instead of consulting it on screen.

For further information, please contact the author, Blaise Parent, at (418) 627-8644, extension 4112.

### SYMBOLS USED

bd ft:	board foot
BDMT:	bone-dry metric ton
cm:	centimetre
cm <sup>3</sup> :	cubic centimetre
dm <sup>3</sup> :	cubic decimetre
FSPL:	fir, spruce, jack pine, larch
G:	billion
ha:	hectare
hl:	hectolitre
kg:	kilogram
km:	kilometre
km <sup>2</sup> :	square kilometre
L:	litre
lb:	pound
m:	metre
m <sup>2</sup> :	square metre
m <sup>3</sup> :	cubic metre
M:	million
mt:	metric ton
NAICS:	North American Industry Classification System (Statistics Canada's new 2000 structure)
ngrv:	nominal gross raw volume
no.:	number
SIC-C:	Canadian Standard Industrial Classification for Compagnies and Enterprises, 1990 (Statistics Canada)
sq.ft.:	square foot
t:	ton
":	inch
%:	percent
\$:	dollar
DM:	deutsche mark
£:	pound sterling
¥:	yen

### CONVERSION FACTORS

1 cord of wood = 85 solid cubic feet = 2.41 cubic metres
1 cunit = 100 solid cubic feet = 2.831 cubic metres
1 board foot (bd ft) = a piece of wood 1 inch thick by 1 foot wide by 1 foot long
1000 board feet (bd ft) = 2.36 cubic metres (net value)
1 cubic metre = 423.7 bd ft = 35.3 cubic feet = 0.353 cunits = 1.5 stacked cubic metres
1 metric ton (long ton) = 1 000 kilograms = 2 205 pounds
1 Imperial ton (short ton) = 2 000 pounds
1 square kilometre = 100 hectares = 0.386 square miles
1 hectare = 2.47 acres

**N.B.:** In the full version of the text, each table, chart and map has been assigned a reference code, which is indicated in the upper right-hand corner. The first two figures of the code correspond to the chapter, the next two to the section and the last two to the illustration. For example, code 02.01.03 designates the third illustration of the first section of chapter 2. The codes in the summary version are the same as those in the full version, so that readers can locate the different elements easily in the original document. As a result, the numbering is not sequential.

**ESTABLISHMENT**

The smallest operating unit, generally a mill or factory, able to provide data on its inputs, outputs and activities for calculation of added value.

**TOTAL JOBS**

Positions related to production or to non-manufacturing activities in an establishment (cafeteria, head office, administration or sales). Also includes jobs generated by new construction, repairs or major alterations. Ownership and active partnership positions are not included in the total jobs figure.

**TOTAL SALARIES AND WAGES**

Amounts allocated for compensation of all the salaried and non-salaried employees of an organization.

**VALUE OF SHIPMENTS AND OTHER INCOME**

Value of shipments of company-specific products plus income obtained from non-manufacturing activities such as the sale of goods purchased and resold without processing, the book value of construction and capital work carried out by the establishment's personnel, for its own use, the cafeteria, etc.

**VALUE ADDED TO TOTAL ACTIVITY**

Value added in the manufacturing activity, plus added value from non-manufacturing activities. This latter figure is obtained by subtracting from gross non-manufacturing production all purchases of goods for resale without processing (taking into account the net stocks variable for those goods), purchases of materials and supplies used in new construction or the production of machinery and tools for use by the establishment, and office supplies purchased and used by the establishment in a non-manufacturing activity.

**CAPITAL EXPENDITURES**

Capital expenditures include the cost of acquiring, constructing and installing plant, materials and sustainable tools, whether for replacement or rental.

**MAINTENANCE AND REPAIRS**

Amounts paid to maintain works, materials and tools in good condition. They are not considered to be capital expenditures and are indicated separately.

# G L O S S A R Y

## OF THE MAIN ECONOMIC TERMS USED IN THE TEXT

**CONSTANT DOLLARS**

Dollars in a reference year used as a basis for converting dollars from other years, to eliminate the impact of fluctuations in purchasing power. The conversion is made using a price index.

**BALANCE OF TRADE**

The difference between the monetary value of exports and imports of merchandise, goods and services. If a country exports more than it imports, its balance of trade is positive. If it imports more than it exports, its balance of trade is negative.

**NATIONAL EXPORTS**

Products grown, extracted or manufactured in Canada and sold to other countries, including products from foreign sources that are processed in Canada.

**SHIPMENT**

Shipment of merchandise (goods) to a domestic or foreign destination.

**IMPORTS**

All merchandise introduced into a country, whether for immediate consumption or storage.

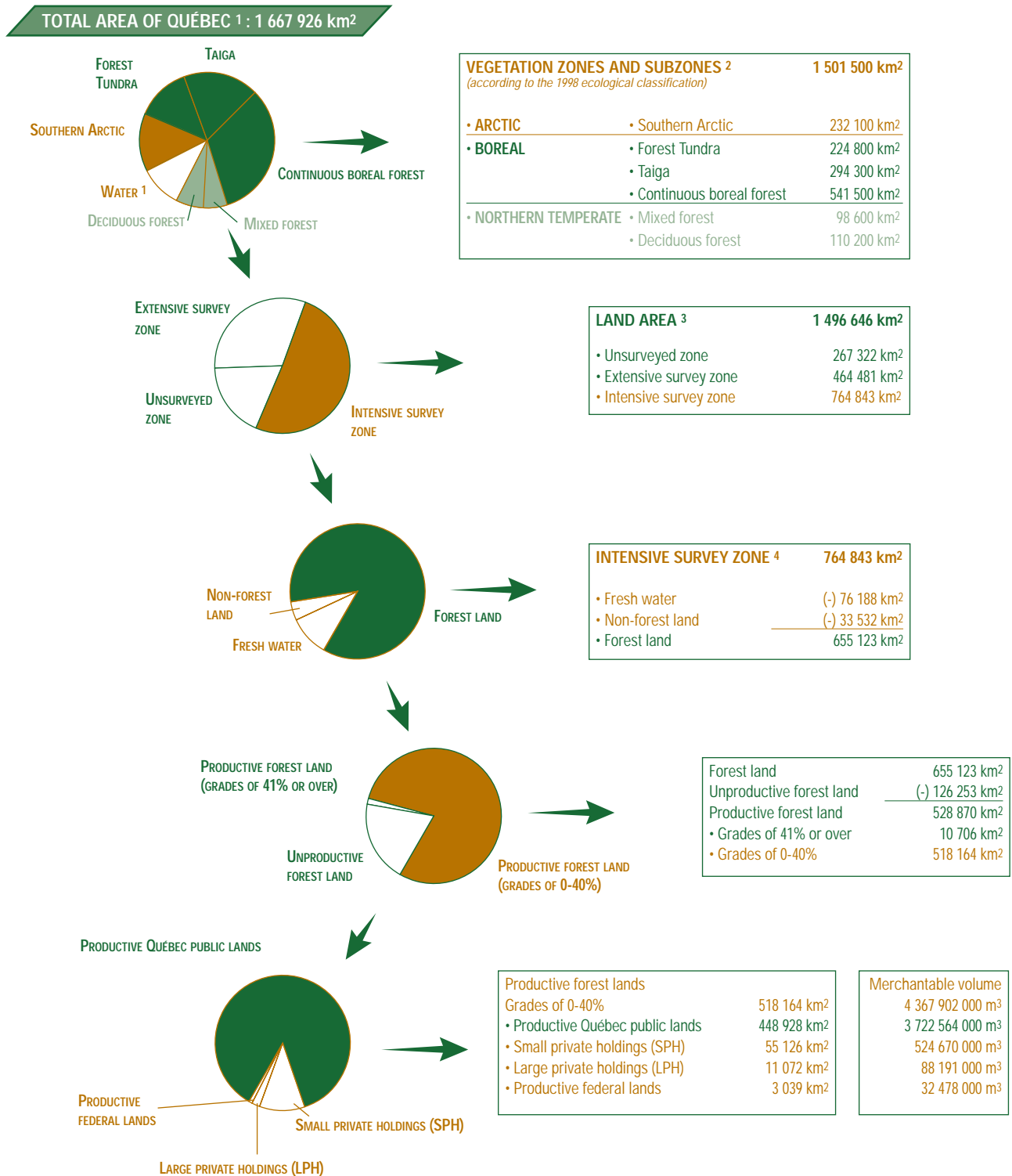
**SELLING PRICE INDEX**

An index showing variations in the general rate of inflation or price variations in a given economic sector, compared with a reference year to which a value of 100 is assigned.

**GROSS DOMESTIC PRODUCT (GDP)**

The value of all final goods and services produced in a given period within the geographical boundaries of a country or territory.

# S U M M A R Y



1 Including the waters of the St. Lawrence River and the Gulf of St. Lawrence, James Bay, Hudson Bay, Ungava Bay and Hudson Strait (171 280 km<sup>2</sup>).

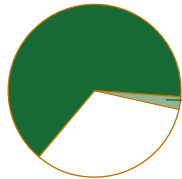
2 The limits of the bioclimatic domains have been revised by the Comité sur la carte des régions écologiques. The committee also established the new ecological land classification system in 1998.

3 Territorial data are drawn in part from the second ten-year survey and have not yet been revised to reflect the new ecoforest survey that will be completed in 2002. The land area will be revised to bring it into line with the area of Québec's vegetation zone.

4 Lands whose forests can be developed over 120 years, in keeping with the principle of sustained yield.

## DISTRIBUTION OF PRODUCTIVE QUÉBEC PUBLIC LANDS

AREAS COVERED BY  
TSFMAs



FOREST RESERVES  
FREE OF RIGHTS

AREAS COVERED BY  
FMCs

Productive Québec public lands  
(grades of 0-40%)

- Areas covered by timber supply and forest management agreements (TSFMAs)
- Areas covered by forest management contracts (FMCs)

Forest reserves free of rights and areas where forest production is prohibited (RSFM 1, parks, etc.)

448 928 km<sup>2</sup>

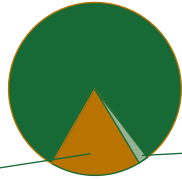
300 623 km<sup>2</sup>

13 605 km<sup>2</sup>

134 700 km<sup>2</sup>

## SURFACE AREAS TAKEN INTO ACCOUNT IN CALCULATING THE ALLOWABLE ANNUAL CUT

AREAS COVERED BY  
TSFMAs



PRIVATE  
LANDS

AREAS COVERED BY  
FMCs

Québec public lands on which rights have been granted

- TSFMA
- FMC

Productive private lands taken into account in calculating allowable harvests (grades of 0-40%)  
SPH: 55 126 km<sup>2</sup>, LPH: 11 072 km<sup>2</sup>

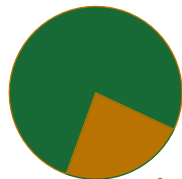
300 623 km<sup>2</sup>

13 605 km<sup>2</sup>

66 198 km<sup>2</sup>

## ALLOWABLE ANNUAL CUT (MARCH 31, 2001)

ALLOWABLE ANNUAL CUT IN PUBLIC FORESTS



ALLOWABLE HARVESTS IN  
PRIVATE FORESTS

Allowable annual cut – public forests  
(common areas)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

54 717 361 m<sup>3</sup>

41 858 061 m<sup>3</sup>

28 993 472 m<sup>3</sup>

1 386 887 m<sup>3</sup>

3 669 893 m<sup>3</sup>

7 807 809 m<sup>3</sup>

Allowable harvest – private forests  
(large and small private holdings)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

12 859 300 m<sup>3</sup>

4 636 500 m<sup>3</sup>

1 132 100 m<sup>3</sup>

2 529 500 m<sup>3</sup>

4 561 200 m<sup>3</sup>

## VOLUMES ALLOCATED BY TSFMAs IN THE PUBLIC FORESTS (MARCH 31, 2001)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

35 022 442 m<sup>3</sup>

27 042 862 m<sup>3</sup>

858 939 m<sup>3</sup>

2 923 224 m<sup>3</sup>

4 197 417 m<sup>3</sup>

1 RSFM: Regulation respecting standards of forest management for forests in the domain of the State



# SUMMARY

(CONT'D)

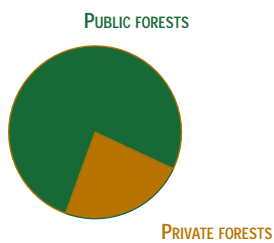
## VOLUMES ALLOCATED BY FMCs IN THE PUBLIC FORESTS (MARCH 31, 2001)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

442 551 m<sup>3</sup>

311 437 m<sup>3</sup>  
20 584 m<sup>3</sup>  
49 792 m<sup>3</sup>  
60 738 m<sup>3</sup>

## TIMBER HARVESTED – VOLUME (1999-2000)



### PUBLIC FORESTS

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

44 287 148 m<sup>3</sup>

33 713 005 m<sup>3</sup>

28 228 351 m<sup>3</sup>  
774 719 m<sup>3</sup>  
2 214 713 m<sup>3</sup>  
2 495 222 m<sup>3</sup>

### PRIVATE FORESTS <sup>1</sup>

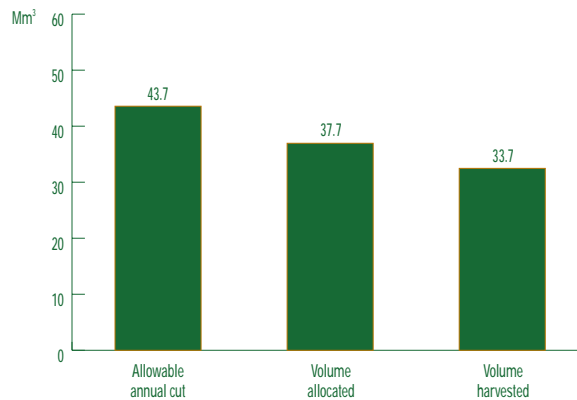
- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

10 574 143 m<sup>3</sup>

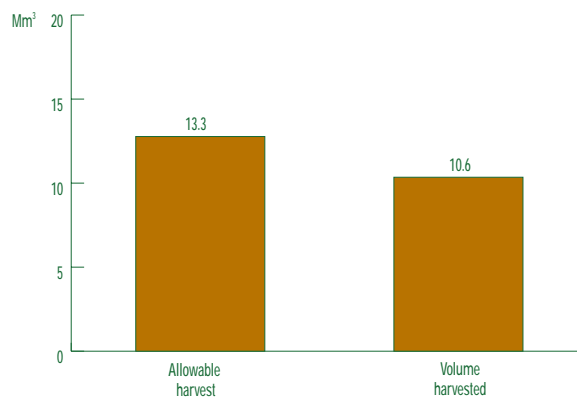
4 307 637 m<sup>3</sup>  
623 332 m<sup>3</sup>  
2 051 176 m<sup>3</sup>  
3 591 998 m<sup>3</sup>

<sup>1</sup> Estimates

## PUBLIC FORESTS (ALLOWABLE ANNUAL CUT, VOLUME ALLOCATED, VOLUME HARVESTED) (1999-2000)



## PRIVATE FORESTS (ALLOWABLE HARVEST, VOLUME HARVESTED) (1999-2000)



# S U M M A R Y

( C O N T ' D )

## FOREST PROTECTION (2000)

AREA AFFECTED (ha)		974 894
Spruce budworm		10 720
Hemlock looper		924 970
Forest fires	Intensive protection zone (mature stands: 469 ha)	794
	Limited forest protection	38 410

## SILVICULTURAL TREATMENTS PLANNED AND CARRIED OUT (1999-2000)

	PLANNED (ha)	CARRIED OUT (ha)	
<b>PUBLIC FORESTS</b>	<b>632 805</b>	<b>622 384</b>	
Site preparation	42 077	47 582	
Planting and seeding	60 126	68 813	(108.3 million seedlings)
Non-commercial treatments	206 919	128 678	
Commercial treatments	323 683	377 311	
<b>PRIVATE FORESTS</b>		<b>59 224</b>	
Site preparation		12 483	
Planting and seeding		13 163	(32.7 million seedlings)
Non-commercial treatments		24 090	
Commercial treatments		9 488	

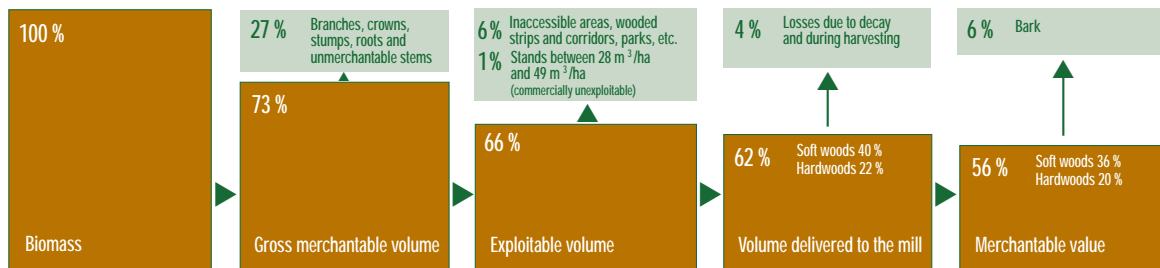
## NETWORK OF PERMANENT ROADS (2000-2001)

Total length: 15 369 km (520 bridges)

## EXPERIMENTAL, TEACHING AND RESEARCH FORESTS (2000)

Total area: 64 900 ha

## FROM FOREST TO MILL <sup>1</sup>



<sup>1</sup> Updated December 1999

## TIMBER CONSUMPTION BY PRIMARY PROCESSING PLANTS (2000)

<b>TOTAL CONSUMPTION (m³)</b>		<b>73 721 137</b>
<b>CONSUMPTION BY SPECIES (m³)</b>	Fir, spruce, jack pine, larch	58 057 673
	Other softwoods	2 567 416
	Poplars	5 493 825
	Other hardwoods	7 602 233
<b>CONSUMPTION BY PRODUCT (m³)</b>	Roundwood	47 765 010
	Chips	19 204 405
	Sawdust, shavings and wood residues	6 751 722
<b>CONSUMPTION BY SOURCE (m³)</b>	Public forests	33 448 828
	Private forests	9 143 194
	Exchanges between mills	24 805 513
	Outside Québec	6 323 602

# SUMMARY

(CONT'D)

## THE FOREST SECTOR IN QUÉBEC'S ECONOMY (1998)

	Total Jobs (no.)	Total Wages (\$, 000s)	Value of Shipments and Other Receipts (\$, 000s)	Value Added to Total Activity 1 (\$, 000s)	Capital Expenditures and Repairs (\$, 000s)
Forest operations (SIC 04) 2	12 142	357 000	2 348 200	705 700	84 000
Manufacturing of wood products (NAICS 321)	34 497	1 068 156	7 019 462	2 732 133	549 200
Paper manufacturing (NAICS 322)	34 029	1 726 325	10 861 591	5 072 113	1 384 000
<b>TOTAL</b>	<b>80 668</b>	<b>3 151 481</b>	<b>20 229 253</b>	<b>8 509 946</b>	<b>2 017 200</b>

1 Including purchases of services

2 Preliminary data

### LOGGING INDUSTRY (2000)

Number of primary processing plants, including 1 144 sawmills	1 237
Number of pulp, paper and cardboard mills, 39 of which are included under primary processing plants	63

### FOREST PRODUCT PRODUCTION (2000)

Lumber (m <sup>3</sup> , 000s)	17 640
Joint sawmill production (BDMT, 000s)	13 174
Chips	7 747
Sawdust and shavings	2 383
Bark	3 044
Pulp and paper production (BDMT, 000s)	10 206
Newsprint	3 848
Cardboard and paper other than newsprint	4 692
Market pulp	1 666

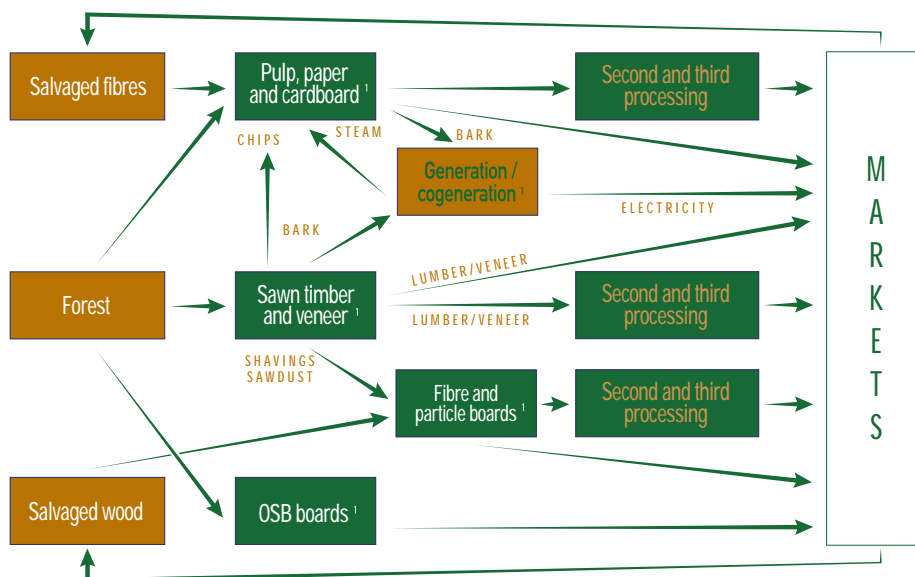
### QUÉBEC'S BALANCE OF TRADE 1 IN THE FOREST PRODUCTS SECTOR, IN 2000 (\$, millions) 2

Wood, charcoal and wooden products	3 527
Pulp, paper and cardboard	6 797
<b>TOTAL</b>	<b>10 324</b>

1 Based on customs data, according to the Standard Classification of Goods (SCG).

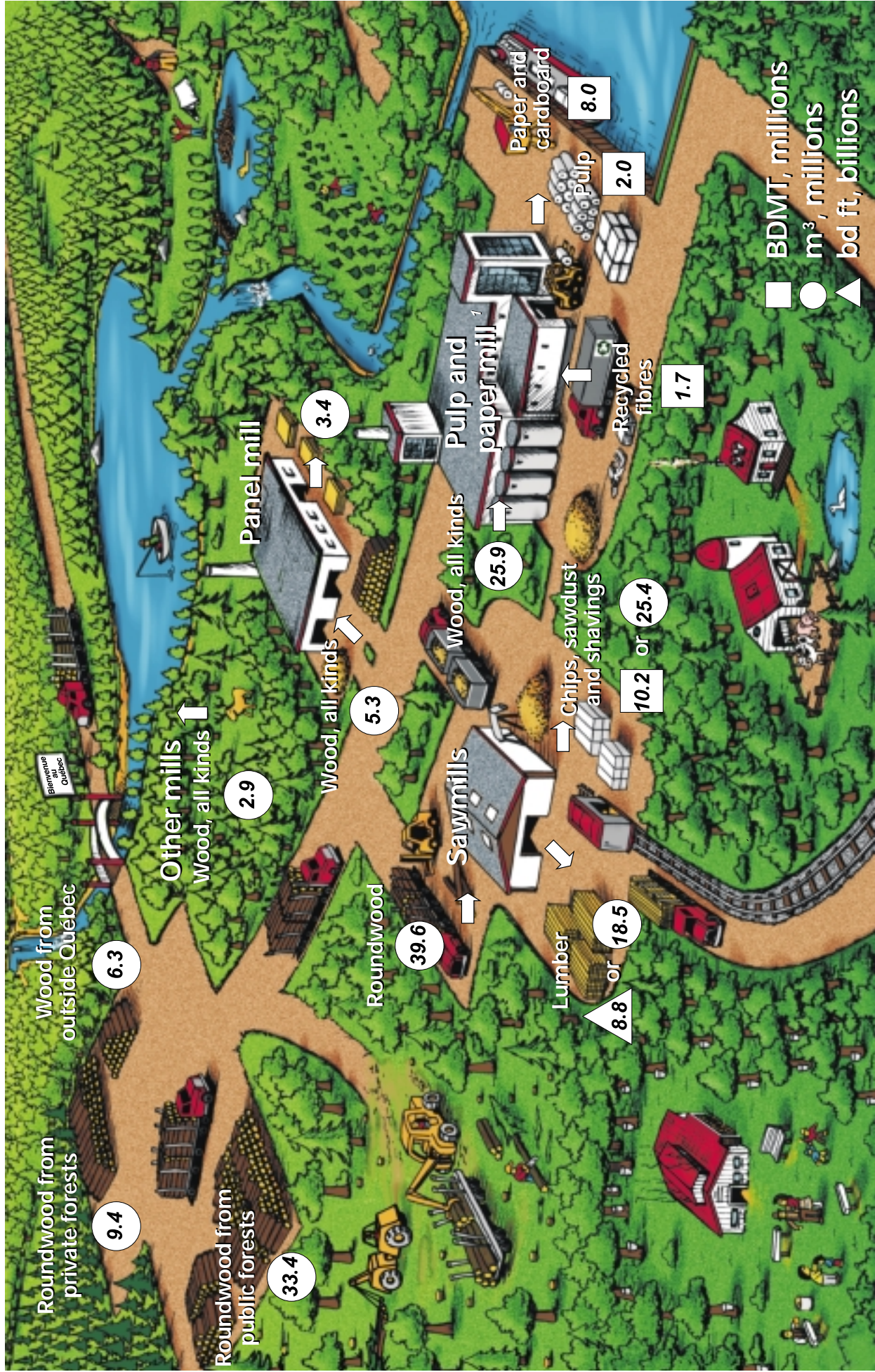
2 Product designation according to the World Custom Organization's harmonized Commodity Description and Coding System.

## INTEGRATION OF THE FOREST PRODUCTS INDUSTRY



1 Primary processing

SUPPLIES FOR QUÉBEC'S PRIMARY WOOD PROCESSING INDUSTRY, IN 2000



<sup>1</sup> Including data from the 2000 annual survey

# QUÉBEC'S FOREST RESOURCES AND INDUSTRY

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# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Highlights

01.00.01

### TOTAL AREA OF QUÉBEC (km<sup>2</sup>)

Total area	1 667 926
Land area <sup>1</sup>	1 496 646
Vegetation zones (according to the 1998 ecological classification) <sup>2</sup>	
• Arctic	232 100
• Boreal	1 060 600
• Northern Temperate	208 800

<sup>1</sup> November 2000 update: original land data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

<sup>2</sup> The bioclimatic domain boundaries have been reviewed by the Comité sur la carte des régions écologiques, which also established the new ecological classification system in 1998.

### TYPES OF OWNERSHIP (km<sup>2</sup>)

• Public lands (Québec)	1 374 255
• Private lands	115 994
• Federal lands	6 397

### SURVEY ZONES (km<sup>2</sup>)

• Intensive survey zone	764 843
• Extensive survey zone	464 481
• Unsurveyed zone	267 322

### PUBLIC LAND USE PLANNING (km<sup>2</sup>)

Public lands <sup>1</sup>	1 373 490
• Forest production prohibited	65 552
• Forest production allowed	86 830
• Forest production has priority	367 856
- Forest and leisure area	6 650
- Forest production area	361 206
• Other resource production <sup>2</sup>	853 252

<sup>1</sup> The areas were established from data gathered in 1997, and differ slightly from the areas measured during forest surveys. In particular, they have not been adjusted to reflect the latest modifications, including those resulting from sales of land, for example. Harmonization should be completed by 2002.

<sup>2</sup> Area with mining sites, energy development sites, etc., north of the common area boundary.

### MANAGEMENT OF PRIVATE FORESTS (MARCH 31, 2001)

Development agencies (no.)	17
• Productive area (ha, 000s)	6 459
Syndicates or wood marketing boards (no.)	15
Forest producers certified under the Act (no.)	34 440

### FOREST COOPERATIVES (1999-2000)

• Forest cooperatives (no.)	50
• Members (no.)	4 032
• Workers (4 weeks or over)	6 048
• Silvicultural work (ha, 000s)	76 242
• Harvest (m <sup>3</sup> , 000s)	5 950
• Turnover (\$, millions)	453

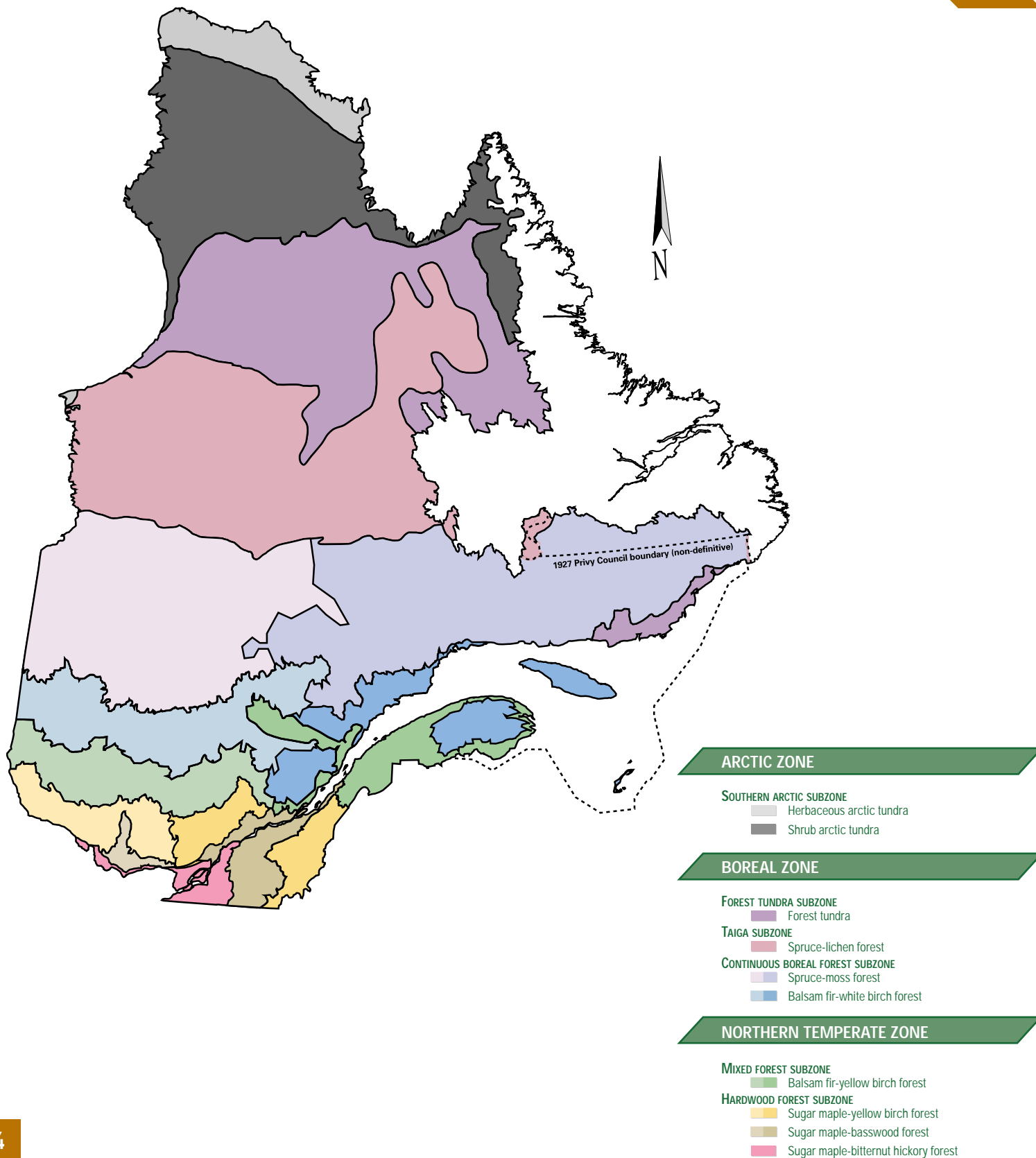
### ADMINISTRATION OF PUBLIC FORESTS (MARCH 31, 2001) (no.)

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# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Vegetation Zones and Subzones

01.01.01

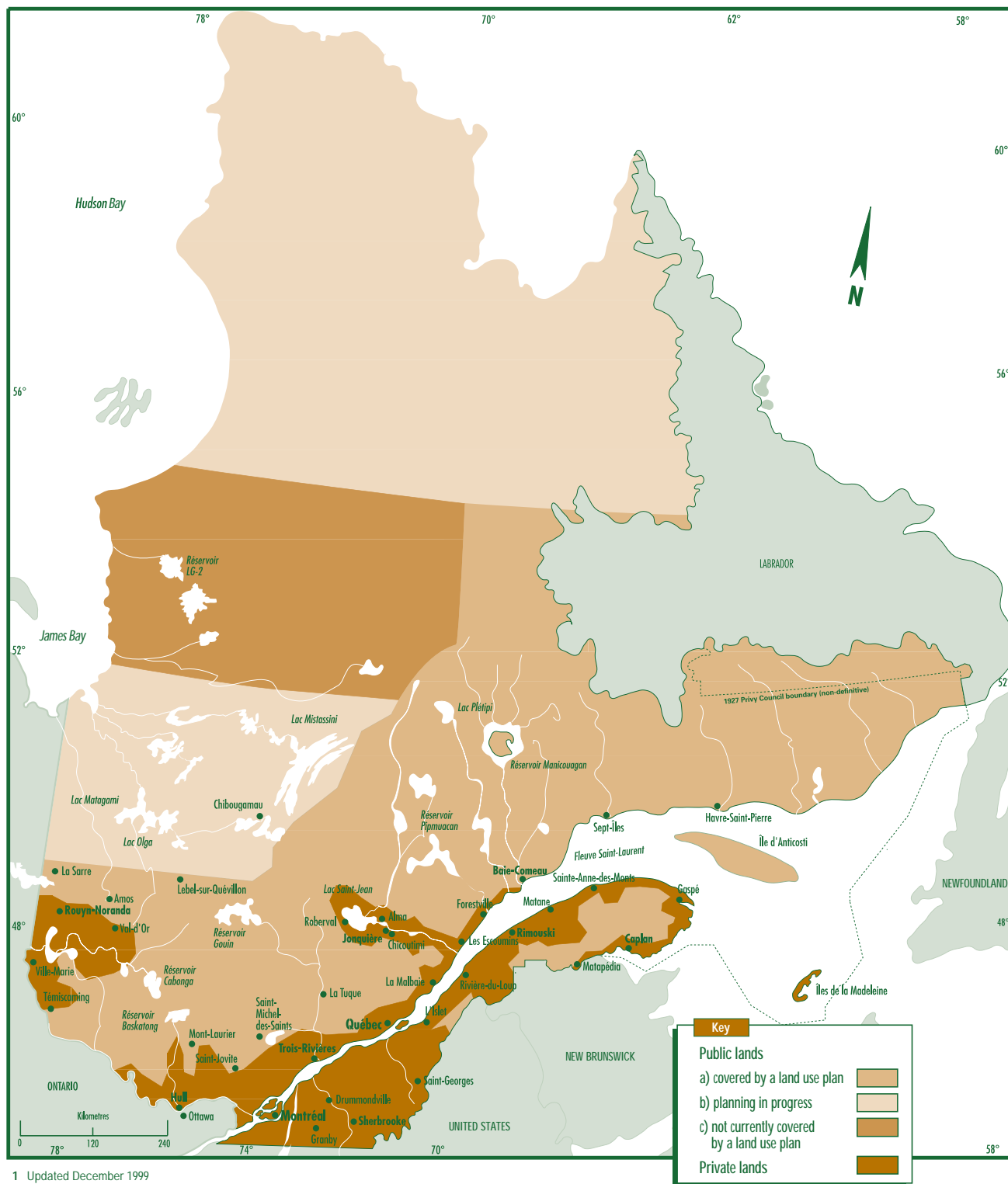


# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Public Land Use Planning

### AREAS SUBJECT TO THE LAND USE PLANNING PROCESS <sup>1</sup>

01.03.01



<sup>1</sup> Updated December 1999

Sources: Direction générale de la gestion du territoire public and Service du développement et de l'intégrité du territoire



# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Administrative divisions in Québec's public forests <sup>1</sup>

01.05.02



**Key**

- Management unit boundaries
- Administrative region boundaries
- - - - Temporary northern limit for timber allocations, as at May 30, 2000

Key	
<b>ADMINISTRATIVE REGIONS</b>	<b>MANAGEMENT UNITS</b>
<b>01 Bas-Saint-Laurent</b>	11-12 p.-111 p.-112 p.
<b>02 Saguenay—Lac-Saint-Jean</b>	21 p.-22-23 p.-24-25-27-33 p.-42 p.-91 p.-92 p.-93 p.
<b>03 Capitale-Nationale</b>	21 p.-31-32-33 p.
<b>04 Mauricie</b>	41 p.-42 p.-43 p.
<b>05 Estrie</b>	51
<b>06 Montréal</b>	63 p.
<b>07 Outaouais</b>	71-72-73-74 p.
<b>08 Abitibi-Témiscamingue</b>	74 p.-81-82-83-84 p.-85 p.-86 p.-87 p.
<b>09 Côte-Nord</b>	23 p.-91 p.-92 p.-93 p.-94-95-96 p.
<b>10 Nord-du-Québec</b>	26-84 p.-85 p.-86 p.-87 p.
<b>11 Gaspésie—Îles-de-la-Madeleine</b>	111 p.-112 p.-12 p.
<b>12 Chaudière-Appalaches</b>	34-35
<b>13 Laval</b>	63 p.
<b>14 Lanaudière</b>	41 p.-43 p.-62 p.-64 p.
<b>15 Laurentides</b>	61-62 p.-64 p.
<b>16 Montérégie</b>	63 p.
<b>17 Centre-du-Québec</b>	41 p.
	1 Updated July 1997
	2 p.: part of

N.B.: This document provides figures for each of the Québec government's 17 administrative regions. However, for internal management purposes, the ministère des Ressources naturelles considers only 10 administrative regions, subdivided into 36 management units.

# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Types of Ownership and Survey Zones

### BREAKDOWN OF QUÉBEC 1 BY SURVEY ZONE AND TYPE OF OWNERSHIP 2

01.06.02

	ADMINISTRATIVE REGIONS																	TOTAL	
	01	02	03	04	05	06	07	08	09 (km <sup>2</sup> )	10	11	12	13	14	15	16	17		
<b>UNSURVEYED ZONE</b>																			
Québec public lands	0	0	0	0	0	0	0	0	0	260 771	0	0	0	0	0	0	0	0	260 771
Private lands (Inuit)	0	0	0	0	0	0	0	0	0	6 551	0	0	0	0	0	0	0	0	6 551
Federal lands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total area</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>267 322</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>267 322</b>
<b>EXTENSIVE SURVEY ZONE 3</b>																			
Québec public lands	0	0	0	0	0	0	0	0	47 359	413 443	0	0	0	0	0	0	0	0	460 802
Forests in the domain of the State 4									47 359	413 443									460 802
Other tenures 5																			0
Private lands	0	0	0	0	0	0	0	0	0	2 116	0	0	0	0	0	0	0	0	2 116
Large holdings 6										2 116									2 116
Small holdings																			0
Federal lands	0	0	0	0	0	0	0	0	38	1 525	0	0	0	0	0	0	0	0	1 563
<b>Total area</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47 397</b>	<b>417 084</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>464 481</b>
<b>INTENSIVE SURVEY ZONE 3</b>																			
Québec public lands	11 563	100 073	12 667	31 549	754	92	25 661	57 341	222 493	147 740	16 285	1 599	0	9 022	15 176	549	118	652 682	
Forests in the domain of the State	11 250	99 427	11 423	31 508	543	0	25 351	55 029	222 006	147 603	15 488	1 471	0	8 402	14 397	530	74	644 502	
Other tenures	313	646	1 244	41	211	0	310	2 312	487	138	797	128	0	620	779	19	44	8 088	
Private lands	11 072	6 307	6 692	7 643	9 671	514	7 895	7 180	1 991	1 463	3 973	13 617	261	4 375	6 844	10 877	6 952	107 327	
Large holdings	1 124	861	2 315	3 647	1 306	0	487	142	971	1 179	125	689	0	3	60	33	40	12 982	
Small holdings	9 948	5 446	4 377	3 996	8 365	514	7 408	7 038	1 020	284	3 848	12 928	261	4 373	6 784	10 844	6 912	94 345	
Federal lands	2	17	242	586	5	15	545	26	409	1846	289	0	0	8	477	107	259	4 834	
<b>Total area</b>	<b>22 637</b>	<b>106 397</b>	<b>19 601</b>	<b>39 778</b>	<b>10 430</b>	<b>621</b>	<b>34 101</b>	<b>64 547</b>	<b>224 893</b>	<b>151 049</b>	<b>20 547</b>	<b>15 216</b>	<b>261</b>	<b>13 405</b>	<b>22 498</b>	<b>11 533</b>	<b>7 329</b>	<b>764 843</b>	
<b>TOTAL (land)</b>	<b>22 637</b>	<b>106 397</b>	<b>19 601</b>	<b>39 778</b>	<b>10 430</b>	<b>621</b>	<b>34 101</b>	<b>64 547</b>	<b>272 290</b>	<b>835 455</b>	<b>20 547</b>	<b>15 216</b>	<b>261</b>	<b>13 405</b>	<b>22 498</b>	<b>11 533</b>	<b>7 329</b>	<b>1 496 646</b>	

1 Not including areas covered by the waters of the St. Lawrence River and Gulf, James Bay, Hudson Bay, Ungava Bay and the Hudson Strait.  
 2 Updated November 2000: the original data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).  
 3 The summary of surveyed forests in Chapter 2 covers the intensive survey zone only, since forest ecosystems in the extensive survey zone are so fragile that timber harvesting is prohibited.  
 4 Land supporting forest stands.  
 5 Forest stations, experimental and research forests, etc.  
 6 More than 800 hectares in a single block.

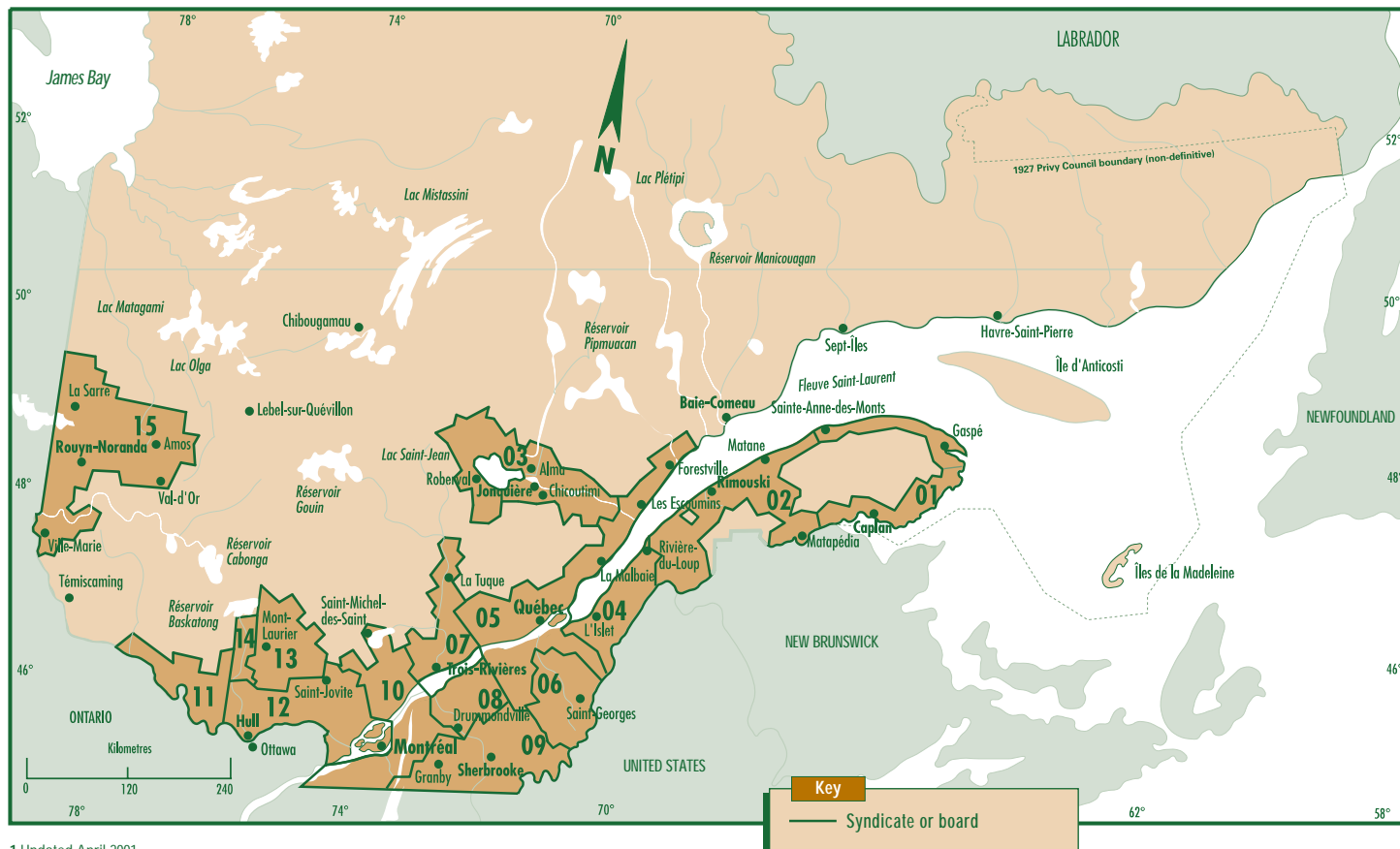
N.B.: Figures have been rounded off, which may have caused negligible errors in the totals.

# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Private Forests

### AREAS COVERED BY SYNDICATES AND WOOD MARKETING BOARDS 1

01.07.01



1 Updated April 2001

### SYNDICATES OR BOARDS

01.07.02

- 01 - Syndicat des producteurs de bois de la Gaspésie
- 02 - Syndicat des producteurs de bois du Bas-Saint-Laurent
- 03 - Syndicat des producteurs de bois du Saguenay—Lac-Saint-Jean
- 04 - Syndicat des producteurs de bois de la Côte-du-Sud
- 05 - Syndicat des producteurs de bois de la région de Québec
- 06 - Syndicat des producteurs de bois de la Beauce
- 07 - Syndicat des producteurs de bois de la Mauricie
- 08 - Syndicat des producteurs de bois du Centre-du-Québec
- 09 - Syndicat des producteurs de bois de l'Estrie
- 10 - Syndicat des producteurs de bois de la région de Montréal
- 11 - Office des producteurs de bois du Pontiac
- 12 - Syndicat des producteurs de bois Outaouais-Laurentides
- 13 - Syndicat des producteurs de bois du comté de Labelle
- 14 - Office des producteurs de bois de la Gatineau
- 15 - Syndicat des producteurs de bois d'Abitibi-Témiscamingue

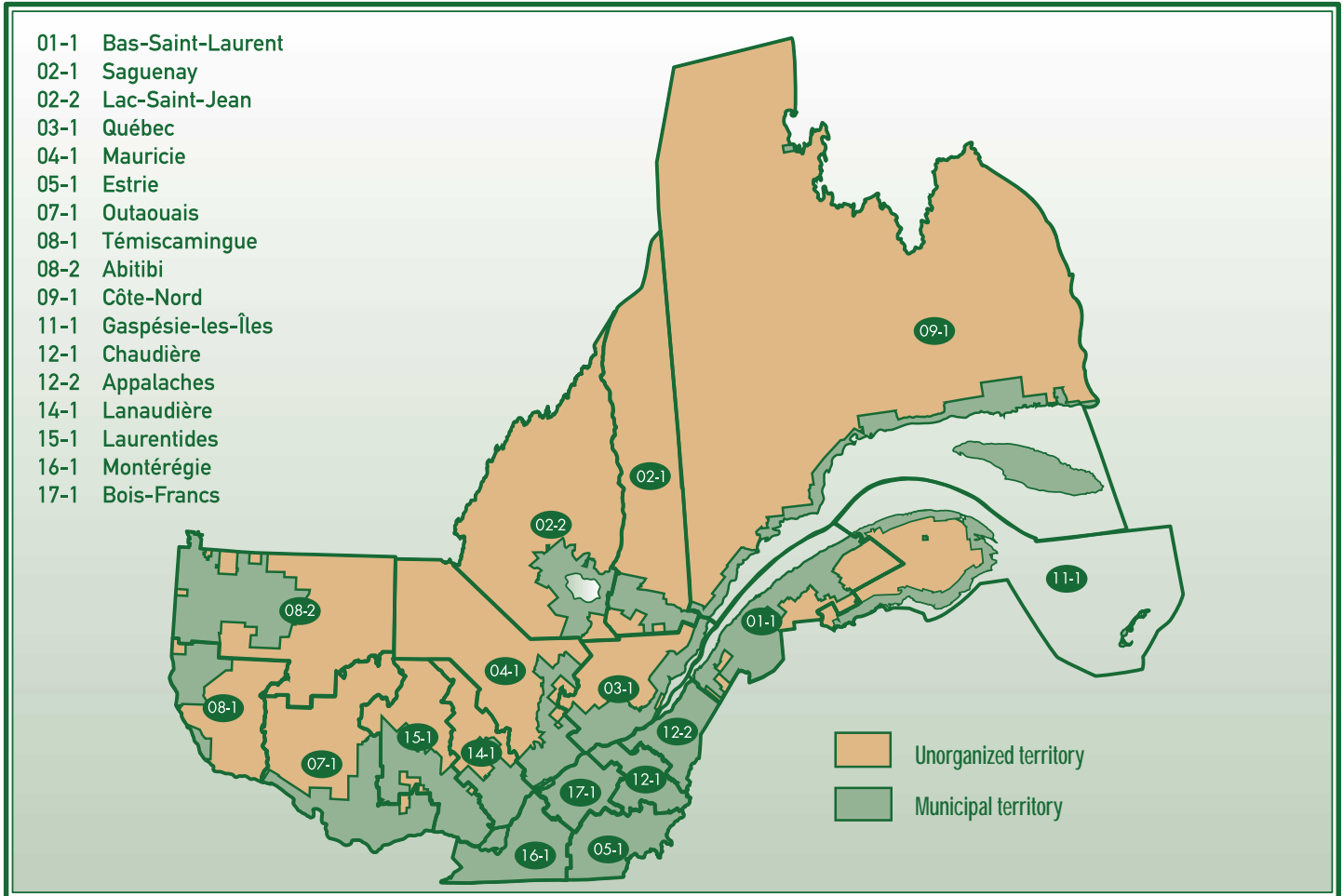
**N.B.:** There are approximately 120 000 private woodlot owners in Québec, and 34 440 are registered as forest producers within the meaning of the **Forest Act** (March 2001). These producers live in areas served by the 17 regional agencies for private forest development.

# GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

## Private Forests (cont'd)

REGIONAL AGENCIES FOR PRIVATE FOREST DEVELOPMENT 1

01.07.04



1 Updated April 2001

# INTENSIVE SURVEY ZONE

## Highlights

02.00.01

LAND SURVEY	AREA (km <sup>2</sup> )	GROSS MERCHANTABLE VOLUME (m <sup>3</sup> , 000s)
Intensive survey zone <sup>1</sup>	764 843	
Bodies of water	-76 188	
Non-forest land	-33 532	
Forest land	655 123	
Unproductive forest land	-126 253	
Productive forest land (grades of 41% and over)	-10 706	
Productive forest land (grades of 0-40%)	518 164	4 367 902
• Québec public lands	448 928	3 722 564
• Small private holdings	55 126	524 670
• Large private holdings	11 072	88 191
• Federal lands	3 039	32 478

<sup>1</sup> Area in which the ministère des Ressources naturelles conducts detailed forest surveys.

## INTENSIVE SURVEY ZONE

### Area of Productive Forests (grades of 0-40%) <sup>1</sup> and Available Gross Merchantable Volume

#### BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION

02.03.01

		ADMINISTRATIVE REGIONS								SUBTOTAL <sup>2</sup> (km <sup>2</sup> ) (m <sup>3</sup> , 000s)	
		01 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		02 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		03 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		04 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)			
<b>TOTAL AREA <sup>2</sup></b>		<b>18 587</b>	<b>164 827</b>	<b>79 584</b>	<b>618 995</b>	<b>15 528</b>	<b>121 401</b>	<b>31 356</b>	<b>312 799</b>	<b>145 054</b>	<b>1 218 022</b>
BY AGE	0-10 years	4 916	2 324	14 638	8 967	2 831	3 637	4 049	3 121	26 434	18 050
	30 years	1 773	12 681	9 655	44 317	4 160	25 312	4 947	25 178	20 535	107 489
	50 years	6 847	82 148	12 682	105 642	4 131	39 901	10 505	127 760	34 166	355 451
	70 years	3 163	42 539	8 847	97 431	3 118	36 494	5 706	77 553	20 832	254 017
	90 years	1 629	21 817	9 759	122 676	1 147	14 808	5 043	67 133	17 577	226 435
	120 years	259	3 317	24 004	239 961	141	1 249	1 106	12 053	25 509	256 580
BY FOREST TYPE	Softwood	6 812	64 424	52 163	446 857	5 548	42 194	12 137	119 377	76 661	672 852
	Mixedwood	6 326	59 980	12 136	111 953	5 108	43 786	10 970	120 826	34 540	336 545
	Hardwood	3 932	40 359	5 868	59 387	3 526	35 233	5 940	72 596	19 267	207 575
	Regenerating	1 516	65	9 416	797	1 346	187	2 308	0	14 585	1 050
<b>QUÉBEC PUBLIC LANDS <sup>2</sup></b>		<b>10 831</b>	<b>99 848</b>	<b>75 769</b>	<b>598 477</b>	<b>10 428</b>	<b>77 783</b>	<b>25 590</b>	<b>266 796</b>	<b>122 619</b>	<b>1 042 905</b>
BY AGE	0-10 years	2 851	287	13 215	7 342	1 874	1 772	2 861	2 204	20 801	11 605
	30 years	834	5 252	7 844	31 109	2 714	14 883	3 858	19 649	15 250	70 894
	50 years	3 045	39 430	12 213	100 945	2 617	24 466	8 666	109 258	26 541	274 099
	70 years	2 462	33 325	8 816	97 154	1 941	20 670	5 037	68 774	18 255	219 923
	90 years	1 414	18 716	9 704	122 226	1 142	14 743	4 410	58 588	16 670	214 273
	120 years	225	2 837	23 979	239 701	141	1 249	757	8 323	25 101	252 110
BY FOREST TYPE	Softwood	4 837	48 210	51 291	442 189	4 586	34 813	10 257	106 997	70 971	632 208
	Mixedwood	3 356	33 014	10 746	103 108	3 006	25 980	9 372	104 443	26 481	266 545
	Hardwood	1 727	18 558	4 971	52 383	1 855	16 803	4 373	55 356	12 925	143 101
	Regenerating	911	65	8 761	797	982	187	1 588	0	12 242	1 050
<b>SMALL PRIVATE HOLDINGS <sup>2</sup></b>		<b>6 701</b>	<b>55 988</b>	<b>3 033</b>	<b>17 289</b>	<b>2 808</b>	<b>24 655</b>	<b>2 273</b>	<b>22 320</b>	<b>14 814</b>	<b>120 251</b>
BY AGE	0-10 years	1 789	2 037	1 003	1 333	580	1 256	458	743	3 829	5 369
	30 years	747	6 153	1 616	11 728	827	6 207	442	3 387	3 631	27 474
	50 years	3 541	39 635	399	4 088	834	9 034	842	10 174	5 617	62 930
	70 years	484	6 043	9	92	566	8 149	352	5 233	1 411	19 517
	90 years	138	2 045	5	49	1	9	156	2 356	300	4 459
	120 years	3	75	0	0	0	0	23	427	26	502
BY FOREST TYPE	Softwood	1 393	9 551	483	2 804	367	2 832	218	1 998	2 461	17 185
	Mixedwood	2 728	25 374	1 286	8 206	1 179	9 851	726	7 492	5 920	50 923
	Hardwood	2 068	21 063	813	6 279	1 045	11 972	1 174	12 830	5 101	52 144
	Regenerating	512	0	450	0	217	0	154	0	1 333	0
<b>LARGE PRIVATE HOLDINGS <sup>2</sup></b>		<b>1 053</b>	<b>8 970</b>	<b>773</b>	<b>3 175</b>	<b>2 089</b>	<b>16 900</b>	<b>2 995</b>	<b>16 463</b>	<b>6 910</b>	<b>45 507</b>
BY AGE	0-10 years	276	0	418	292	344	594	720	166	1 758	1 052
	30 years	192	1 276	191	1 446	601	4 058	641	2 109	1 626	8 889
	50 years	260	3 070	68	591	639	5 921	854	6 350	1 822	15 933
	70 years	216	3 163	22	184	501	6 272	158	1 336	897	10 954
	90 years	77	1 056	50	402	4	55	294	3 203	425	4 716
	120 years	31	405	25	260	0	0	326	3 298	382	3 964
BY FOREST TYPE	Softwood	582	6,662	388	1,861	572	4,309	1,587	9,548	3,129	22,380
	Mixedwood	242	1 586	103	629	863	7 256	602	4 811	1 809	14 282
	Hardwood	137	722	78	685	536	5 335	248	2 104	998	8 846
	Regenerating	92	0	204	0	119	0	558	0	974	0
<b>FEDERAL LANDS <sup>2</sup></b>		<b>2</b>	<b>22</b>	<b>9</b>	<b>54</b>	<b>202</b>	<b>2 064</b>	<b>498</b>	<b>7 220</b>	<b>711</b>	<b>9 359</b>
BY AGE	0-10 years	0	0	3	1	33	15	10	8	46	24
	30 years	0	0	5	34	18	164	5	33	28	231
	50 years	1	14	2	17	42	480	143	1 979	187	2 490
	70 years	1	8	0	1	110	1 404	158	2 210	268	3 623
	90 years	0	0	0	0	0	1	182	2 986	182	2 987
	120 years	0	0	0	0	0	0	0	4	0	4
BY FOREST TYPE	Softwood	0	1	1	3	24	240	76	835	101	1 079
	Mixedwood	1	5	1	10	59	700	270	4 080	331	4 796
	Hardwood	1	15	6	40	91	1 124	144	2 305	242	3 484
	Regenerating	0	0	2	0	29	0	7	0	38	0

<sup>1</sup> Updated November 2000: the original data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

<sup>2</sup> The figures have been rounded off, which may have caused negligible errors.

## INTENSIVE SURVEY ZONE

Area of Productive Forests (grades of 0-40%)<sup>1</sup>  
and Available Gross Merchantable Volume (cont'd)

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

02.03.01

		ADMINISTRATIVE REGIONS								SUBTOTAL <sup>2</sup> (km <sup>2</sup> ) (m <sup>3</sup> , 000s)	
		05 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		06 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		07 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)		08 (km <sup>2</sup> ) (m <sup>3</sup> , 000s)			
<b>TOTAL AREA<sup>2</sup></b>		<b>7 653</b>	<b>86 391</b>	<b>43</b>	<b>350</b>	<b>27 214</b>	<b>365 977</b>	<b>48 554</b>	<b>444 501</b>	<b>83 464</b>	<b>897 220</b>
BY AGE	0-10 years	1 603	190	20	3	2 565	7 067	8 480	3 070	12 668	10 331
	30 years	1 350	12 862	7	61	1 595	13 410	5 815	24 762	8 766	51 096
	50 years	3 578	53 700	13	215	7 903	117 983	9 622	95 079	21 115	266 977
	70 years	333	5 060	0	0	5 005	69 200	11 159	145 386	16 497	219 646
	90 years	788	14 571	3	71	9 780	154 367	10 210	138 483	20 781	307 492
	120 years	1	7	0	0	366	3 952	3 269	37 720	3 636	41 679
BY FOREST TYPE	Softwood	1 267	13 411	0	3	3 483	37 132	17 676	148 251	22 427	198 797
	Mixedwood	2 809	31 846	3	25	10 435	144 156	17 088	174 707	30 335	350 733
	Hardwood	2 975	41 134	23	323	12 342	183 978	10 991	121 445	26 332	346 880
	Regenerating	602	0	17	0	954	712	2 798	97	4 370	809
<b>QUÉBEC PUBLIC LANDS<sup>2</sup></b>		<b>677</b>	<b>9 127</b>	<b>0</b>	<b>0</b>	<b>21 523</b>	<b>287 127</b>	<b>44 859</b>	<b>419 428</b>	<b>67 060</b>	<b>715 682</b>
BY AGE	0-10 years	71	9	0	0	1 868	5 894	7 379	2 856	9 318	8 759
	30 years	53	415	0	0	1 286	9 903	5 199	20 660	6 538	30 977
	50 years	299	4 792	0	0	4 735	68 663	8 119	79 546	13 154	153 001
	70 years	107	1 547	0	0	4 272	57 531	10 784	140 953	15 163	200 031
	90 years	147	2 359	0	0	8 999	141 247	10 178	138 103	19 323	281 709
	120 years	1	6	0	0	363	3 888	3 201	37 310	3 565	41 205
BY FOREST TYPE	Softwood	108	1 001	0	0	2 993	29 694	17 113	145 034	20 214	175 730
	Mixedwood	272	3 455	0	0	8 515	114 091	16 234	167 143	25 020	284 689
	Hardwood	287	4 670	0	0	9 470	142 630	9 134	107 153	18 891	254 454
	Regenerating	10	0	0	0	545	712	2 379	97	2 935	809
<b>SMALL PRIVATE HOLDINGS<sup>2</sup></b>		<b>5 733</b>	<b>62 119</b>	<b>42</b>	<b>349</b>	<b>4 843</b>	<b>66 552</b>	<b>3 563</b>	<b>24 012</b>	<b>14 181</b>	<b>153 032</b>
BY AGE	0-10 years	1 262	143	19	3	647	1 052	1 093	211	3 022	1 410
	30 years	1 166	11 300	7	60	276	3 202	587	4 000	2 036	18 562
	50 years	2 755	40 256	13	215	2 675	41 762	1 473	15 308	6 916	97 541
	70 years	135	2 124	0	0	630	10 041	365	4 301	1 131	16 465
	90 years	415	8 296	3	71	614	10 495	12	129	1 044	18 992
	120 years	0	0	0	0	0	0	32	63	32	63
BY FOREST TYPE	Softwood	992	10 674	0	3	453	6 840	476	2 550	1 922	20 067
	Mixedwood	2 154	23 997	3	25	1 708	26 721	826	7 295	4 691	58 037
	Hardwood	2 054	27 447	23	322	2 293	32 992	1 842	14 168	6 212	74 928
	Regenerating	534	0	15	0	389	0	419	0	1 356	0
<b>LARGE PRIVATE HOLDINGS<sup>2</sup></b>		<b>1 241</b>	<b>15 129</b>	<b>0</b>	<b>0</b>	<b>403</b>	<b>5 633</b>	<b>113</b>	<b>945</b>	<b>1 757</b>	<b>21 706</b>
BY AGE	0-10 years	270	38	0	0	36	108	2	0	309	146
	30 years	131	1 148	0	0	24	203	22	62	177	1 413
	50 years	523	8 636	0	0	207	3 167	23	169	753	11 972
	70 years	91	1 390	0	0	40	663	8	115	139	2 168
	90 years	227	3 916	0	0	93	1 428	21	252	340	5 596
	120 years	0	1	0	0	3	63	36	347	39	411
BY FOREST TYPE	Softwood	167	1 732	0	0	18	322	86	656	271	2 711
	Mixedwood	383	4 389	0	0	106	1 684	23	242	511	6 316
	Hardwood	633	9 007	0	0	270	3 626	4	46	907	12 680
	Regenerating	58	0	0	0	9	0	0	0	67	0
<b>FEDERAL LANDS<sup>2</sup></b>		<b>1</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>445</b>	<b>6 666</b>	<b>19</b>	<b>116</b>	<b>467</b>	<b>6 800</b>
BY AGE	0-10 years	0	0	1	0	13	13	6	3	20	15
	30 years	0	0	0	1	10	101	6	41	16	143
	50 years	1	17	0	0	285	4 391	6	55	292	4 463
	70 years	0	0	0	0	63	964	2	18	65	982
	90 years	0	0	0	0	74	1 196	0	0	74	1 196
	120 years	0	0	0	0	0	0	0	0	0	0
BY FOREST TYPE	Softwood	0	3	0	0	18	277	2	10	20	290
	Mixedwood	0	4	0	0	107	1 660	6	27	113	1 691
	Hardwood	1	10	0	1	309	4 729	11	79	321	4 818
	Regenerating	0	0	1	0	11	0	1	0	13	0

<sup>1</sup> Updated November 2000: the original data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

<sup>2</sup> The figures have been rounded off, which may have caused negligible errors.

# INTENSIVE SURVEY ZONE

Area of Productive Forests (grades of 0-40%)<sup>1</sup>  
and Available Gross Merchantable Volume (cont'd)

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

02.03.01

		ADMINISTRATIVE REGIONS								SUBTOTAL <sup>2</sup> (km <sup>2</sup> ) (m <sup>3</sup> , 000s)	
		09		10		11		12			
		(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)		
<b>TOTAL AREA<sup>2</sup></b>		<b>143 736</b>	<b>1 108 749</b>	<b>83 688</b>	<b>525 583</b>	<b>16 451</b>	<b>135 773</b>	<b>10 899</b>	<b>93 634</b>	<b>254 775</b>	<b>1 863 738</b>
BY AGE	0-10 years	15 267	7 854	16 935	2 958	3 645	830	3 005	1 732	38 853	13 373
	30 years	10 062	29 937	10 050	23 529	2 616	13 323	1 768	13 763	24 496	80 553
	50 years	6 760	55 219	10 205	85 156	5 141	57 364	4 465	54 179	26 572	251 918
	70 years	12 123	111 977	16 032	142 242	2 521	31 601	788	9 962	31 464	295 782
	90 years	7 414	92 972	5 645	59 325	2 054	27 148	866	13 916	15 979	193 362
	120 years	92 109	810 789	24 822	212 373	474	5 507	6	81	117 412	1 028 750
BY FOREST TYPE	Softwood	118 944	998 564	62 747	458 879	7 091	65 404	2 458	21 189	191 239	1 544 037
	Mixedwood	8 803	84 444	4 782	53 806	5 981	51 674	4 687	38 404	24 253	228 327
	Hardwood	2 944	21 175	1 076	12 004	1 905	18 612	2 699	34 038	8 624	85 829
	Regenerating	13 045	4 566	15 084	893	1 475	83	1 056	2	30 659	5 545
<b>QUÉBEC PUBLIC LANDS<sup>2</sup></b>		<b>142 173</b>	<b>1 097 448</b>	<b>81 696</b>	<b>509 666</b>	<b>13 343</b>	<b>108 351</b>	<b>1 489</b>	<b>14 612</b>	<b>238 701</b>	<b>1 730 077</b>
BY AGE	0-10 years	15 030	6 986	16 624	2 877	2 996	768	431	48	35 080	10 679
	30 years	9 675	28 413	9 965	23 283	2 088	9 976	81	449	21 809	62 121
	50 years	6 263	51 326	10 083	84 258	3 854	42 420	376	5 578	20 577	183 582
	70 years	11 987	110 503	15 863	140 334	2 061	25 350	421	5 762	30 332	281 948
	90 years	7 249	91 140	5 370	55 914	1 874	24 383	174	2 696	14 667	174 133
	120 years	91 969	809 080	23 791	202 999	470	5 454	6	81	116 236	1 017 614
BY FOREST TYPE	Softwood	118 087	991 573	61 254	445 533	6 363	59 345	526	5 264	186 231	1 501 715
	Mixedwood	8 401	81 692	4 604	51 754	4 377	36 931	583	5 735	17 965	176 112
	Hardwood	2 770	20 191	1 014	11 493	1 277	11 992	218	3 612	5 279	47 287
	Regenerating	12 915	3 992	14 823	886	1 326	83	162	2	29 226	4 963
<b>SMALL PRIVATE HOLDINGS<sup>2</sup></b>		<b>518</b>	<b>3 439</b>	<b>170</b>	<b>771</b>	<b>2 777</b>	<b>24 617</b>	<b>8 752</b>	<b>72 411</b>	<b>12 217</b>	<b>101 237</b>
BY AGE	0-10 years	78	446	58	26	608	60	2 387	1 670	3 131	2 202
	30 years	159	673	46	181	469	3 070	1 634	12 954	2 309	16 879
	50 years	204	1 535	44	370	1 155	13 580	3 807	44 294	5 210	59 778
	70 years	31	316	7	70	383	5 371	291	3 182	712	8 940
	90 years	14	126	9	88	159	2 494	633	10 311	814	13 019
	120 years	31	343	6	35	4	42	0	0	41	420
BY FOREST TYPE	Softwood	210	1 483	57	273	649	5 351	1 800	14 769	2 716	21 877
	Mixedwood	150	961	47	355	1 435	13 308	3 786	29 707	5 418	44 331
	Hardwood	101	580	35	142	557	5 957	2 331	27 935	3 024	34 615
	Regenerating	56	415	31	0	137	0	834	0	1 058	415
<b>LARGE PRIVATE HOLDINGS<sup>2</sup></b>		<b>762</b>	<b>5 414</b>	<b>759</b>	<b>6 497</b>	<b>103</b>	<b>779</b>	<b>659</b>	<b>6 611</b>	<b>2 283</b>	<b>19 301</b>
BY AGE	0-10 years	120	357	125	40	20	0	188	14	452	411
	30 years	192	703	16	36	32	169	53	360	293	1 268
	50 years	225	1 799	47	342	25	266	282	4 308	578	6 714
	70 years	64	663	77	851	19	233	77	1 018	236	2 766
	90 years	105	1 172	170	2 115	6	101	59	910	340	4 298
	120 years	58	720	325	3 114	1	10	0	0	383	3 845
BY FOREST TYPE	Softwood	472	3 740	559	5 347	50	407	132	1 157	1 213	10 651
	Mixedwood	186	1 216	78	996	50	357	318	2 963	631	5 531
	Hardwood	57	319	13	155	3	16	150	2 491	223	2 980
	Regenerating	47	140	108	0	1	0	59	0	216	140
<b>FEDERAL LANDS<sup>2</sup></b>		<b>282</b>	<b>2 448</b>	<b>1 064</b>	<b>8 650</b>	<b>228</b>	<b>2 026</b>	<b>0</b>	<b>0</b>	<b>1 574</b>	<b>13 123</b>
BY AGE	0-10 years	39	64	129	15	21	2	0	0	189	81
	30 years	36	149	22	29	27	108	0	0	85	286
	50 years	68	560	32	186	106	1 099	0	0	207	1 844
	70 years	41	494	85	988	58	647	0	0	184	2 128
	90 years	46	535	96	1 208	15	171	0	0	158	1 913
	120 years	51	646	700	6 225	0	0	0	0	751	6 871
BY FOREST TYPE	Softwood	174	1 769	876	7 726	28	300	0	0	1 078	9 795
	Mixedwood	66	575	52	701	120	1 078	0	0	238	2 354
	Hardwood	15	85	14	215	68	647	0	0	98	947
	Regenerating	27	19	121	8	11	0	0	0	159	26

<sup>1</sup> Updated November 2000: the original data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

<sup>2</sup> The figures have been rounded off, which may have caused negligible errors.



# INTENSIVE SURVEY ZONE

Area of Productive Forests (grades of 0-40%)<sup>1</sup>  
and Available Gross Merchantable Volume (cont'd)

02.03.01

## BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

		ADMINISTRATIVE REGIONS										TOTAL <sup>2</sup>	
		13		14		15		16		17			
		(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)	(km <sup>2</sup> )	(m <sup>3</sup> , 000s)
<b>TOTAL AREA<sup>2</sup></b>		<b>59</b>	<b>345</b>	<b>9 894</b>	<b>104 712</b>	<b>17 866</b>	<b>212 998</b>	<b>3 543</b>	<b>40 399</b>	<b>3 509</b>	<b>30 468</b>	<b>518 165</b>	<b>4 367 902</b>
BY AGE	0-10 years	31	0	1 425	2 374	1 834	2 492	593	313	788	700	82 627	47 633
	30 years	13	101	1 145	7 810	1 569	11 103	795	6 660	763	5 042	58 081	269 853
	50 years	14	224	3 816	47 878	5 171	63 114	1 613	22 777	1 792	21 578	94 259	1 029 916
	70 years	0	1	2 487	33 774	4 447	63 648	118	1 969	37	496	75 882	869 332
	90 years	1	19	839	10 749	4 019	58 211	425	8 680	128	2 653	59 750	807 602
	120 years	0	0	182	2 126	826	14 430	0	0	0	0	147 565	1 343 565
BY FOREST TYPE	Softwood	0	0	1 752	18 400	2 409	23 325	209	2 855	549	4 168	295 248	2 464 434
	Mixedwood	8	59	4 418	49 290	6 367	74 520	819	11 012	973	9 974	101 713	1 060 461
	Hardwood	24	286	3 096	37 008	8 155	115 114	2 224	26 533	1 708	16 327	69 428	835 553
	Regenerating	28	0	627	13	936	38	291	0	279	0	51 776	7 454
<b>QUÉBEC PUBLIC LANDS<sup>2</sup></b>		<b>0</b>	<b>0</b>	<b>7 565</b>	<b>81 891</b>	<b>12 880</b>	<b>151 103</b>	<b>16</b>	<b>153</b>	<b>88</b>	<b>753</b>	<b>448 928</b>	<b>3 722 564</b>
BY AGE	0-10 years	0	0	1 063	1 995	1 143	1 596	5	1	16	20	67 426	34 656
	30 years	0	0	691	4 354	872	4 611	4	33	16	90	45 179	173 080
	50 years	0	0	2 681	34 038	3 133	33 838	5	70	48	505	66 139	679 133
	70 years	0	0	2 166	29 449	3 222	44 201	1	8	4	56	69 142	775 616
	90 years	0	0	783	9 937	3 705	52 841	2	41	4	83	55 155	733 016
	120 years	0	0	182	2 118	805	14 015	0	0	0	0	145 887	1 327 062
BY FOREST TYPE	Softwood	0	0	1 586	16 801	2 052	19 862	1	4	19	154	281 073	2 346 474
	Mixedwood	0	0	3 441	39 626	4 791	54 252	3	33	32	308	77 733	821 565
	Hardwood	0	0	2 102	25 450	5 508	76 952	10	117	32	290	44 748	547 651
	Regenerating	0	0	436	13	529	38	2	0	5	0	45 374	6 873
<b>SMALL PRIVATE HOLDINGS<sup>2</sup></b>		<b>59</b>	<b>345</b>	<b>2 319</b>	<b>22 702</b>	<b>4 717</b>	<b>58 748</b>	<b>3 439</b>	<b>39 100</b>	<b>3 379</b>	<b>29 254</b>	<b>55 126</b>	<b>524 670</b>
BY AGE	0-10 years	31	0	362	378	643	839	571	285	763	678	12 352	11 162
	30 years	13	101	452	3 449	640	6 006	783	6 553	741	4 903	10 605	83 926
	50 years	14	224	1 133	13 822	1 947	27 959	1 569	22 117	1 732	20 921	24 139	305 291
	70 years	0	1	318	4 274	1 171	18 544	114	1 906	31	404	4 888	70 051
	90 years	1	19	53	774	297	5 002	402	8 239	111	2 349	3 022	52 853
	120 years	0	0	0	3	21	398	0	0	0	0	121	1 386
BY FOREST TYPE	Softwood	0	0	166	1 591	331	3 162	208	2 844	525	3 957	8 329	70 682
	Mixedwood	8	59	971	9 595	1 493	19 218	811	10 888	928	9 494	20 240	202 544
	Hardwood	24	286	991	11 516	2 514	36 368	2 144	25 368	1 655	15 803	21 665	251 029
	Regenerating	28	0	190	0	380	0	278	0	271	0	4 893	415
<b>LARGE PRIVATE HOLDINGS<sup>2</sup></b>		<b>0</b>	<b>0</b>	<b>3</b>	<b>34</b>	<b>53</b>	<b>732</b>	<b>31</b>	<b>499</b>	<b>37</b>	<b>412</b>	<b>11 072</b>	<b>88 191</b>
BY AGE	0-10 years	0	0	0	0	7	41	3	8	9	2	2 537	1 659
	30 years	0	0	0	1	4	42	1	7	6	48	2 106	11 668
	50 years	0	0	1	7	18	267	10	177	8	106	3 190	35 175
	70 years	0	0	0	4	18	273	1	26	2	35	1 293	16 226
	90 years	0	0	1	21	6	92	16	281	13	222	1 141	15 226
	120 years	0	0	0	0	1	17	0	0	0	0	805	8 237
BY FOREST TYPE	Softwood	0	0	0	4	4	54	1	8	5	47	4 623	35 854
	Mixedwood	0	0	1	9	17	234	3	59	12	166	2 985	26 594
	Hardwood	0	0	1	21	30	444	27	432	17	200	2 203	25 603
	Regenerating	0	0	0	0	2	0	0	0	3	0	1 262	140
<b>FEDERAL LANDS<sup>2</sup></b>		<b>0</b>	<b>0</b>	<b>7</b>	<b>84</b>	<b>217</b>	<b>2 414</b>	<b>57</b>	<b>648</b>	<b>5</b>	<b>49</b>	<b>3 039</b>	<b>32 478</b>
BY AGE	0-10 years	0	0	1	0	42	15	15	19	1	0	313	155
	30 years	0	0	1	6	53	444	8	68	0	1	191	1 179
	50 years	0	0	1	11	73	1 050	28	414	4	46	792	10 317
	70 years	0	0	3	46	37	629	1	29	0	1	559	7 440
	90 years	0	0	1	17	12	276	6	118	0	0	432	6 507
	120 years	0	0	0	4	0	0	0	0	0	0	752	6 880
BY FOREST TYPE	Softwood	0	0	0	3	22	248	0	0	1	9	1 222	11 425
	Mixedwood	0	0	5	60	66	817	2	33	1	6	756	9 757
	Hardwood	0	0	1	21	103	1 350	44	615	4	34	813	11 270
	Regenerating	0	0	0	0	26	0	11	0	0	0	248	26

<sup>1</sup> Updated November 2000: the original data were drawn from the second survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the third survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

<sup>2</sup> The figures have been rounded off, which may have caused negligible errors.

# FOREST PROTECTION IN QUÉBEC

## Highlights

03.00.01

### AREAS DISTURBED BY THE SPRUCE BUDWORM (ha, 000s)

	1999	2000 <sup>1</sup>
Light defoliation	2.6	2.7
Moderate defoliation	3.8	1.8
Severe defoliation	16.5	6.2
Total area disturbed	22.9	10.7

<sup>1</sup> Preliminary figures

### AREAS DISTURBED BY THE HEMLOCK LOOPER (ha, 000s)

	1999	2000 <sup>1</sup>
Light defoliation	2.2	45.4
Moderate defoliation	18.8	103.8
Severe defoliation	451.2	775.8
Total area disturbed	472.2	925.0

<sup>1</sup> Preliminary figures

### FOREST FIRES

<b>Intensive protection zone</b>	<b>1999</b>	<b>2000 <sup>1</sup></b>
• Fires (no.)	1 005	475
• Area disturbed (ha, 000s)	27.8	0.8
• Fire control and firefighting costs (\$, millions)	58.8	52.9
• Relative importance of fires caused by lightning <sup>2</sup> (%)		
- Number		32
- Area disturbed		80
<b>Limited protection zone</b>	<b>1999</b>	<b>2000 <sup>1</sup></b>
• Fires (no.)	32	41
• Area disturbed (ha, 000s)	69.9	38.4
• Fire control and firefighting costs (\$, millions)	1.0	0.7

<sup>1</sup> Preliminary figures

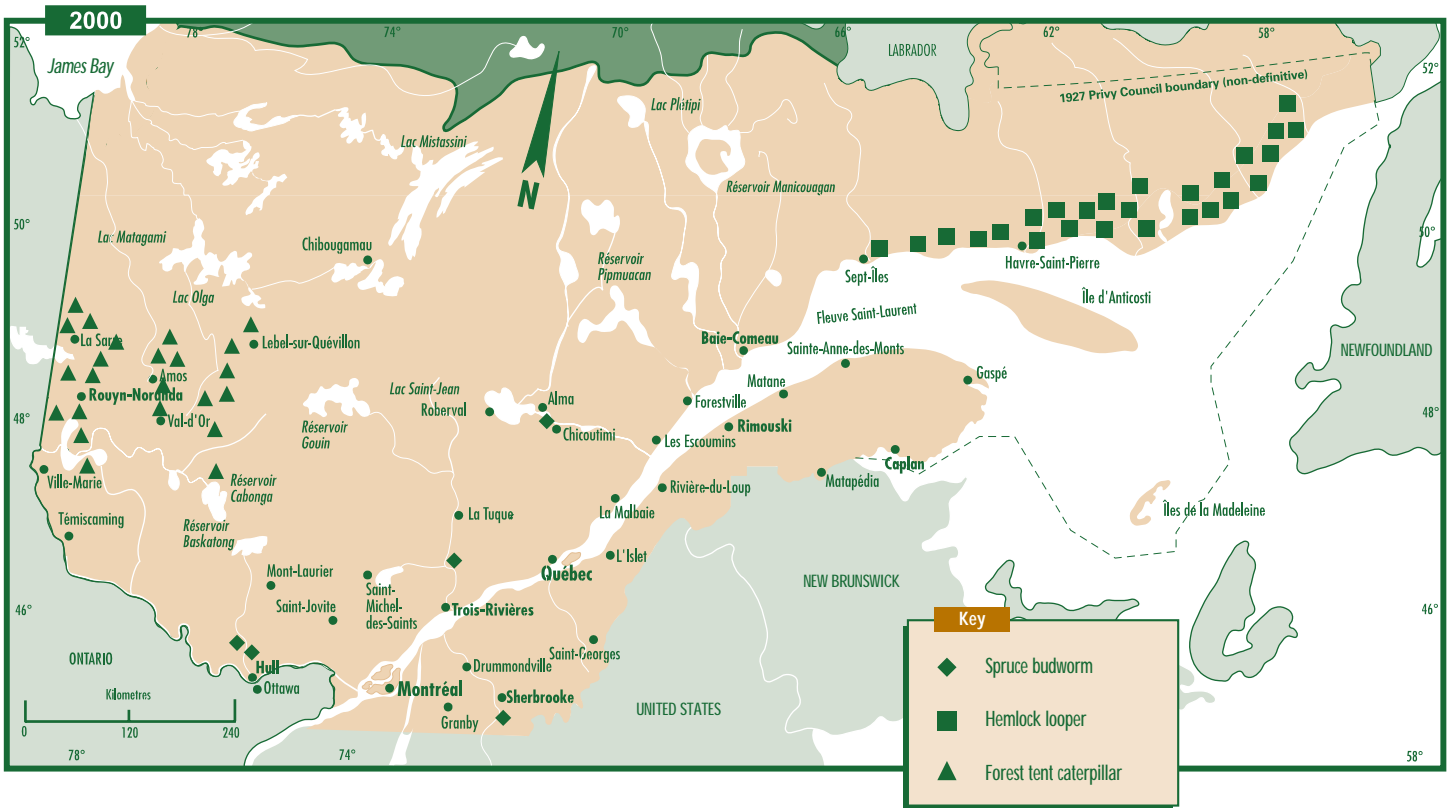
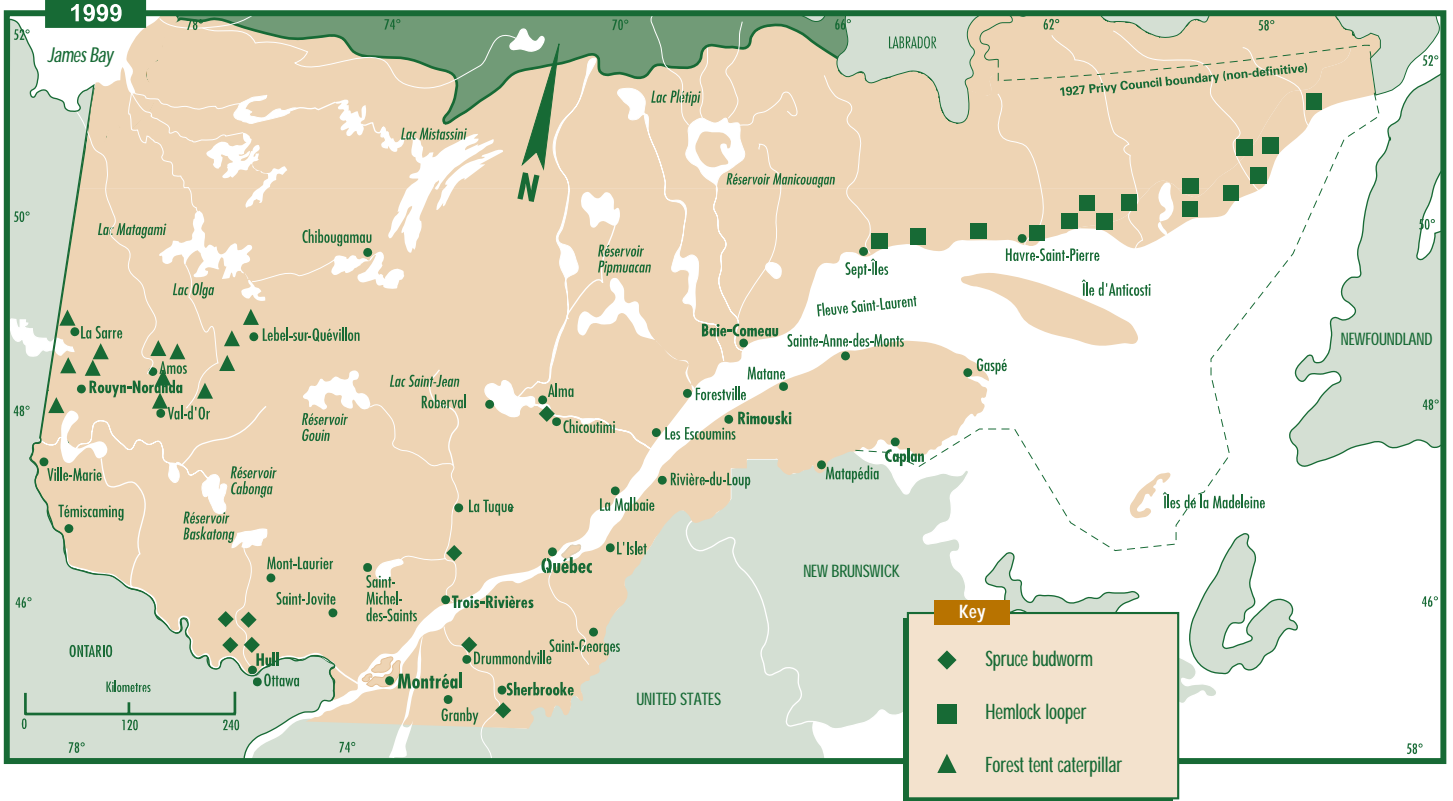
<sup>2</sup> Lightning was the main cause of forest fires in Québec during the period 1990-2000.

# FOREST PROTECTION IN QUÉBEC

## Insects and Diseases

### AREAS DAMAGED BY DEFOLIATOR INSECTS

03.03.01

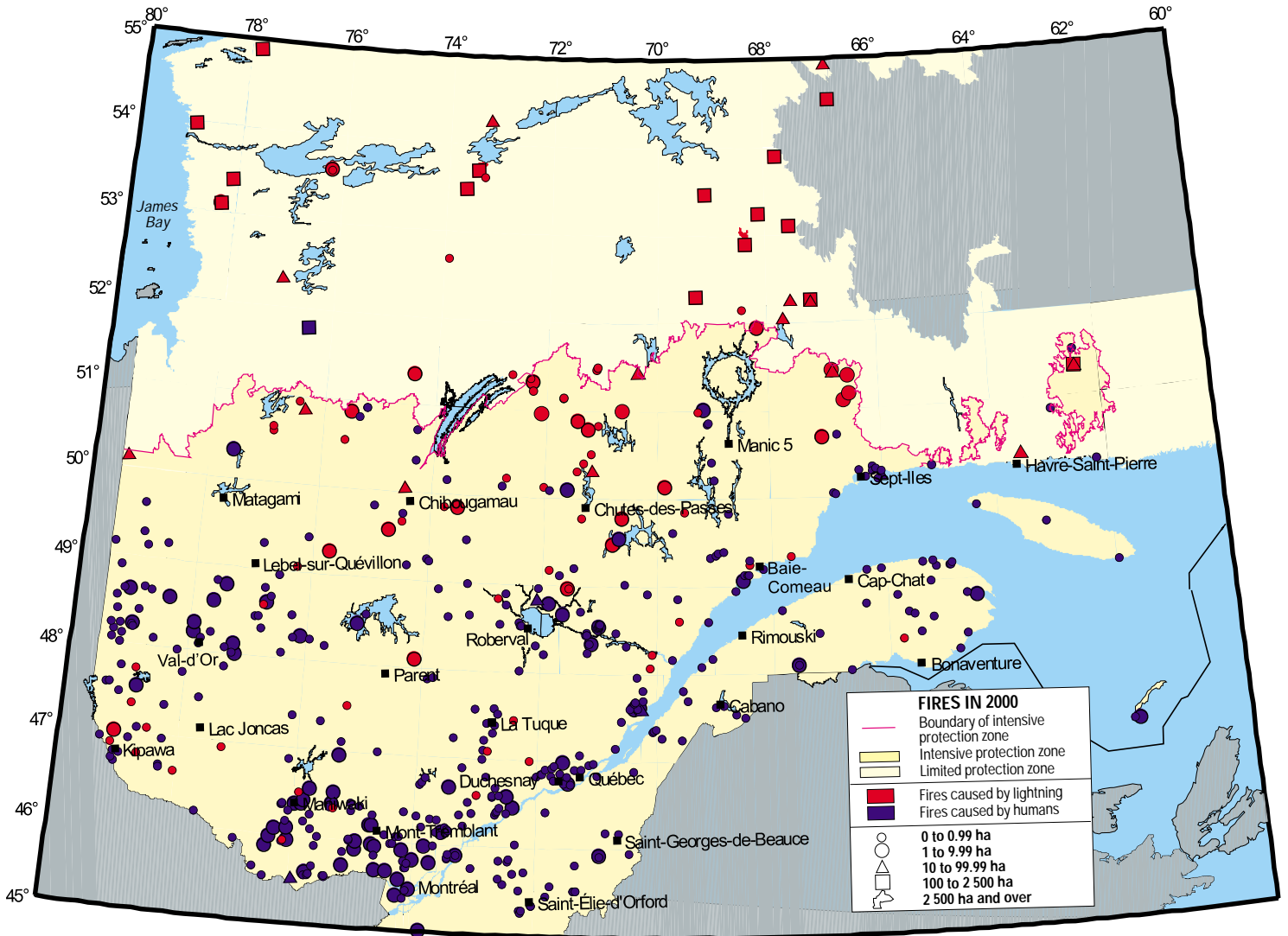


# FOREST PROTECTION IN QUÉBEC

## Forest Fires

### AREAS DAMAGE BY FIRES

03.04.02



# FOREST PROTECTION IN QUÉBEC

## Forest Fires(cont'd)

### INTENSIVE PROTECTION ZONE: BREAKDOWN OF FOREST FIRES BY ADMINISTRATIVE REGION

03.04.09

ADMINISTRATIVE REGIONS		1995	1996	1997	1998	1999 <sup>1</sup>	2000 <sup>2</sup>
01 BAS-SAINT-LAURENT	no.	26	35	16	20	35	16
	ha	6	12	3	5	86	1
02 SAGUENAY—LAC-SAINT-JEAN	no.	185	324	64	61	122	78
	ha	45 240	52 211	5 421	5 321	2 374	114
03 CAPITALE-NATIONALE	no.	38	33	23	20	24	36
	ha	54	13	2 916	6	5 204	46
04 MAURICIE <sup>3</sup>	no.	112	111	81	67	79	34
	ha	62 574	2 308	8 822	801	79	12
05 ESTRIE	no.	19	4	18	13	24	14
	ha	19	1	7	14	48	2
06 MONTRÉAL	no.	0	0	0	0	2	0
	ha	0	0	0	0	0	0
07 OUTAOUAIS	no.	115	48	127	104	102	40
	ha	80	46	53	203	39	60
08 ABITIBI-TÉMISCAMINGUE	no.	182	116	118	165	119	72
	ha	55 120	5 238	101	110	429	31
09 CÔTE-NORD	no.	107	141	37	110	134	48
	ha	220	24 731	3 413	1 052	18 913	345
10 NORD-DU-QUÉBEC	no.	123	158	131	38	59	32
	ha	2 561	159 180	72 743	4 189	421	98
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	no.	47	61	26	33	46	22
	ha	29 555	31	179	7	27	9
12 CHAUDIÈRE-APPALACHES	no.	24	7	18	15	33	7
	ha	8	2	10	8	10	4
13 LAVAL	no.	0	0	0	0	0	0
	ha	0	0	0	0	0	0
14 LANAUDIÈRE	no.	65	33	61	61	87	25
	ha	49	17	33	71	42	19
15 LAURENTIDES	no.	73	40	82	52	86	39
	ha	62	22	40	16	31	46
16 MONTÉRÉGIE	no.	29	9	9	22	36	6
	ha	29	5	9	34	94	6
17 CENTRE-DU-QUÉBEC	no.			8	16	17	6
	ha			4	9	11	1
TOTAL	no.	1 145	1 120	819	797	1 005	475
	ha	195 577	243 817	93 749	11 845	27 807	794

<sup>1</sup> Figures revised in 2000

<sup>2</sup> Preliminary figures

<sup>3</sup> Combined data for Mauricie and Centre-du-Québec in 1995 and 1996

# SUSTAINABLE DEVELOPMENT OF QUÉBEC'S FORESTS

## Highlights

04.00.01

### SUSTAINABLE DEVELOPMENT CRITERIA

1. Preservation of biological diversity
2. Maintenance and improvement of the conditions and productivity of forest ecosystems
3. Conservation of soil and water resources
4. Maintenance of the function of forest ecosystems as a component of global ecological cycles
5. Maintenance of the multiple socio-economic benefits society derives from the forests
6. Giving of proper consideration, in selecting forms of development, to the values and needs expressed by the populations concerned

### DISTRIBUTION OF PROTECTED AREAS BY BIOCLIMATIC DOMAIN (km<sup>2</sup>)

Sugar maple-bitternut hickory domain	296
Sugar maple-basswood domain	884
Sugar maple-yellow birch domain	2 718
Balsam fir-yellow birch domain	1 728
Balsam fir-white birch domain	12 652
Spruce-moss domain	989
Forest tundra domain	14 548
Shrub arctic tundra domain	12 252
Waters of the St. Lawrence River, James Bay, Hudson Bay, Ungava Bay and Hudson Strait	2 954
<b>TOTAL</b>	<b>49 021</b>

### PLANT SPECIES DESIGNATED AS THREATENED OR VULNERABLE

Wild leek  
 Adam-and-Eve  
 Jack-in-the-pulpit  
 Hop sedge  
 Autumn coral-root, Pringle Corallorhiza variety  
 Conrad corema  
 Ram's Head Lady's Slipper  
 Dwarf huckleberry, Bigelow variety  
 Spread-leaved sunflower  
 Beech fern  
 Mayapple  
 Van Brunt's Jacob's badder  
 Douglas knotweed, Douglas subspecies  
 Lemon sumac, fragrant variety  
 Massachusetts fern

### ANIMAL SPECIES LIKELY TO BE DESIGNATED AS THREATENED OR VULNERABLE

Fish	5
Amphibians	5
Reptiles	7
Birds	12
Mammals	16

# FOREST MANAGEMENT

## Highlights

05.00.01

### ALLOWABLE ANNUAL CUT IN QUÉBEC'S FORESTS (m<sup>3</sup>, 000s)

	2000	2001
Allowable annual cut – public forests (common areas) (softwoods 72.6%; hardwoods 27.4%)	43 728.9	41 858.1
Allowable harvest – private forests (softwoods 44.8%; hardwoods 55.2%)	13 304.4	12 859.3
<b>TOTAL</b>	<b>57 033.3</b>	<b>54 717.4</b>

### SURFACE AREAS CONSIDERED IN CALCULATING THE ALLOWABLE ANNUAL CUT IN QUÉBEC (ha, 000s)

	2000	2001
Productive public forests <sup>1</sup> - TSFMA	30 836.4	30 062.3
- FMC	1 384.9	1 360.5
Productive private forests <sup>1</sup>	6 619.8	6 619.8
<b>TOTAL</b>	<b>38 841.1</b>	<b>38 042.6</b>

<sup>1</sup> Grades of 0-40%

### VOLUME OF TIMBER ALLOCATED IN QUÉBEC'S PUBLIC FORESTS (m<sup>3</sup>, 000s)

	2000	2001
Timber supply and forest management agreements (TSFMAs)	37 258.9	35 022.4
Forest management contracts (FMCs)	481.1	442.6

### NUMBER OF COMMON AREAS AND TIMBER SUPPLY AND FOREST MANAGEMENT AGREEMENTS

	2000	2001
Common areas	121	114
Timber supply and forest management agreements (TSFMAs)	256	253
Forest management contracts (FMCs)	77	82

### VOLUME OF TIMBER HARVESTED IN QUÉBEC (1999-2000) (m<sup>3</sup>, 000s)

Public forests	33 713
Private forests <sup>1</sup>	10 574
• Volumes marketed by syndicates and marketing boards	6 096
<b>TOTAL</b>	<b>44 287</b>
Volume harvested/allowable annual cut <sup>2</sup>	
• Softwoods	91.5%
• Hardwoods	51.9%
<b>TOTAL</b>	<b>77.7%</b>

<sup>1</sup> Including approximately 2.0 million m<sup>3</sup> of firewood

<sup>2</sup> Allowable annual cut (public and private forests), all species combined

### SIZE OF CUTTING AREAS IN QUÉBEC (1999-2000) (ha, 000s)

Public forests	377.3
Private forests (estimate)	85.0
<b>TOTAL</b>	<b>462.3</b>

Total size of cutting areas/  
productive forest area <sup>1</sup> 1.22 %

<sup>1</sup> Total area of public and private forests considered in calculating  
the allowable annual cut

### MARKET VALUE OF STANDING TREES (PUBLIC FORESTS, ALL SPECIES COMBINED), BASED ON THE MEAN PROVINCIAL UNIT RATE (\$/m<sup>3</sup>)

1998-1999	10.52
1999-2000	11.56
2000-2001	10.90

### RELATIVE SHARE OF TRANSPORTATION METHODS USED FOR QUÉBEC'S LUMBER EXPORTS (2000-2001)

Rail	52.5%
Truck	44.7%
Ship	2.8%
<b>TOTAL</b>	<b>100 %</b>

### NETWORK OF PERMANENT FOREST ROADS IN QUÉBEC (2000-2001)

Length (km)	15 369
Bridges (no.)	520

### QUÉBEC'S PRODUCTION OF SEEDLINGS FOR REFORESTATION

	1999-2000	2000-2001
Cones harvested (hl)	1 090.5	4 775.2
Area of seed tree orchards (ha)	1 278.8	1 278.8
<b>Seedlings produced (000s)</b>	<b>155 257.4</b>	<b>157 986.5</b>
• MRN nurseries	40 615.5	41 460.1
• Privately owned nurseries	114 641.9	116 526.4

### REFORESTATION IN QUÉBEC <sup>1</sup>

	(seedlings, 000s)		(ha, 000s)
Public forests	1998-1999	111 093	68.3
	1999-2000 <sup>1,2</sup>	108 288	68.8
Private forests	1998-1999	33 200	14.5
	1999-2000 <sup>1</sup>	32 689	13.2
<b>TOTAL</b>	<b>1998-1999</b>	<b>144 293</b>	<b>82.8</b>
	<b>1999-2000 <sup>1,2</sup></b>	<b>140 977</b>	<b>82.0</b>

<sup>1</sup> Preliminary figures

<sup>2</sup> Includes sowing

# FOREST MANAGEMENT

## Highlights (cont'd)

05.00.01

### SITE PREPARATION IN QUÉBEC'S FORESTS <sup>1</sup> (ha, 000s)

Public forests	1998-1999	52.2
	1999-2000 <sup>1</sup>	47.6
Private forests	1998-1999	12.1
	1999-2000 <sup>1</sup>	12.5
<b>TOTAL</b>	<b>1998-1999</b>	<b>64.3</b>
	<b>1999-2000 <sup>1</sup></b>	<b>60.1</b>

<sup>1</sup> Preliminary figures

### NONCOMMERCIAL SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC <sup>1</sup> (ha, 000s)

Public forests	1998-1999	119.7
	1999-2000 <sup>1</sup>	128.7
Private forests	1998-1999	24.1
	1999-2000 <sup>1</sup>	24.1
<b>TOTAL</b>	<b>1998-1999</b>	<b>143.8</b>
	<b>1999-2000 <sup>1</sup></b>	<b>152.8</b>

<sup>1</sup> Preliminary figures

### COMMERCIAL SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC <sup>1</sup> (ha, 000s)

Public forests	1998-1999	365.9
	1999-2000 <sup>1</sup>	377.3
Private forests	1998-1999	9.1
	1999-2000 <sup>1</sup>	9.5
<b>TOTAL</b>	<b>1998-1999</b>	<b>375.0</b>
	<b>1999-2000 <sup>1</sup></b>	<b>386.8</b>

<sup>1</sup> Preliminary figures

### MAPLE SYRUP PRODUCTION IN QUÉBEC'S FORESTS

		1999 <sup>1</sup>	2000 <sup>2</sup>
Bulk maple syrup	(l)	20 650 000	24 799 000
	(\$)	108 480 000	101 174 000
Direct sales by producers	(l)	2 644 000	3 232 000
	(\$)	23 113 000	27 027 000
Producer consumption	(l)	292 000	281 000
	(\$)	2 550 000	2 353 000
<b>TOTAL PRODUCTION</b>	<b>(l)</b>	<b>23 586 000</b>	<b>28 312 000</b>
	<b>(\$)</b>	<b>134 143 000</b>	<b>130 554 000</b>

<sup>1</sup> Revised figures

<sup>2</sup> Preliminary figures

### SILVICULTURAL TREATMENTS PLANNED IN QUÉBEC'S PUBLIC FORESTS TO ACHIEVE FIXED YIELDS <sup>1</sup> (ha, 000s/year)

Common areas	632.8
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<sup>1</sup> Silvicultural treatments planned on March 31, 2001

### SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC <sup>1</sup> (ha, 000s)

Public forests	1998-1999 <sup>1</sup>	610.2
	1999-2000 <sup>2</sup>	622.4
	2000-2001 <sup>3</sup>	622.2
Private forests	1998-1999 <sup>1</sup>	59.9
	1999-2000 <sup>2</sup>	59.2
	2000-2001 <sup>3</sup>	59.0
<b>TOTAL</b>	<b>1998-1999 <sup>1</sup></b>	<b>670.1</b>
	<b>1999-2000 <sup>2</sup></b>	<b>681.6</b>
	<b>2000-2001 <sup>3</sup></b>	<b>681.2</b>

<sup>1</sup> Revised figures

<sup>2</sup> Provisional figures

<sup>3</sup> Estimated figures



## FOREST MANAGEMENT

### Allowable Annual Cut

The allowable annual cut was calculated for public forests (areas covered by TSFMA<sup>1</sup>) (30.8 million ha) and for small and large private holdings (6.6 million ha).

#### ALLOWABLE ANNUAL CUT BY ADMINISTRATIVE REGION<sup>2</sup> ON MARCH 31, 2000 (m<sup>3</sup>)

05.01.01

ADMINISTRATIVE REGIONS	PUBLIC FORESTS (COMMON AREAS)					PRIVATE FORESTS <sup>3</sup> (ALLOWABLE HARVEST)					TOTAL
	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	
01 BAS-SAINT-LAURENT	1 200 843	73 478	95 271	247 114	1 616 706	662 800	152 100	480 900	499 600	1 795 400	3 412 106
02 SAGUENAY—LAC-SAINT-JEAN	7 446 665	1 683	612 734	1 008 836	9 069 918	258 500	5 500	246 200	95 900	606 100	9 676 018
03 CAPITALE-NATIONALE	895 419	7 067	73 401	276 062	1 251 949	438 400	62 200	128 100	544 200	1 172 900	2 424 849
04 MAURICIE	2 527 401	70 480	460 689	1 034 369	4 092 939	436 000	55 300	84 800	385 700	961 800	5 054 739
05 ESTRIE	35 530	1 622	4 385	40 573	82 110	389 900	138 200	127 100	789 500	1 444 700	1 526 810
06 MONTRÉAL	0	0	0	0	0	0	0	0	0	0	0
07 OUTAOUAIS	670 822	690 869	439 026	1 924 537	3 725 254	201 200	163 800	236 400	555 800	1 157 200	4 882 454
08 ABITIBI-TÉMISCAMINGUE	3 258 284	521 731	791 244	1 579 884	6 151 143	105 500	6 800	239 000	40 600	391 900	6 543 043
09 CÔTE-NORD	5 808 989	610	254 435	409 087	6 473 121	169 400	17 200	39 000	161 400	387 000	6 860 121
10 NORD-DU-QUÉBEC	5 118 244	0	569 660	243 959	5 931 863	8 300	400	12 600	2 400	23 700	5 955 563
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 831 757	72 022	129 229	184 886	2 217 894	364 800	72 800	139 900	157 800	735 300	2 953 194
12 CHAUDIÈRE-APPALACHES	133 710	11 354	10 295	60 811	216 170	761 600	143 900	242 700	744 100	1 892 300	2 108 470
13 LAVAL	0	0	0	0	0	0	0	0	0	0	0
14 LANAUDIÈRE	477 152	49 942	171 835	430 894	1 129 823	84 900	80 000	44 600	265 100	474 600	1 604 423
15 LAURENTIDES	642 384	120 142	132 196	875 288	1 770 010	190 900	119 300	187 500	694 800	1 192 500	2 962 510
16 MONTERÉGIE	0	0	0	0	0	120 500	60 200	67 000	409 600	657 300	657 300
17 CENTRE-DU-QUÉBEC	0	0	0	0	0	85 000	48 500	55 700	222 500	411 700	411 700
<b>TOTAL</b>	<b>30 047 200</b>	<b>1 621 000</b>	<b>3 744 400</b>	<b>8 316 300</b>	<b>43 728 900</b>	<b>4 277 700</b>	<b>1 126 200</b>	<b>2 331 500</b>	<b>5 569 000</b>	<b>13 304 400</b>	<b>57 033 300</b>

#### ALLOWABLE ANNUAL CUT BY ADMINISTRATIVE REGION<sup>2</sup> ON MARCH 31, 2001 (m<sup>3</sup>)

ADMINISTRATIVE REGIONS	PUBLIC FORESTS (COMMON AREAS)					PRIVATE FORESTS <sup>3</sup> (ALLOWABLE HARVEST)					TOTAL
	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SOUS-TOTAL	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	
01 BAS-SAINT-LAURENT	930 919	42 223	109 878	240 603	1 323 623	771 000	93 100	547 200	414 800	1 826 100	3 149 723
02 SAGUENAY—LAC-SAINT-JEAN	7 401 398	4 145	612 642	960 134	8 978 319	264 100	3 400	180 200	81 000	528 700	9 507 019
03 CAPITALE-NATIONALE	864 298	9 082	92 964	279 134	1 245 478	393 000	38 500	158 400	370 000	959 900	2 205 378
04 MAURICIE	2 620 575	55 377	474 529	1 022 052	4 172 533	498 000	33 900	72 600	257 000	861 500	5 034 033
05 ESTRIE	35 530	1 622	4 385	40 573	82 110	519 300	202 600	139 100	856 000	1 717 000	1 799 110
06 MONTRÉAL	0	0	0	0	0	0	0	0	0	0	0
07 OUTAOUAIS	815 428	568 007	432 544	1 620 590	3 436 569	172 600	220 600	269 000	557 500	1 219 700	4 656 269
08 ABITIBI-TÉMISCAMINGUE	3 399 886	501 905	753 162	1 512 542	6 167 495	228 400	13 600	510 900	70 500	823 400	6 990 895
09 CÔTE-NORD	4 875 327	700	255 577	353 686	5 485 290	113 300	1 300	51 900	31 600	198 100	5 683 390
10 NORD-DU-QUÉBEC	5 180 980	0	473 692	244 549	5 899 221	0	0	0	0	0	5 899 221
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 524 856	36 522	143 672	134 247	1 839 297	276 500	48 600	139 600	166 900	631 600	2 470 897
12 CHAUDIÈRE-APPALACHES	157 653	17 363	23 903	54 893	253 812	909 700	207 900	182 700	710 700	2 011 000	2 264 812
13 LAVAL	0	0	0	0	0	0	0	0	0	0	0
14 LANAUDIÈRE	537 547	31 369	157 135	377 190	1 103 241	88 700	28 300	38 100	158 700	313 800	1 417 041
15 LAURENTIDES	649 075	118 572	135 810	967 616	1 871 073	215 900	117 800	154 500	462 400	950 600	2 821 673
16 MONTERÉGIE	0	0	0	0	0	36 300	66 200	30 000	283 900	416 400	416 400
17 CENTRE-DU-QUÉBEC	0	0	0	0	0	149 700	56 300	55 300	140 200	401 500	401 500
<b>TOTAL</b>	<b>28 993 472</b>	<b>1 386 887</b>	<b>3 669 893</b>	<b>7 807 809</b>	<b>41 858 061</b>	<b>4 636 500</b>	<b>1 132 100</b>	<b>2 529 500</b>	<b>4 561 200</b>	<b>12 859 300</b>	<b>54 717 361</b>

<sup>1</sup> TSFMA: timber supply and forest management agreement

<sup>2</sup> Volumes are distributed proportionally to the size of common areas located in the region

<sup>3</sup> Includes an estimate of the allowable harvest for certain large private holdings excluded from the territories considered by the regional agencies for private forest development when making this calculation.

Sources: Direction de la gestion des stocks forestiers

Fédération des producteurs de bois du Québec, 1988, *La forêt privée du Québec, son potentiel ligneux*

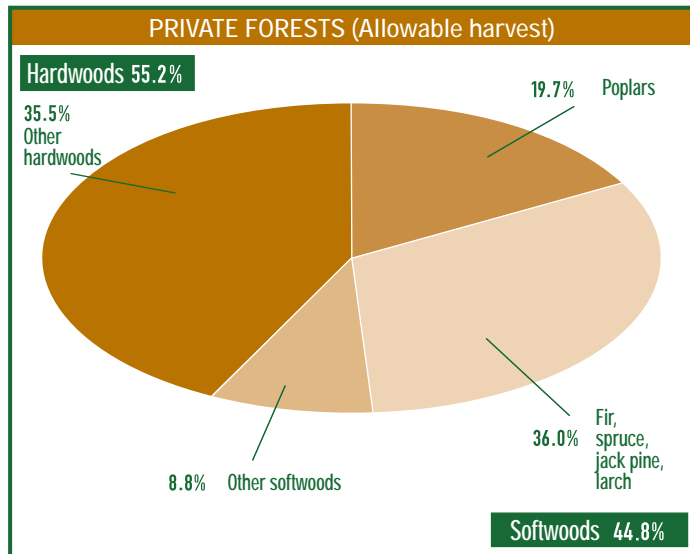
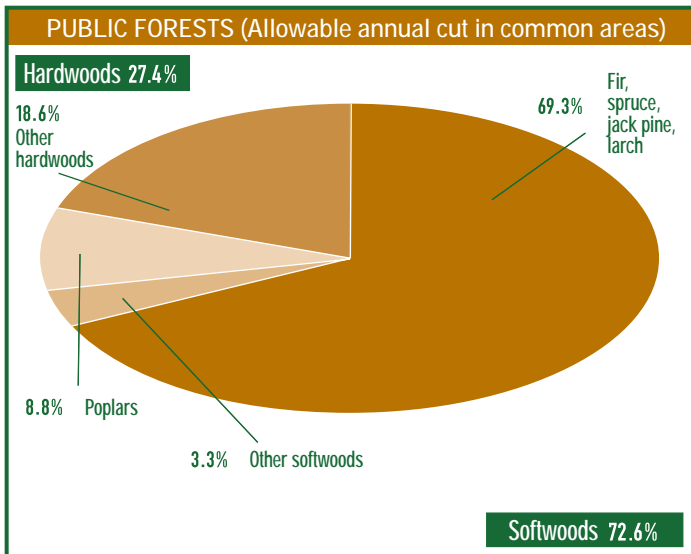
# FOREST MANAGEMENT

## Allowable Annual Cut (cont'd)

### BREAKDOWN OF ALLOWABLE ANNUAL CUT BY SPECIES (2001)

05.01.02

05.01.03



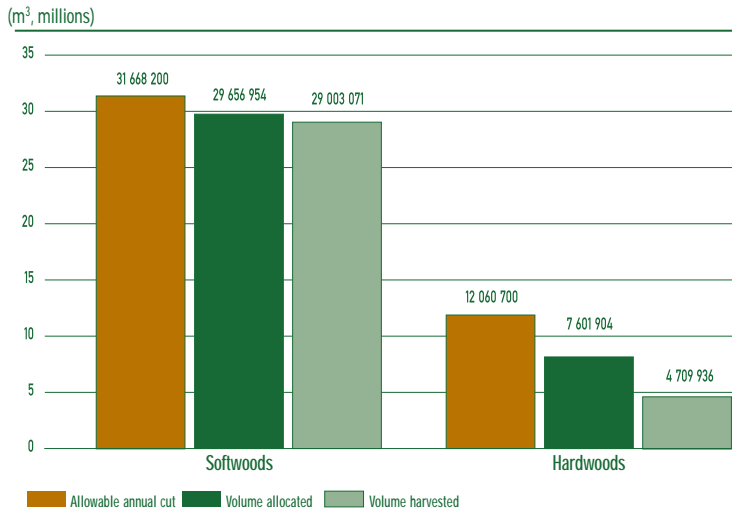
# FOREST MANAGEMENT

## Allowable Annual Cut (cont'd)

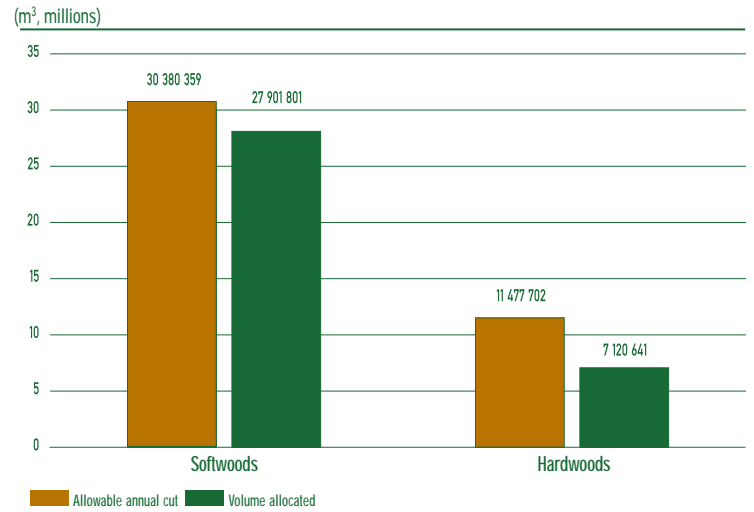
### ALLOWABLE ANNUAL CUT/VOLUME ALLOCATED (COMMON AREAS)/VOLUMES HARVESTED (PUBLIC FORESTS)

05.01.10

#### By species group (1999-2000)



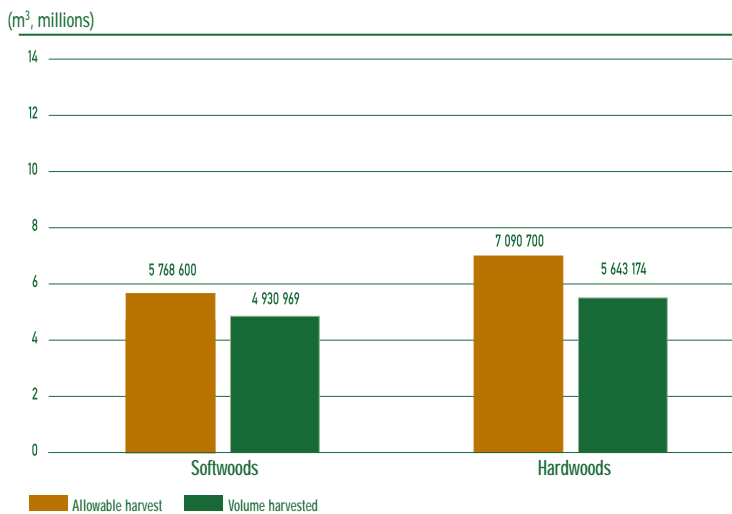
#### By species group (2000-2001)



### ALLOWABLE HARVEST/VOLUME OF TIMBER HARVESTED<sup>1</sup> (PRIVATE FORESTS)

05.01.11

#### By species group (1999-2000)



<sup>1</sup> Including an estimated volume of firewood (2.0 million m<sup>3</sup> of hardwoods)

# FOREST MANAGEMENT

## Harvest

### VOLUME OF TIMBER HARVESTED IN PUBLIC AND PRIVATE FORESTS A) BY TENURE AND SPECIES GROUP

05.02.01

	1995-1996 <sup>1</sup>		1996-1997 <sup>1</sup>		1997-1998 <sup>1</sup>		1998-1999 <sup>1</sup>		1999-2000		2000-2001	
	TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
	(m <sup>3</sup> , 000s)	(%)	(m <sup>3</sup> , 000s)	(%)	(m <sup>3</sup> , 000s)	(%)	(m <sup>3</sup> , 000s)	(%)	(m <sup>3</sup> , 000s)	(%)	(m <sup>3</sup> , 000s)	(%)
<b>TOTAL</b>	<b>41 080</b>	<b>100</b>	<b>38 026</b>	<b>100</b>	<b>42 152</b>	<b>100</b>	<b>43 025</b>	<b>100</b>	<b>44 287</b>	<b>100</b>	n.a. <sup>3</sup>	
SOFTWOODS	31 529	77	29 656	78	32 440	77	32 308	75	33 934	77	n.a.	
HARDWOODS	9 551	23	8 370	22	9 712	23	10 717	25	10 353	23	n.a.	
<b>QUÉBEC PUBLIC LANDS <sup>4</sup></b>	<b>31 275</b>	<b>100</b>	<b>28 599 <sup>1</sup></b>	<b>100</b>	<b>32 571 <sup>1</sup></b>	<b>100</b>	<b>33 002</b>	<b>100</b>	<b>33 713 <sup>2</sup></b>	<b>100</b>	n.a.	
SOFTWOODS	26 772	86	25 095	88	27 950	86	27 754	84	29 003 <sup>2</sup>	86	n.a.	
HARDWOODS	4 503	14	3 504	12	4 621	14	5 248	16	4 710 <sup>2</sup>	14	n.a.	
<b>PRIVATE HOLDINGS <sup>5</sup></b>	<b>9 805</b>	<b>100</b>	<b>9 427 <sup>2</sup></b>	<b>100</b>	<b>9 581 <sup>2</sup></b>	<b>100</b>	<b>10 023</b>	<b>100</b>	<b>10 574</b>	<b>100</b>	<b>10 098 <sup>2</sup></b>	<b>100</b>
SOFTWOODS	4 757	49	4 561	48	4 490	47	4 554	45	4 931	47	4 891 <sup>2</sup>	48
HARDWOODS	5 048	51	4 866	52	5 091	53	5 469	55	5 643	53	5 207 <sup>2</sup>	52

1 Revised figures

2 Preliminary figures

3 Figures not available

4 Volume of timber harvested and actually measured in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.)

5 Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m<sup>3</sup>), but excluding small volumes of roundwood harvested for export.

### VOLUME OF TIMBER HARVESTED IN PUBLIC AND PRIVATE FORESTS B) BY ADMINISTRATIVE REGION (m<sup>3</sup>, 000s)

05.02.02

1998-1999

ADMINISTRATIVE REGIONS	PUBLIC FORESTS <sup>1</sup>						PRIVATE FORESTS <sup>2</sup>					
	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS
01 BAS-SAINT-LAURENT	1 247.2	47.1	1 294.4	152.0	211.1	363.2	741.4	65.7	807.2	489.5	239.3	728.9
02 SAGUENAY—LAC-SAINT-JEAN	7 843.1	0.0	7 843.1	505.0	245.5	750.5	227.1	0.1	227.3	133.2	55.6	188.8
03 CAPITALE-NATIONALE	558.9	1.1	560.0	13.3	67.4	80.7	324.7	30.0	354.7	57.9	198.6	256.5
04 MAURICIE	2 266.6	22.8	2 289.4	341.6	235.9	577.5	508.9	29.2	538.2	38.1	189.9	228.0
05 ESTRIE	28.6	1.3	29.9	17.5	21.8	39.3	426.2	122.9	549.2	105.4	731.1	836.5
06 MONTRÉAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07 OUTAOUAIS	351.7	367.0	718.8	250.0	760.9	1 010.9	159.8	79.1	238.8	324.0	495.6	819.7
08 ABITIBI-TÉMISCAMINGUE	2 413.0	268.9	2 681.9	525.5	410.2	935.8	168.7	5.3	174.0	234.8	18.3	253.1
09 CÔTE-NORD	4 382.2	1.3	4 383.5	2.3	3.5	5.8	38.1	0.0	38.1	18.2	7.6	25.9
10 NORD-DU-QUÉBEC	4 841.9	0.0	4 841.9	306.9	0.3	307.3	0.0	0.0	0.0	0.0	0.0	0.0
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 722.3	28.2	1 750.5	90.8	55.5	146.3	195.5	26.1	221.6	57.4	47.3	104.7
12 CHAUDIÈRE-APPALACHES	139.9	34.0	173.9	5.7	40.8	46.4	692.0	91.8	783.8	137.3	516.7	654.1
13 LAVAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 LANAUDIÈRE	480.3	18.4	498.7	139.5	188.1	327.6	89.6	26.5	116.1	52.0	157.5	209.5
15 LAURENTIDES	632.5	49.5	682.0	103.3	552.9	656.1	169.5	18.4	188.0	172.1	414.5	586.6
16 MONTÉRÉGIE	0.0	0.0	0.0	0.0	0.0	0.0	30.3	36.0	66.3	24.3	295.0	319.4
17 CENTRE-DU-QUÉBEC	5.6	0.5	6.1	0.2	0.5	0.7	190.2	61.3	251.5	32.1	225.3	257.4
<b>TOTAL</b>	<b>26 913.8</b>	<b>840.2</b>	<b>27 754.0</b>	<b>2 453.9</b>	<b>2 794.4</b>	<b>5 248.2</b>	<b>3 962.1</b>	<b>592.4</b>	<b>4 554.5</b>	<b>1 876.3</b>	<b>3 592.5</b>	<b>5 468.8</b>

1 Volume of timber harvested and scaled in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.)

2 Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m<sup>3</sup>), but excluding small volumes of roundwood harvested for export.

# FOREST MANAGEMENT

## Harvest (cont'd)

### VOLUME OF TIMBER HARVESTED IN PUBLIC AND PRIVATE FORESTS (CONT'D)

#### B) BY ADMINISTRATIVE REGION (m<sup>3</sup>, 000s) (CONT'D)

 1999-2000 <sup>1</sup>

05.02.03

ADMINISTRATIVE REGIONS	PUBLIC FORESTS <sup>2</sup>						PRIVATE FORESTS <sup>3</sup>					
	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS
01 BAS-SAINT-LAURENT	1 319.8	43.3	1 363.1	118.6	220.7	339.3	854.1	94.8	948.9	456.6	227.9	684.5
02 SAGUENAY—LAC-SAINT-JEAN	8 112.8	0.5	8 113.3	345.5	282.9	628.4	348.1	0.7	348.7	162.6	53.3	215.9
03 CAPITALE-NATIONALE	822.0	1.3	823.3	24.6	62.3	86.9	401.1	23.6	424.7	106.1	199.6	305.7
04 MAURICIE	2 618.2	30.4	2 648.6	368.4	235.4	603.8	483.5	28.0	511.5	52.7	177.6	230.3
05 ESTRIE	33.8	0.6	34.4	12.7	30.9	43.6	440.9	116.2	557.1	110.9	717.2	828.1
06 MONTRÉAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07 OUTAOUAIS	415.3	384.3	799.6	349.5	654.6	1 004.1	140.6	86.2	226.8	324.3	516.8	841.1
08 ABITIBI-TÉMISCAMINGUE	2 546.4	196.2	2 742.6	374.2	257.8	631.9	66.5	11.0	77.5	290.9	35.7	326.6
09 CÔTE-NORD	4 476.8	18.0	4 494.8	6.8	13.9	20.7	73.2	0.1	73.3	39.3	10.6	49.8
10 NORD-DU-QUÉBEC	5 125.0	0.0	5 125.0	364.9	0.4	365.3	0.0	0.0	0.0	0.0	0.0	0.0
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 572.0	38.9	1 610.9	51.1	28.0	79.1	231.2	15.7	246.9	48.1	39.5	87.6
12 CHAUDIÈRE-APPALACHES	126.4	7.7	134.2	9.3	28.7	38.0	738.3	88.7	827.0	173.7	518.4	692.1
13 LAVAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 LANAUDIÈRE	429.5	14.9	444.4	101.1	158.3	259.4	111.9	33.7	145.6	47.6	141.9	189.5
15 LAURENTIDES	628.2	38.5	666.8	87.9	520.7	608.6	201.3	29.0	230.3	169.4	400.6	570.1
16 MONTÉRÉGIE	0.0	0.0	0.0	0.0	0.0	0.0	31.8	40.7	72.5	25.1	300.5	325.6
17 CENTRE-DU-QUÉBEC	2.1	0.1	2.2	0.1	0.6	0.7	185.3	54.9	240.2	43.7	252.4	296.2
<b>TOTAL</b>	<b>28 228.4</b>	<b>774.7</b>	<b>29 003.1</b>	<b>2 214.7</b>	<b>2 495.2</b>	<b>4 709.9</b>	<b>4 307.6</b>	<b>623.3</b>	<b>4 931.0</b>	<b>2 051.2</b>	<b>3 592.0</b>	<b>5 643.2</b>

<sup>1</sup> Provisional figures

<sup>2</sup> Volume of timber harvested and scaled in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.)

<sup>3</sup> Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m<sup>3</sup>), but excluding small volumes of roundwood harvested for export.

05.02.04

 2000-2001 <sup>1</sup>

ADMINISTRATIVE REGIONS	PUBLIC FORESTS <sup>2</sup>						PRIVATE FORESTS <sup>3</sup>					
	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS
01 BAS-SAINT-LAURENT	n.a. <sup>4</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	752.0	90.5	842.5	491.4	222.1	713.5
02 SAGUENAY—LAC-SAINT-JEAN	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	324.0	1.5	325.5	21.7	42.8	64.5
03 CAPITALE-NATIONALE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	408.0	24.0	432.0	136.5	219.3	355.8
04 MAURICIE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	534.7	30.3	565.0	32.1	163.0	195.1
05 ESTRIE	n.a.	n.a.	n.a.	n.a.	n.a.	n.d.	471.5	74.5	546.0	108.1	624.1	732.2
06 MONTRÉAL	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0	0.0
07 OUTAOUAIS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	195.7	99.8	295.5	294.7	481.1	775.9
08 ABITIBI-TÉMISCAMINGUE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	151.8	2.2	154.0	266.3	21.4	287.8
09 CÔTE-NORD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	50.3	0.0	50.4	18.4	7.1	25.4
10 NORD-DU-QUÉBEC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0	0.0
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	137.9	28.8	166.7	49.5	53.4	102.9
12 CHAUDIÈRE-APPALACHES	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	801.7	85.9	887.6	161.2	496.6	657.8
13 LAVAL	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0	0.0
14 LANAUDIÈRE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	84.0	39.7	123.7	45.9	150.4	196.3
15 LAURENTIDES	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	192.2	26.5	218.8	166.7	359.0	525.7
16 MONTÉRÉGIE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	22.0	45.8	67.8	23.8	297.4	321.1
17 CENTRE-DU-QUÉBEC	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	160.8	54.5	215.3	41.9	210.9	252.9
<b>TOTAL</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>4 286.7</b>	<b>604.1</b>	<b>4 890.8</b>	<b>1 858.3</b>	<b>3 348.6</b>	<b>5 206.9</b>

<sup>1</sup> Provisional figures

<sup>2</sup> Volume of timber harvested and scaled in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.)

<sup>3</sup> Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m<sup>3</sup>), but excluding small volumes of roundwood harvested for export.

<sup>4</sup> Data not available

# FOREST MANAGEMENT

## Forest Dues

MARKET VALUE OF STANDING TIMBER IN PUBLIC FORESTS BY QUALITY AND MEAN PROVINCIAL UNIT RATES,  
1998-1999 TO 2000-2001 (\$/m<sup>3</sup>)

05.03.06

SPECIES GROUP	QUALITY <sup>2</sup>	FISCAL YEAR (PERIOD) <sup>1</sup>														
		1998-1999 <sup>3</sup>					1999-2000					2000-2001				
		1st per.	2nd per.	3rd per.	4th per.	Mean	1st per.	2nd per.	3rd per.	4th per.	Mean	1st per.	2nd per.	3rd per.	4th per.	Mean
FIR, SPRUCE, JACK PINE, LARCH	A (pole)	16.38	16.70	16.59	16.39	16.52	16.97	17.02	17.09	17.05	17.03	16.52	16.76	16.76	16.78	16.71
	B (saw timber, pulpwood)	11.53	11.43	11.63	11.68	11.57	12.53	12.60	13.14	12.44	12.68	12.50	12.37	11.42	10.93	11.81
WHITE PINE	B (saw timber, peeling)	16.54	16.42	16.48	16.62	16.51	16.50	16.50	16.39	16.44	16.46	16.45	16.37	16.39	16.25	16.37
RED PINE	A (pole)	22.90	23.36	23.20	22.93	23.10	23.38	23.45	23.54	23.50	23.47	23.41	23.76	23.76	23.78	23.68
	B (saw timber)	11.79	11.71	11.75	11.85	11.77	11.76	11.76	11.68	11.72	11.73	11.75	11.69	11.70	11.61	11.69
HEMLOCK, CEDAR	B (saw timber)	4.30	4.25	4.31	4.35	4.30	4.36	4.49	4.81	4.43	4.52	4.07	3.98	3.52	3.25	3.71
WHITE AND RED PINE, HEMLOCK, CEDAR	C (pulpwood)	2.60	2.52	2.55	2.43	2.52	1.55	1.55	1.60	1.73	1.61	1.81	1.91	2.01	2.03	1.94
OAK, CHERRY, WALNUT, HICKORY	A (peeling)	54.26	54.37	54.80	56.86	55.07	39.38	39.97	40.74	40.92	40.25	39.91	41.65	42.97	42.67	41.80
	B (saw timber)	44.33	44.43	45.01	44.84	44.65	17.86	17.68	17.11	17.95	17.65	23.61	23.85	24.44	24.17	24.02
	C (saw timber)	9.09	9.11	9.23	9.19	9.16	10.57	10.46	10.12	10.62	10.44	8.80	8.89	9.11	9.01	8.95
YELLOW BIRCH, ASH, BASSWOOD, ELM	A (peeling)	24.73	24.78	24.97	25.91	25.10	26.18	26.57	27.08	27.20	26.76	20.41	21.30	21.97	21.82	21.38
	B (saw timber)	21.18	21.23	21.51	21.43	21.34	12.04	11.92	11.54	12.10	11.90	13.69	13.83	14.17	14.01	13.92
	C (saw timber)	8.06	8.08	8.18	8.15	8.12	7.22	7.15	6.92	7.26	7.14	4.69	4.74	4.85	4.80	4.77
WHITE BIRCH	A (peeling)	13.20	13.23	13.33	13.83	13.40	12.70	12.89	13.14	13.20	12.98	11.75	12.27	12.66	12.57	12.31
	B (saw timber)	9.70	9.72	9.85	9.81	9.77	5.13	5.07	4.91	5.15	5.07	5.99	6.05	6.20	6.13	6.09
	C (saw timber)	3.97	3.98	4.03	4.01	4.00	2.94	2.91	2.82	2.96	2.91	2.46	2.48	2.54	2.52	2.50
MAPLE	B (saw timber)	15.35	15.38	15.58	15.52	15.46	13.95	13.81	13.36	14.02	13.79	18.12	18.74	18.66	19.11	18.66
	C (saw timber)	6.94	6.95	7.04	7.02	6.99	6.66	6.59	6.38	6.69	6.58	4.23	4.38	4.36	4.46	4.36
OTHER HARDWOODS	B (saw timber)	11.09	11.12	11.26	11.22	11.17	5.69	5.64	5.45	5.72	5.63	7.23	7.30	7.48	7.40	7.35
	C (saw timber)	4.10	4.11	4.16	4.14	4.13	3.36	3.33	3.22	3.38	3.32	2.58	2.60	2.67	2.64	2.62
POPLARS	B (saw timber, peeling)	1.94	2.11	2.49	2.16	2.18	5.37	6.94	7.63	6.34	6.57	5.30	5.77	4.41	4.08	4.89
	C (pulpwood)	0.87	1.07	1.48	1.10	1.13	4.34	6.07	6.81	5.39	5.65	5.30	5.77	4.41	4.08	4.89
ALL HARDWOODS EXCEPT POPLARS	D (pulpwood)	2.51	2.46	2.48	2.38	2.46	1.83	1.81	1.88	2.02	1.89	1.79	1.92	2.01	2.05	1.94
ALL SPECIES	All qualities	10.47	10.40	10.60	10.61	10.52	11.35	11.51	12.00	11.36	11.56	11.50	11.44	10.56	10.12	10.90
QUALITY HARDWOODS	All qualities	7.43	7.41	7.51	7.44	7.45	5.21	5.16	5.07	5.33	5.19	5.53	5.70	5.80	5.84	5.85
POPLARS	All qualities	1.26	1.44	1.84	1.48	1.51	4.71	6.38	7.11	5.74	5.98	5.30	5.77	4.41	4.08	4.89

<sup>1</sup> Beginning in 1998-1999: 1st period from April 1 to June 30; 2nd period from July 1 to September 30; 3rd period from October 1 to December 31; 4th period from January 1 to March 31

<sup>2</sup> The letters A, B, C and D correspond to the quality assigned during wood grading based on species, diameter, length and imperfections observed on the trunk and crosscuts.

<sup>3</sup> Since 1997-1998, mean unit rates have been estimated from the volume of timber harvested in each tariff zone during the previous year, for all species groups except FSPL

# FOREST MANAGEMENT

## Seedling Production

### SEEDLING PRODUCTION (000s) BY ADMINISTRATIVE REGION<sup>1</sup> AND PRODUCER CATEGORY

05.05.05

ADMINISTRATIVE REGIONS	PRODUCERS	1997-1998			1998-1999			1999-2000			2000-2001		
		Bareroot	Container	TOTAL	Bareroot	Container	TOTAL	Bareroot	Container	TOTAL	Bareroot	Container	TOTAL
01 BAS-SAINT-LAURENT	FF <sup>2</sup>	10 180	6 886	17 067	10 315	7 154	17 469	10 621	7 032	17 653	8 545	9 941	18 485
	P&FC <sup>3</sup>		14 126	14 126		11 653	11 653		9 993	9 993		10 384	10 384
	<b>TOTAL</b>	<b>10 180</b>	<b>21 012</b>	<b>31 193</b>	<b>10 315</b>	<b>18 807</b>	<b>29 121</b>	<b>10 621</b>	<b>17 025</b>	<b>27 646</b>	<b>8 545</b>	<b>20 325</b>	<b>28 869</b>
02 SAGUENAY—LAC-SAINT-JEAN	FF	2 679	3 594	6 273	2 772	7 438	10 210	2 946	3 586	6 533	3 707	2 729	6 436
	P&FC		11 872	11 872		19 203	19 203		16 080	16 080		22 920	22 920
	<b>TOTAL</b>	<b>2 679</b>	<b>15 466</b>	<b>18 145</b>	<b>2 772</b>	<b>19 203</b>	<b>29 413</b>	<b>2 946</b>	<b>19 203</b>	<b>22 613</b>	<b>3 707</b>	<b>19 203</b>	<b>29 356</b>
03 CAPITALE-NATIONALE	FF												
	P&FC		10 743	10 743		10 519	10 519		9 264	9 264		7 269	7 269
	<b>TOTAL</b>		<b>10 743</b>	<b>10 743</b>		<b>10 519</b>	<b>10 519</b>		<b>9 264</b>	<b>9 264</b>		<b>7 269</b>	<b>7 269</b>
04 MAURICIE ET 17 CENTRE-DU-QUÉBEC	FF	3 605	1 082	4 687	3 534	1 237	4 770	2 614	1 470	4 084	2 160	1 195	3 356
	P&FC		14 810	14 810		27 389	27 389		26 070	26 070		21 171	21 171
	<b>TOTAL</b>	<b>3 605</b>	<b>15 892</b>	<b>19 497</b>	<b>3 534</b>	<b>28 625</b>	<b>32 159</b>	<b>2 614</b>	<b>27 540</b>	<b>30 154</b>	<b>2 160</b>	<b>22 366</b>	<b>24 526</b>
05 ESTRIE	FF												
	P&FC	1 053		1 053									
	<b>TOTAL</b>	<b>1 053</b>		<b>1 053</b>									
07 OUTAOUAIS	FF												
	P&FC		1 441	1 441	2 061	6 021	8 081		8 915	8 915		6 654	6 654
	<b>TOTAL</b>		<b>1 441</b>	<b>1 441</b>	<b>2 061</b>	<b>6 021</b>	<b>8 081</b>		<b>8 915</b>	<b>8 915</b>		<b>6 654</b>	<b>6 654</b>
08 ABITIBI-TÉMISCAMINGUE	FF	1 892	7 750	9 642	2 246	6 838	9 084	1 859	5 564	7 423	1 321	6 776	8 098
	P&FC		16 055	16 055		16 288	16 288		9 851	9 851		12 821	12 821
	<b>TOTAL</b>	<b>1 892</b>	<b>23 805</b>	<b>25 697</b>	<b>2 246</b>	<b>23 126</b>	<b>25 371</b>	<b>1 859</b>	<b>15 415</b>	<b>17 274</b>	<b>1 321</b>	<b>19 597</b>	<b>20 918</b>
09 CÔTE-NORD	FF												
	P&FC		12 498	12 498		8 455	8 455		4 812	4 812		9 260	9 260
	<b>TOTAL</b>		<b>12 498</b>	<b>12 498</b>		<b>8 455</b>	<b>8 455</b>		<b>4 812</b>	<b>4 812</b>		<b>9 260</b>	<b>9 260</b>
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	FF												
	P&FC		6 174	6 174		6 122	6 122		7 263	7 263		5 923	5 923
	<b>TOTAL</b>		<b>6 174</b>	<b>6 174</b>		<b>6 122</b>	<b>6 122</b>		<b>7 263</b>	<b>7 263</b>		<b>5 923</b>	<b>5 923</b>
12 CHAUDIÈRE-APPALACHES	FF												
	P&FC		1 473	1 473		1 840	1 840	1 930	2 233	4 162	2 168	1 733	3 901
	<b>TOTAL</b>		<b>1 473</b>	<b>1 473</b>		<b>1 840</b>	<b>1 840</b>	<b>1 930</b>	<b>2 233</b>	<b>4 162</b>	<b>2 168</b>	<b>1 733</b>	<b>3 901</b>
14 LANAUDIÈRE	FF	2 018	1 364	3 382	2 365	1 672	4 037	2 089	2 835	4 924	2 401	2 685	5 085
	P&FC												
	<b>TOTAL</b>	<b>2 018</b>	<b>1 364</b>	<b>3 382</b>	<b>2 365</b>	<b>1 672</b>	<b>4 037</b>	<b>2 089</b>	<b>2 835</b>	<b>4 924</b>	<b>2 401</b>	<b>2 685</b>	<b>5 085</b>
15 LAURENTIDES	FF												
	P&FC		20 191	20 191		17 072	17 072		18 231	18 231		16 225	16 225
	<b>TOTAL</b>		<b>20 191</b>	<b>20 191</b>		<b>17 072</b>	<b>17 072</b>		<b>18 231</b>	<b>18 231</b>		<b>16 225</b>	<b>16 225</b>
<b>TOTAL</b>	FF	20 374	20 677	41 051	21 231	24 338	45 569	20 129	20 487	40 616	18 134	23 326	41 460
	P&FC	1 053	109 383	110 436	2 061	124 560	126 621	1 930	112 712	114 642	2 168	114 359	116 526
	<b>TOTAL</b>	<b>21 427</b>	<b>130 060</b>	<b>151 487</b>	<b>23 292</b>	<b>148 898</b>	<b>172 190</b>	<b>22 058</b>	<b>133 199</b>	<b>155 257</b>	<b>20 302</b>	<b>137 685</b>	<b>157 987</b>

<sup>1</sup> There is no seedling production in regions 06 (Montréal), 10 (Nord-du-Québec), 13 (Laval) and 16 (Montréal).

<sup>2</sup> FF: Forestry Fund nurseries

<sup>3</sup> P&FC: Private producers and forest companies

# FOREST MANAGEMENT

## Summary of Silvicultural Treatments Carried Out

### A) PUBLIC FORESTS

05.15.01

TREATMENTS	AREA (1997-1998) <sup>1</sup>					AREA (1998-1999) <sup>1</sup>					
	TSFMA <sup>2</sup>		MRN <sup>3</sup>		TOTAL	TSFMA		MRN		TOTAL	
	(ha)	(%)	(ha)	(%)	(ha)	(ha)	(%)	(ha)	(%)	(ha)	
<b>SITE PREPARATION</b>											
1) SCARIFYING	33 564.0	100.0			33 564.0	43 096.0	100.0			43 096.0	
2) CLEARING	3 055.0	100.0			3 055.0	6 834.0	100.0			6 834.0	
3) BRUSHING	169.0	64.0	95.0	36.0	264.0						
4) HARROWING											
5) REMOVAL OF RESIDUAL STEMS	593.0				593.0	2 243.0				2 243.0	
<b>TOTAL</b>	<b>37 381.0</b>	<b>99.7</b>	<b>95.0</b>	<b>0.3</b>	<b>37 476.0</b>	<b>52 173.0</b>	<b>100.0</b>			<b>52 173.0</b>	
<b>REFORESTATION AND SEEDING</b>											
1) PLANTING	(ha)	30 530.0	100.0		30 530.0	26 298.0	100.0			26 298.0	
	(seedlings, millions)	64.5	100.0		64.5	71.4	100.0			71.4	
2) REINFORCEMENT	(ha)	21 323.0	100.0		21 323.0	17 833.0	100.0	4.0	0.0	17 837.0	
	(seedlings, millions)	27.2	100.0		27.2	23.3	100.0			23.3	
3) ENRICHMENT	(ha)	1 431.0	100.0		1 431.0	2 575.0	100.0			2 575.0	
	(seedlings, millions)	0.4	100.0		0.4	0.8	100.0			0.8	
4) REGENERATION OF SBBA <sup>4</sup>	Natural (ha)										
	Artificial (ha)	7 060.0	100.0		7 060.0	21 614.0	100.0			21 614.0	
	(plants, millions)	13.0	100.0		13.0	15.7	100.0			15.7	
5) SEEDING	(ha)	1 730.0	100.0		1 730.0	4 075.0	100.0			4 075.0	
<b>TOTAL</b>	(ha)	<b>62 074.0</b>	<b>100.0</b>		<b>62 074.0</b>	<b>72 395.0</b>	<b>100.0</b>	<b>4.0</b>	<b>0.0</b>	<b>72 399.0</b>	
	(seedlings, millions)	<b>105.2</b>	<b>100.0</b>		<b>105.2</b>	<b>111.1</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>	<b>111.1</b>	
<b>NONCOMMERCIAL TREATMENTS</b>											
1) RELEASE (PLANTATIONS)		13 806.0	92.0	1 205.0	8.0	15 011.0	14 943.0	94.3	901.0	5.7	15 844.0
2) RELEASE (NATURAL REGENERATION)		1 693.0	68.4	783.0	31.6	2 476.0	2 560.0	89.1	313.0	10.9	2 873.0
3) PRE-COMMERCIAL THINNING		67 351.0	93.9	4 367.0	6.1	71 718.0	94 844.0	96.1	3 868.0	3.9	98 712.0
4) PHYTOSANITARY CONTROL									44.0	100.0	44.0
5) FERTILIZATION											0.0
6) DRAINAGE		2 046.0	100.0			2 046.0	2 212.0	100.0			2 212.0
<b>TOTAL</b>		<b>84 896.0</b>	<b>93.0</b>	<b>6 355.0</b>	<b>7.0</b>	<b>91 251.0</b>	<b>114 559.0</b>	<b>95.7</b>	<b>5 126.0</b>	<b>4.3</b>	<b>119 685.0</b>
<b>COMMERCIAL TREATMENTS</b>											
1) CUTTING WITH PROTECTION OF REGENERATION AND SOIL		274 970.0	100.0			274 970.0	232 450.0	100.0			232 450.0
2) SELECTION AND PRE-SELECTION CUTTING		54 345.0	100.0			54 345.0	57 719.0	100.0			57 719.0
3) IMPROVEMENT CUTTING		3 912.0	100.0			3 912.0	4 078.0	100.0			4 078.0
4) SHELTERWOOD CUTTING		4 401.0	100.0			4 401.0	5 903.0	100.0			5 903.0
5) COMMERCIAL THINNING		3 906.0	92.8	304.0	7.2	4 210.0	7 025.0	96.3	268.0	3.7	7 293.0
6) STRIP AND PATCH CUTTING		863.0	100.0			863.0	1 174.0	100.0			1 174.0
7) HARVESTING IN BUFFER STRIPS		609.0	100.0			609.0	503.0	100.0			503.0
8) OTHER METHODS:											
A) CUTTING FOR REFORESTATION		7 060.0	100.0			7 060.0	10 145.0	100.0			10 145.0
B) CLEAR CUTTING	- SBBA	11 492.0	100.0			11 492.0	11 338.0	100.0			11 338.0
	- ROADS	10 648.0	100.0			10 648.0	10 410.0	100.0			10 410.0
C) SALVAGE CUTTING	- SPECIAL PLANS <sup>5</sup>	8 601.0	100.0			8 601.0	1 480.0	100.0			1 480.0
D) OTHER METHODS		7 008.0	98.9	77.0	1.1	7 085.0	20 614.0	99.9	21.0	0.1	20 635.0
<b>SUBTOTAL</b>		<b>44 809.0</b>	<b>99.8</b>	<b>77.0</b>	<b>0.2</b>	<b>44 886.0</b>	<b>53 987.0</b>	<b>100.0</b>	<b>21.0</b>	<b>0.0</b>	<b>54 008.0</b>
9) TREATMENTS CARRIED OUT UNDER THE RESOURCE DEVELOPMENT PROGRAM		6 765.0	100.0			6 765.0	2 778.0	100.0			2 778.0
<b>TOTAL</b>		<b>394 580.0</b>	<b>99.9</b>	<b>381.0</b>	<b>0.1</b>	<b>394 961.0</b>	<b>365 617.0</b>	<b>99.9</b>	<b>289.0</b>	<b>0.1</b>	<b>365 906.0</b>
<b>GRAND TOTAL</b>		<b>578 931.0</b>	<b>98.8</b>	<b>6 831.0</b>	<b>1.2</b>	<b>585 762.0</b>	<b>604 744.0</b>	<b>99.1</b>	<b>5 419.0</b>	<b>0.9</b>	<b>610 163.0</b>

<sup>1</sup> Revised figures

<sup>2</sup> TSFMA: Timber supply and forest management agreement holders

<sup>3</sup> MRN: ministère des Ressources naturelles

<sup>4</sup> SBBA: stacking, branching and bucking area

<sup>5</sup> Areas disturbed by natural disasters, etc.



# FOREST MANAGEMENT

## Summary of Silvicultural Treatments Carried Out (cont'd)

05.15.02

### A) PUBLIC FORESTS (CONT'D)

TREATMENTS	AREA (1999-2000) <sup>1</sup>			AREA (2000-2001) <sup>1</sup>		
	TSFMA <sup>2</sup> (ha)	MRN <sup>3</sup> (%)	TOTAL (ha)	TSFMA (ha)	MRN (%)	TOTAL (ha)
<b>SITE PREPARATION</b>						
1) SCARIFYING	41 934.4	100.0	41 934.4	42 000.0	100.0	42 000.0
2) CLEARING	5 645.4	100.0	5 645.4	5 500.0	100.0	5 500.0
3) BRUSHING	2.2	100.0	2.2			
4) HARROWING						
5) REMOVAL OF RESIDUAL STEMS						
<b>TOTAL</b>	<b>47 582.0</b>	<b>100.0</b>	<b>47 582.0</b>	<b>47 500.0</b>	<b>100.0</b>	<b>47 500.0</b>
<b>REFORESTATION AND SEEDING</b>						
1) PLANTING	(ha)					
	(seedlings, millions)					
	34 853.0	100.0	34 853.0	34 800.0	100.0	34 800.0
	76.3	100.0	76.3	73.0	100.0	73.0
2) REINFORCEMENT	(ha)					
	(seedlings, millions)					
	19 872.0	100.0	19 872.0	20 000.0	100.0	20 000.0
	24.6	100.0	24.6	24.0	100.0	24.0
3) ENRICHMENT	(ha)					
	(seedlings, millions)					
	2 263.0	100.0	2 263.0	2 200.0	100.0	2 200.0
	0.8	100.0	0.8	1.0	100.0	1.0
4) REGENERATION OF SBBA <sup>4</sup>	Natural (ha)					
	Artificial (ha)					
	(plants, millions)					
	10 187.0	100.0	10 187.0	10 200.0	100.0	10 200.0
	6.7	100.0	6.7	7.0	100.0	7.0
5) SEEDING	(ha)					
	1 638.0	100.0	1 638.0	1 600.0	100.0	1 600.0
<b>TOTAL</b>	<b>(ha)</b>	<b>100.0</b>	<b>68 813.0</b>	<b>68 800.0</b>	<b>100.0</b>	<b>68 800.0</b>
	<b>(seedlings, millions)</b>	<b>100.0</b>	<b>108.3</b>	<b>105.0</b>	<b>100.0</b>	<b>105.0</b>
<b>NONCOMMERCIAL TREATMENTS</b>						
1) RELEASE (PLANTATIONS)	17 301.0	100.0	17 301.0	17 000.0	100.0	17 000.0
2) RELEASE (NATURAL REGENERATION)	2 237.0	100.0	2 237.0	2 200.0	100.0	2 200.0
3) PRE-COMMERCIAL THINNING	106 450.0	100.0	106 450.0	107 000.0	100.0	107 000.0
4) PHYTOSANITARY CONTROL						
5) FERTILIZATION						
6) DRAINAGE	2 690.0	100.0	2 690.0	2 500.0	100.0	2 500.0
<b>TOTAL</b>	<b>128 678.0</b>	<b>100.0</b>	<b>128 678.0</b>	<b>128 700.0</b>	<b>100.0</b>	<b>128 700.0</b>
<b>COMMERCIAL TREATMENTS</b>						
1) CUTTING WITH PROTECTION OF REGENERATION AND SOIL	275 000.0	100.0	275 000.0	275 000.0	100.0	275 000.0
2) SELECTION AND PRE-SELECTION CUTTING	46 482.0	100.0	46 482.0	46 500.0	100.0	46 500.0
3) IMPROVEMENT CUTTING	3 684.0	100.0	3 684.0	3 700.0	100.0	3 700.0
4) SHELTERWOOD CUTTING	3 725.0	100.0	3 725.0	3 700.0	100.0	3 700.0
5) COMMERCIAL THINNING	7 363.0	100.0	7 363.0	7 300.0	100.0	7 300.0
6) STRIP AND PATCH CUTTING	598.0	100.0	598.0	600.0	100.0	600.0
7) HARVESTING IN BUFFER STRIPS	500.0	100.0	500.0	500.0	100.0	500.0
8) OTHER METHODS:						
A) CUTTING FOR REFORESTATION	6 410.0	100.0	6 410.0	6 400.0	100.0	6 400.0
B) CLEAR CUTTING						
- SBBA	3 698.0	100.0	3 698.0	3 700.0	100.0	3 700.0
- ROADS	5 445.0	100.0	5 445.0	5 400.0	100.0	5 400.0
C) SALVAGE CUTTING						
- SPECIAL PLANS <sup>5</sup>	8 000.0	100.0	8 000.0	8 000.0	100.0	8 000.0
D) OTHER METHODS	7 406.0	100.0	7 406.0	7 400.0	100.0	7 400.0
<b>SUBTOTAL</b>	<b>30 959.0</b>	<b>100.0</b>	<b>30 959.0</b>	<b>30 900.0</b>	<b>100.0</b>	<b>30 900.0</b>
9) TREATMENTS CARRIED OUT UNDER THE RESOURCE DEVELOPMENT PROGRAM	9 000.0	100.0	9 000.0	9 000.0	100.0	9 000.0
<b>TOTAL</b>	<b>377 311.0</b>	<b>100.0</b>	<b>377 311.0</b>	<b>377 200.0</b>	<b>100.0</b>	<b>377 200.0</b>
<b>GRAND TOTAL</b>	<b>622 384.0</b>	<b>100.0</b>	<b>622 384.0</b>	<b>622 200.0</b>	<b>100.0</b>	<b>622 200.0</b>

<sup>1</sup> Provisional figures (estimated for 2000-2001)

<sup>2</sup> TSFMA: Timber supply and forest management agreement holders

<sup>3</sup> MRN: ministère des Ressources naturelles

<sup>4</sup> SBBA: stacking, branching and bucking area

<sup>5</sup> Areas disturbed by natural disasters, etc.

# FOREST MANAGEMENT

## Summary of Silvicultural Treatments Carried Out (cont'd)

### B) PRIVATE FORESTS

05.15.03

TREATMENTS	SUPERFICIES (1996-1997) <sup>1</sup> (ha)	SUPERFICIES (1997-1998) (ha)	SUPERFICIES (1998-1999) (ha)	SUPERFICIES (1999-2000) <sup>2</sup> (ha)
<b>SITE PREPARATION</b>				
1) SCARIFYING	1 019	1 029	883	953
2) CLEARING	3 191	3 902	3 508	3 671
3) PLOUGHING AND HARROWING	315	264	458	391
4) BRUSHING				
-MECHANICAL	5 127	5 092	6 190	6 156
-CHEMICAL		295	332	382
5) REMOVAL OF RESIDUAL STEMS	581	520	538	451
6) OTHER TREATMENTS	215	143	237	479
<b>TOTAL</b>	<b>10 448</b>	<b>11 245</b>	<b>12 146</b>	<b>12 483</b>
<b>REFORESTATION AND SEEDING</b>				
1) PLANTING	33 766	11 562	11 378	11 461
2) REINFORCEMENT	4 528	3 102	3 068	1 643
3) ENRICHMENT	72	510	65	59
<b>TOTAL</b>	<b>38 366</b>	<b>15 174</b>	<b>14 511</b>	<b>13 163</b>
	(seedlings, millions)	38.4	34.8	33.2
<b>NONCOMMERCIAL TREATMENTS</b>				
1) RELEASE (PLANTATIONS)				
-MECHANICAL	6 328	7 239	9 081	9 342
-CHEMICAL	4 862	4 516	3 975	3 525
2) RELEASE (NATURAL REGENERATION)				
-MECHANICAL	275	209	217	255
-CHEMICAL	14	22	16	7
3) PRE-COMMERCIAL THINNING	5 957	6 314	8 002	8 451
4) PHYTOSANITARY CONTROL	655	358	562	362
5) DRAINAGE	2 406	2 236	2 239	2 148
<b>TOTAL</b>	<b>20 497</b>	<b>20 894</b>	<b>24 092</b>	<b>24 090</b>
<b>COMMERCIAL TREATMENTS</b>				
1) SELECTION CUTTING	1 652	2 042	2 394	2 265
2) SHELTERWOOD CUTTING	376	366	535	461
3) STRIP AND PATCH CUTTING	38	11	27	51
4) COMMERCIAL THINNING	3 587	3 600	4 242	4 106
5) OTHER METHODS	1 070	1 056	1 938	2 605
<b>TOTAL</b>	<b>6 723</b>	<b>7 075</b>	<b>9 136</b>	<b>9 488</b>
<b>GRAND TOTAL</b>	<b>76 034</b>	<b>54 388</b>	<b>59 885</b>	<b>59 224</b>

<sup>1</sup> Revised figures

<sup>2</sup> Estimated figures

# FOREST USE FOR EDUCATIONAL AND RECREATIONAL PURPOSES

## Highlights

06.00.01

### TEACHING AND RESEARCH FORESTS (MARCH 2001)

Teaching and research forests (no.)	16
Area (ha, 000s)	38.7

NOTE: The Duchesnay Forest Station is now under the responsibility of SEPAQ.

### EXPERIMENTAL FORESTS (MARCH 2001)

Permanent (no.)	212
Temporary (no.)	430
<b>TOTAL (no.)</b>	<b>642</b>
Area (ha, 000s)	26.2

### PRINCIPAL WILDLIFE-RELATED ACTIVITIES (1999) <sup>1</sup>

	Participants (no.)	Expenditures (\$, millions)	Jobs (no.)	Value added <sup>2</sup> (\$, millions)
Fishing	1 042 200	1 331.1	9 108	414.8
Hunting	403 600	298.2	3 210	152.0
Outdoor activities	2 325 300	1 227.4	15 127	677.8
Wildlife-related travel	1 198 800	293.4	3 265	157.2

<sup>1</sup> In 1999, nearly 60% of Québec's population, i.e. 3.6 million people, practised one or more activities related directly to nature.

<sup>2</sup> Added value includes purchase of services.

# LOGGING

## Highlights

07.00.01

### ECONOMIC INDICATORS FOR THE QUÉBEC LOGGING INDUSTRY (SIC-C 041) 1 (1999) 2

Total jobs (no.)	10 546
Total salaries and wages (\$, 000s)	285 000
Value of shipments and other receipts (\$, 000s)	2 293 800
Value added <sup>3</sup> to total activity (\$, 000s)	705 700
Capital expenditures and repairs (\$, 000s)	184 900

<sup>1</sup> We have kept Statistics Canada Group 04 (logging industry), because the NIACS 113 data are currently available only for capital and repair expenses.

<sup>2</sup> Estimated figures

<sup>3</sup> Added value includes purchase of services.

# TIMBER USE

## Highlights

08.00.01

### CONSUMPTION OF QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS (2000) (m<sup>3</sup>, 000s)

#### BY SPECIES

• FSPL	58 058
• Other softwoods	2 567
• Poplars	5 494
• Hardwoods	7 602
• <b>TOTAL</b>	<b>73 721</b>

#### BY TYPE OF WOOD MATERIAL

• Roundwood	47 765
• Chips	19 204
• Sawdust, shavings and wood residues	6 752
• <b>TOTAL</b>	<b>73 721</b>

#### BY SOURCE

• Public forests	33 449
• Private forests	9 143
• Exchange between mills	24 805
• Outside Québec	6 324
• <b>TOTAL</b>	<b>73 721</b>

#### BY PRODUCT

• Pulp and paper	25 854
• Saw timber	39 621
• Peelers	365
• Panelboard	5 331
• Other	2 550
• <b>TOTAL</b>	<b>73 721</b>

### PRINCIPAL PRODUCTS OF QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS (2000)

Pulp destined for sale (BDMT)	1 972 593
Paper (BDMT)	6 406 504
Paperboard (BDMT)	1 547 490
Insulation board (mt)	85 812
Particle board (m3)	3 389 365
Veneer (m2)	118 116 228
Shingles (squares)	429 082
Poles (units)	371 776
Mulching material (BDMT)	62 200
Charcoal (mt)	7 114
Saw timber (bd ft, 000s)	8 733 214
Other products (bd ft, 000s) <sup>1</sup>	102 151

<sup>1</sup> Other products: fuel pellets, electricity, turning and shaping, laths, etc.

### FSPL CHIP STOCKS AT QUÉBEC'S SAWMILLS

	(December 1999)	(December 2000)
FSPL chips (BDMT, 000s)	81.1	C.D. <sup>1</sup>

<sup>1</sup> Confidential data

### BARK IN QUÉBEC (2000) (BDMT, 000s)

• Estimated production	3 774
• Use	2 774
• Projects <sup>1</sup>	706

<sup>1</sup> Steam boiler, pyrolysis, electricity generation and cogeneration projects

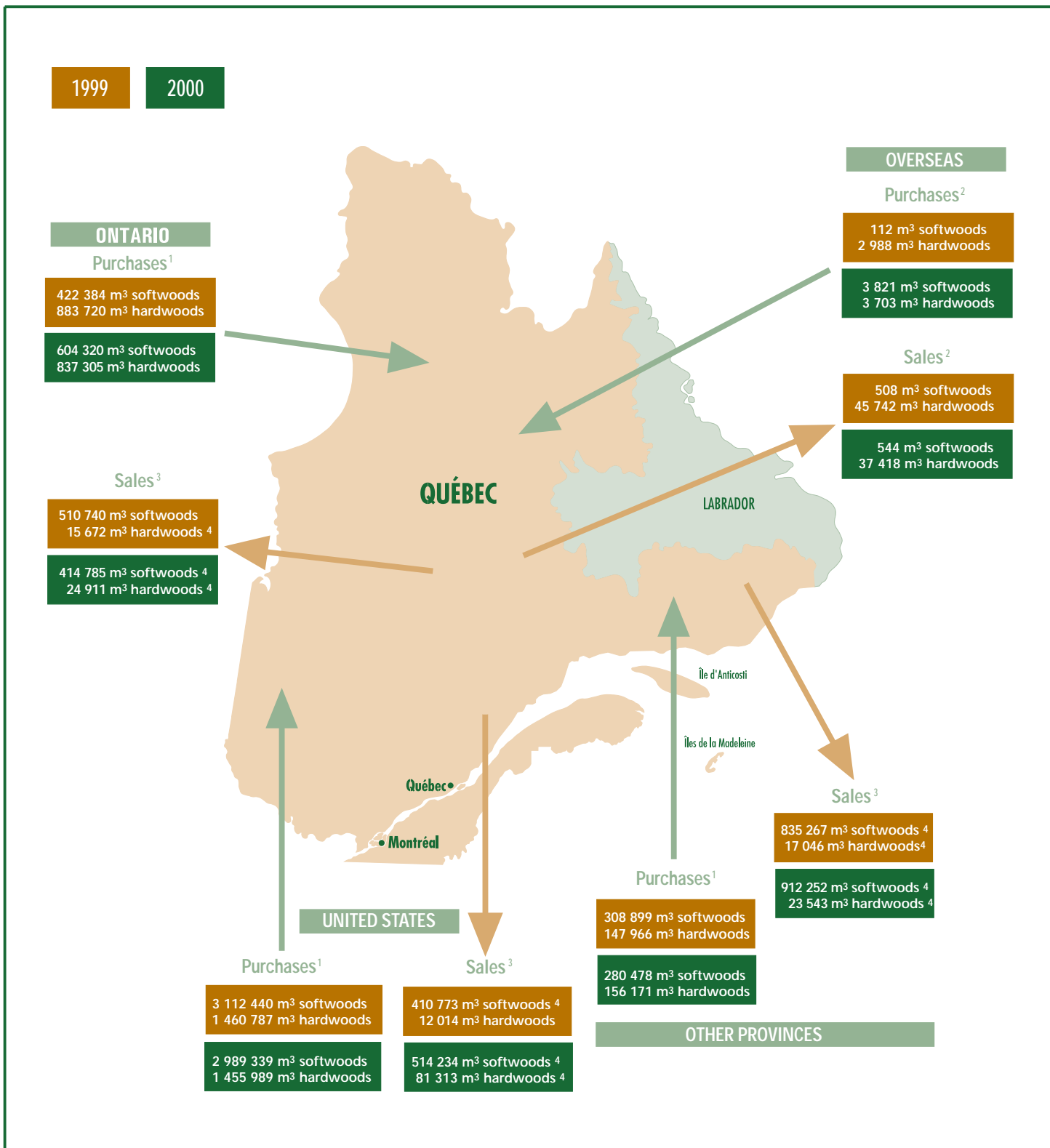
### ROUNDWOOD AND CHIP PURCHASES AND SALES OUTSIDE QUÉBEC (2000) (m<sup>3</sup>, 000s)

REGION OR COUNTRY	PURCHASES	SALES
<b>ONTARIO</b>		
• Softwoods	604.3	414.8
• Hardwoods	837.3	24.9
<b>OTHER PROVINCES</b>		
• Softwoods	280.5	912.3
• Hardwoods	156.2	23.5
<b>UNITED STATES</b>		
• Softwoods	2 989.3	514.2
• Hardwoods	1 456.0	81.3
<b>OVERSEAS</b>		
• Softwoods	3.8	0.5
• Hardwoods	3.7	37.4
<b>TOTAL</b>		
• <b>Softwoods</b>	<b>3 877.9</b>	<b>1 841.8</b>
• <b>Hardwoods</b>	<b>2 453.2</b>	<b>167.1</b>

# TIMBER USE

## ROUNDWOOD AND CHIP PURCHASES AND SALES OUTSIDE QUÉBEC IN 1999 AND 2000

08.05.01



1 Figures from the Forestry Register

2 Figures from the Institut de la statistique du Québec

3 Figures from other sources.

4 Figures include sales of timber from private forests listed in the marketing reports of Québec's syndicates and wood marketing boards.

# WOOD INDUSTRIES

## Highlights

09.00.01

### QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS (2000)

Lumber	1 144
Pulp and paper <sup>1</sup>	39
Veneer and plywood	15
Particle board	11
Wood turning and shaping	11
Energy production and cogeneration <sup>2</sup>	16
Other	1
<b>TOTAL</b>	<b>1 237</b>

<sup>1</sup> The remaining 23 pulp, paper and paperboard mills do not consume round-wood, chips, sawdust or shavings.

<sup>2</sup> Mills producing electricity, pellets and fuel chips.

Source: Forestry Register, ministère des Ressources naturelles

### ESTABLISHMENTS BY WOOD PROCESSING GROUP (SIC-C) (1998) <sup>1</sup>

Wood	1 056
Wooden furniture	220 <sup>1</sup>
Paper and related products	210 <sup>1</sup>
<b>TOTAL</b>	<b>1 486</b>

<sup>1</sup> Estimated data

Source: Statistics Canada: 31-203, based on the former Canadian SIC

### ECONOMIC INDICATORS FOR QUÉBEC'S WOOD PRODUCTS INDUSTRY <sup>1</sup> (1998)

Jobs (no.)	34 497
Salaries and wages (\$, 000s)	1 068 156
Value of shipments and other revenue (\$, 000s)	7 019 462
Value added <sup>2</sup> to total activity (\$, 000s)	2 732 133
Capital and repair expenditures (\$, 000s)	549 200

<sup>1</sup> According to NIACS 321 (wood products manufacturing industry), Statistics Canada

<sup>2</sup> Including purchase of services

### QUÉBEC'S LUMBER PRODUCTION (m<sup>3</sup>, 000s)

1998	• Softwoods	16 248
	• Hardwoods	511
1999	• Softwoods	17 379
	• Hardwoods	566
2000	• Softwoods	17 078
	• Hardwoods	562

### SOURCE OF WOOD USED BY QUÉBEC'S SAWMILLS (2000) <sup>1</sup> (m<sup>3</sup>, 000s)

Public forests	29 130.4
Private forests	5 948.1
Other mills	159.6
Outside Québec	4 383.5
<b>TOTAL</b>	<b>39 621.6</b>

<sup>1</sup> Provisional data

### JOINT PRODUCTION OF QUÉBEC'S SAWMILLS (2000) <sup>1</sup> (BDMT, 000s)

Chips	7 747
Sawdust and shavings	2 383
Bark	3 044
<b>TOTAL</b>	<b>13 174</b>

<sup>1</sup> Provisional data

### QUÉBEC'S LUMBER SHIPMENTS (2000) <sup>1</sup> (m<sup>3</sup>, 000s)

Softwoods	16 952.8
Hardwoods	1 982.7
<b>TOTAL</b>	<b>18 935.5</b>

<sup>1</sup> Provisional data

### DESTINATION OF QUÉBEC'S LUMBER SHIPMENTS (2000) <sup>1</sup> (%)

	Softwoods	Hardwoods
Canada	51.0	59.0
United States	48.5	30.1
Overseas	0.5	10.9
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>

<sup>1</sup> Provisional data

### ECONOMIC INDICATORS FOR QUÉBEC'S SAWMILL AND WOOD PRESERVATION INDUSTRIES (NIACS 32111) (1998)

Jobs (no.)	18 301
Salaries and wages (\$, 000s)	615 655
Value of shipments and other revenue (\$, 000s)	4 162 223
Value added <sup>1</sup> to total activity (\$, 000s)	1 524 048
Capital and repair expenditures (\$, 000s)	346 600

<sup>1</sup> Including purchase of services

# WOOD INDUSTRIES

## Highlights (cont'd)

09.00.01

### ECONOMIC INDICATORS OF QUÉBEC'S SAWMILLS, EXCLUDING SHINGLE MILLS (NIACS 321111) (1998)

Jobs (no.)	17 598
Salaries and wages (\$, 000s)	594 456
Value of shipments and other revenue (\$, 000s)	4 015 856
Value added <sup>1</sup> to total activity (\$, 000s)	1 473 803
Capital and repair expenditures (\$, 000s)	N.a. <sup>2</sup>

<sup>1</sup> Including purchase of services  
<sup>2</sup> N.a.: not available

### VOLUME AND VALUE OF QUÉBEC'S LUMBER EXPORTS BY DESTINATION (2000)

	Volume (m <sup>3</sup> , 000s)	Value (\$, millions)
United States	9 783.1	2 043.8
Europe	234.8	207.9
Middle East and Africa	19.6	15.9
Asia and Oceania	26.1	26.2
Central and South America	8.1	2.4
<b>TOTAL</b>	<b>10 071.7</b>	<b>2 296.2</b>

### ECONOMIC INDICATORS FOR QUÉBEC'S WAFERBOARD INDUSTRY (NIACS 321217) <sup>1</sup> (1998)

Jobs (no.)	760
Salaries and wages (\$, 000s)	37 444
Value of shipments and other revenue (\$, 000s)	360 071
Value added <sup>2</sup> to total activity (\$, 000s)	190 878

<sup>1</sup> NIACS 321217 corresponds to the oriented strand board (OSB) industry.  
<sup>2</sup> Including purchase of services

### QUÉBEC'S BALANCE OF TRADE <sup>1</sup> IN THE WOOD PRODUCTS SECTOR <sup>2</sup> (\$, millions)

Wood, charcoal and wood products	Exports	Imports	Balance of Trade
1999	4 549.9	699.7	3 850.2
2000	4 309.2	782.7	3 526.5

<sup>1</sup> Based on Customs figures  
<sup>2</sup> Product descriptors consistent with the Harmonized Commodity Description and Coding System (World Customs Organization)

### ECONOMIC INDICATORS FOR QUÉBEC'S VENEER, PLYWOOD AND RECONSTITUTED WOOD INDUSTRY (NIACS 3212) <sup>1</sup> (1998)

Jobs (no.)	5 127
Salaries and wages (\$, 000s)	181 048
Value of shipments and other revenue (\$, 000s)	1 348 443
Value added <sup>2</sup> to total activity (\$, 000s)	569 596
Capital and repair expenditures (\$, 000s)	112 600

<sup>1</sup> According to NIACS 3212, which is a subdivision of Statistics Canada group 321 (wood products manufacturing industry)  
<sup>2</sup> Including purchase of services

### ECONOMIC INDICATORS FOR QUÉBEC'S PARTICLE BOARD INDUSTRY

	1999	2000
Jobs (no.)	2 072	2 276
Mills (no.)	13	13
Production capacity (m <sup>3</sup> , 000s/year)	4 073	4 705
Capital and repair expenditures (\$, 000s)	180 000 <sup>1</sup>	N.a. <sup>2</sup>

<sup>1</sup> Estimates  
<sup>2</sup> N.a.: not available

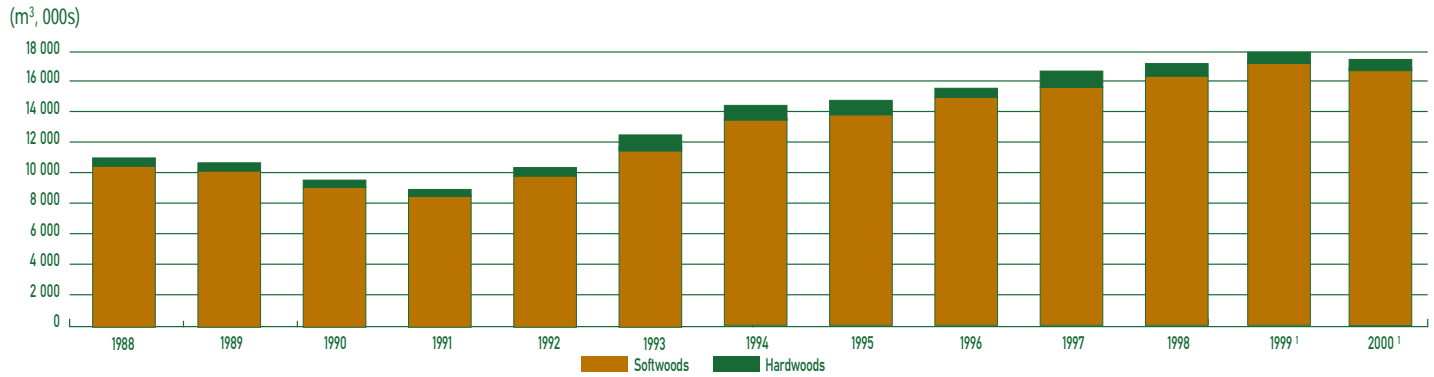


# WOOD INDUSTRIES

## Overview

### TIMBER PRODUCTION IN QUÉBEC (SOFTWOODS AND HARDWOODS)

09.01.08



<sup>1</sup> Preliminary figures

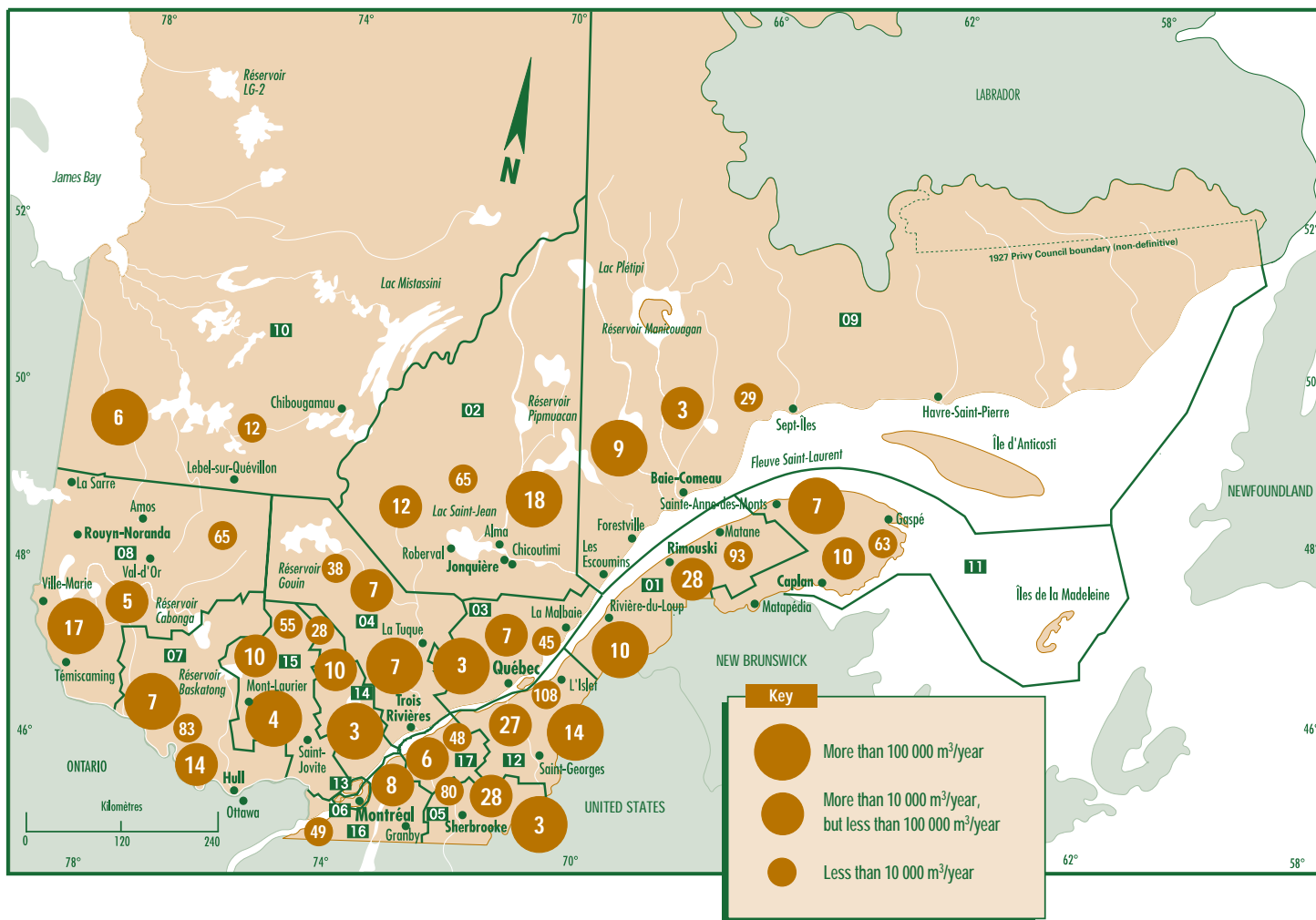
Sources: Statistics Canada: 35-002 (1987 to 1995) and 35-003

# WOOD INDUSTRIES

## The Sawmill Industry

SAWMILLS BY SIZE (2000) <sup>1</sup>

09.02.01



<sup>1</sup> Mill size based on authorized consumption volumes

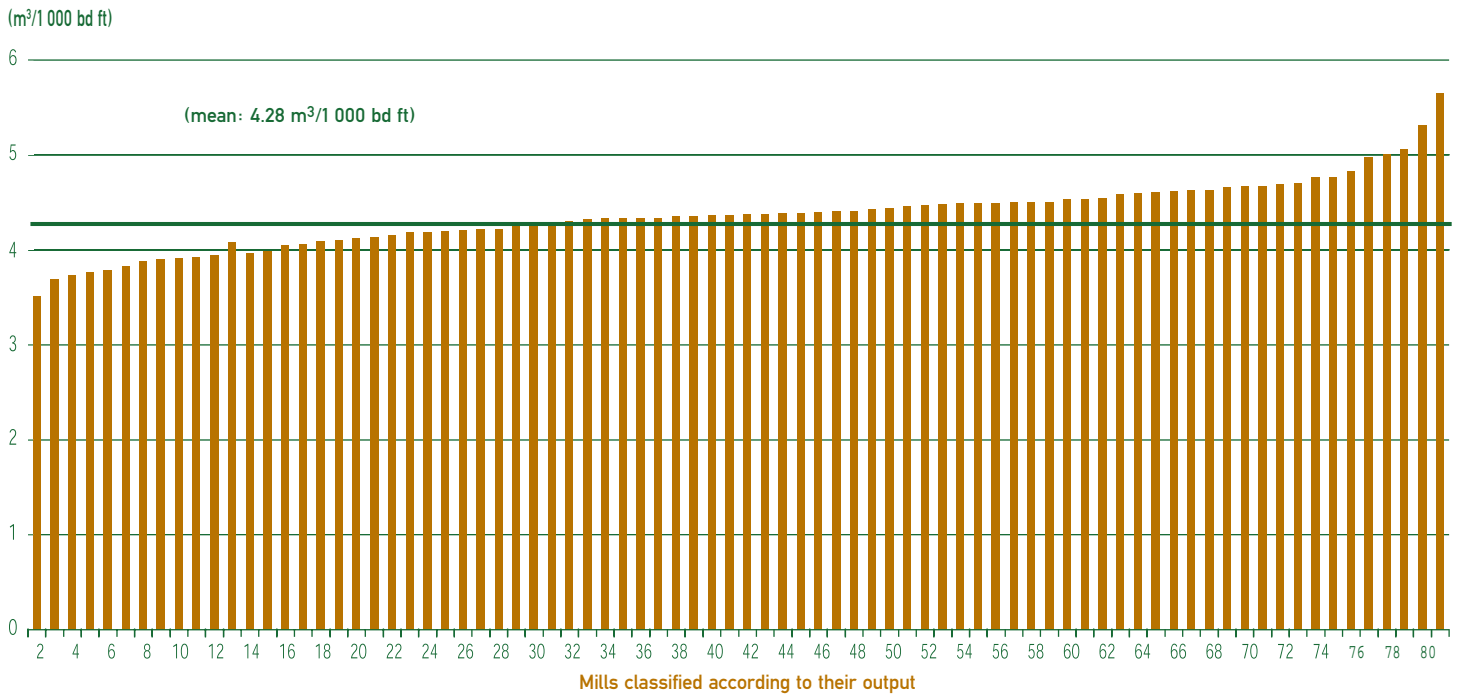
Source: Ministère des Ressources naturelles, Direction du développement de l'industrie des produits forestiers (compiled in-house)

# WOOD INDUSTRIES

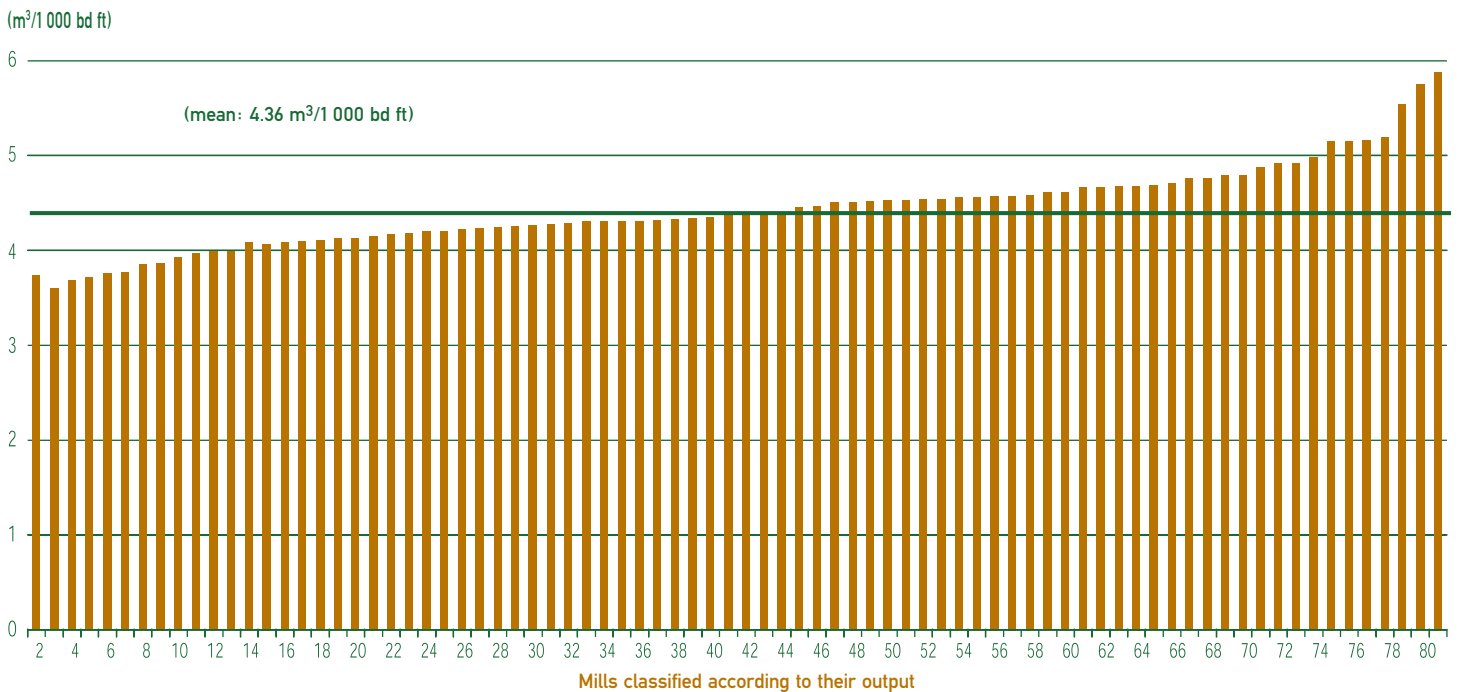
## The Sawmill Industry (cont'd)

SAWMILL OUTPUT (FIR, SPRUCE, JACK PINE, LARCH) (1999) (TSFMA HOLDERS) <sup>1</sup>

09.02.06



SAWMILL OUTPUT (FIR, SPRUCE, JACK PINE, LARCH) (2000) (TSFMA HOLDERS) <sup>1</sup>



<sup>1</sup> TSFMA: timber supply and forest management agreement

# THE PULP AND PAPER INDUSTRY

## Highlights

10.00.01

### QUÉBEC'S PULP, PAPER AND PAPERBOARD MILLS (JUNE 2001)

Mills consuming roundwood, chips, sawdust and shavings (primary processing mills)	40
Mills consuming marketed pulp and recycled fibres	23
<b>TOTAL</b>	<b>63</b>

### QUÉBEC'S PULP, PAPER AND PAPERBOARD MILLS AND PRODUCTION CAPACITY (JUNE 2000) <sup>1</sup>

	Mills (no.)	Production capacity (000 mt/year)
Pulp destined for sale	11	2 338.5
Newsprint (mechanical, supercalandered, etc.)	21	6 014.9
Cardboard packaging and other cardboard	11	1 639.9
Low-density board	2	99.8
Fine and specialty paper	7	975.6
Construction paperboard	2	101.2
Kraft papers (packing, carbon)	2	110.2
Sanitary tissue	7	567.3
<b>TOTAL</b>	<b>63</b>	<b>11 847.4</b>

<sup>1</sup> Classification by main product

### MAIN TIMBER SUPPLY SOURCES FOR QUÉBEC'S PULP AND PAPER INDUSTRY (2000) <sup>1</sup> (m<sup>3</sup>, 000s)

Roundwood and chips (public forests)	1 665.2
Roundwood and chips (private forests)	2 339.0
Roundwood, chips, sawdust and shavings from Québec's mills	20 238.1
Roundwood, chips, sawdust and shavings from outside Québec	1 618.3
<b>TOTAL</b>	<b>25 860.6</b>

<sup>1</sup> Preliminary figures

### RAW MATERIALS USED IN QUÉBEC'S PULP AND PAPER MILLS (2000) <sup>1</sup> (BDMT, 000s)

Roundwood	1 994
Joint sawmill production	8 725
Recycled fibres and commercial pulp	2 621
<b>TOTAL</b>	<b>13 340</b>

<sup>1</sup> Preliminary figures

### RECYCLED FIBRE FROM PAPER AND BOARD RECYCLED BY QUÉBEC'S PULP AND PAPER INDUSTRY (2000) <sup>1</sup> (BDMT, 000s)

Recovered paper for de-inking	822.4
Recovered paperboard for de-inking	201.8
Recovered paper, without de-inking	317.9
Recovered paperboard, without de-inking	393.5
<b>TOTAL</b>	<b>1 735.6</b>

<sup>1</sup> Preliminary figures

# THE PULP AND PAPER INDUSTRY

## Highlights (cont'd)

10.00.01

### TYPES OF PULP PRODUCED BY QUÉBEC'S PULP AND PAPER INDUSTRY (mt, 000s)

	1999	2000
Thermomechanical pulp	3 060	3 305
Chemi-thermomechanical pulp	1 223	1 193
Other mechanical pulp	607	610
<b>Subtotal</b>	<b>4 890</b>	<b>5 108</b>
Sulphate pulp (Kraft)	2 227	2 261
Other mechanical pulp	395	393
<b>Subtotal</b>	<b>2 622</b>	<b>2 654</b>
<b>TOTAL</b>	<b>7 512</b>	<b>7 762</b>

### QUÉBEC'S PAPER AND PAPERBOARD PRODUCTION (mt, 000s)

	1999	2000
Newsprint	4 007	3 848
Specialty printing and writing papers	2 473	2 746
Sanitary tissue	348	341
Paperboard	1 567	1 504
Other products	101	100
<b>TOTAL</b>	<b>8 496</b>	<b>8 539</b>

### QUÉBEC'S SHARE OF CANADIAN PAPER AND PAPERBOARD PRODUCTION (mt, 000s)

	1999		2000	
	Newsprint	Other paper and paperboard	Newsprint	Other paper and paperboard
Québec	4 007	4 476	3 848	4 692
Canada	9 204	10 994	9 222	11 461
<b>Québec / Canada (%)</b>	<b>43,5</b>	<b>40,7</b>	<b>41,7</b>	<b>40,9</b>

### ECONOMIC INDICATORS FOR QUÉBEC'S PAPER PRODUCTS INDUSTRY 1 (1998)

Jobs (no.)	34 029
Salaries and wages (\$, 000s)	1 726 325
Value of shipments and other revenue (\$, 000s)	10 861 591
Value added <sup>2</sup> to total activity (\$, 000s)	5 072 113
Capital and repair expenditures (\$, 000s)	1 384 000

<sup>1</sup> According to NIACS 322 (paper products industry), Statistics Canada

<sup>2</sup> Including purchase of services

### ECONOMIC INDICATORS FOR QUÉBEC'S PULP, PAPER AND BOARD INDUSTRY 1 (1998)

Jobs (no.)	20 723
Salaries and wages (\$, 000s)	1 203 999
Value of shipments and other revenue (\$, 000s)	7 858 054
Value added <sup>2</sup> to total activity (\$, 000s)	3 865 425
Capital and repair expenditures (\$, 000s) <sup>3</sup>	1 212 200

<sup>1</sup> According to NIACS 3221, which is a subdivision of Statistics Canada group 322 (paper products industry)

<sup>2</sup> Including purchase of services

<sup>3</sup> Estimate

# THE PULP AND PAPER INDUSTRY

## Highlights (cont'd)

10.00.01

### DESTINATION OF QUÉBEC'S PULP AND PAPER SHIPMENTS (1999) (mt, 000s)

	Canada	United States	Other countries	TOTAL
Newsprint	545	2 560	903	4 008
Pulp destined for sale	327	561	687	1 575
Other paper and paperboard	1 474	2 804	206	4 484
<b>TOTAL</b>	<b>2 346</b>	<b>5 925</b>	<b>1 796</b>	<b>10 067</b>

### DESTINATION OF QUÉBEC'S PULP AND PAPER SHIPMENTS (2000) (mt, 000s)

	Canada	United States	Other countries	TOTAL
Newsprint	518	2 468	874	3 860
Pulp destined for sale	301	569	768	1 638
Other paper and paperboard	1 471	3 020	187	4 678
<b>TOTAL</b>	<b>2 290</b>	<b>6 057</b>	<b>1 829</b>	<b>10 176</b>

### RELATIVE SHARE OF QUÉBEC'S PULP AND PAPER EXPORTS (\$, millions)

	1999	2000
Pulp and paper exports	6 975	7 927
Total exports	61 988	74 152
<b>Relative share (%)</b>	<b>11.3</b>	<b>10.7</b>

### SHARE OF QUÉBEC'S NEWSPRINT EXPORTS ON US MARKET (mt, 000s)

	1999	2000 <sup>1</sup>
Québec's shipments to the United States	2 560	2 468
US newsprint consumption	11 367	11 852
<b>Relative share (%)</b>	<b>22.5</b>	<b>20.8</b>

<sup>1</sup> Preliminary figures

### QUÉBEC'S BALANCE OF TRADE<sup>1</sup> IN THE PULP AND PAPER SECTOR (2000)<sup>2</sup> (\$, millions)

	Exports	Imports	Balance of trade
Woodpulp or pulp derived from other cellulosic fibrous material; paper or paperboard for recycling (waste and residues)	1 112.2	218.9	893.3
Paper and paperboard; cellulose products, in paper or paperboard	6 815.1	910.9	5 904.2
<b>TOTAL</b>	<b>7 927.3</b>	<b>1 129.8</b>	<b>6 797.5</b>

<sup>1</sup> Based on customs figures

<sup>2</sup> Product descriptors consistent with the Harmonized Commodity Description and Coding System (World Customs Organization)

### ENVIRONMENTAL PROTECTION

	1981	2000 <sup>1</sup>	2000 / 1981
Total suspended solids in mill effluent (kg/tonne of pulp produced)	26.0	2.7	-90 %
Biochemical oxygen demand in mill effluent (kg/tonne of pulp produced)	59.1	1.7	-97 %
Water consumption by mills (m <sup>3</sup> /tonne of pulp produced)	121.0	56.0	-54 %

<sup>1</sup> Estimates

### INVESTMENTS BY PAPERMILLS TO CLEAN UP ATMOSPHERIC EMISSIONS (1999)

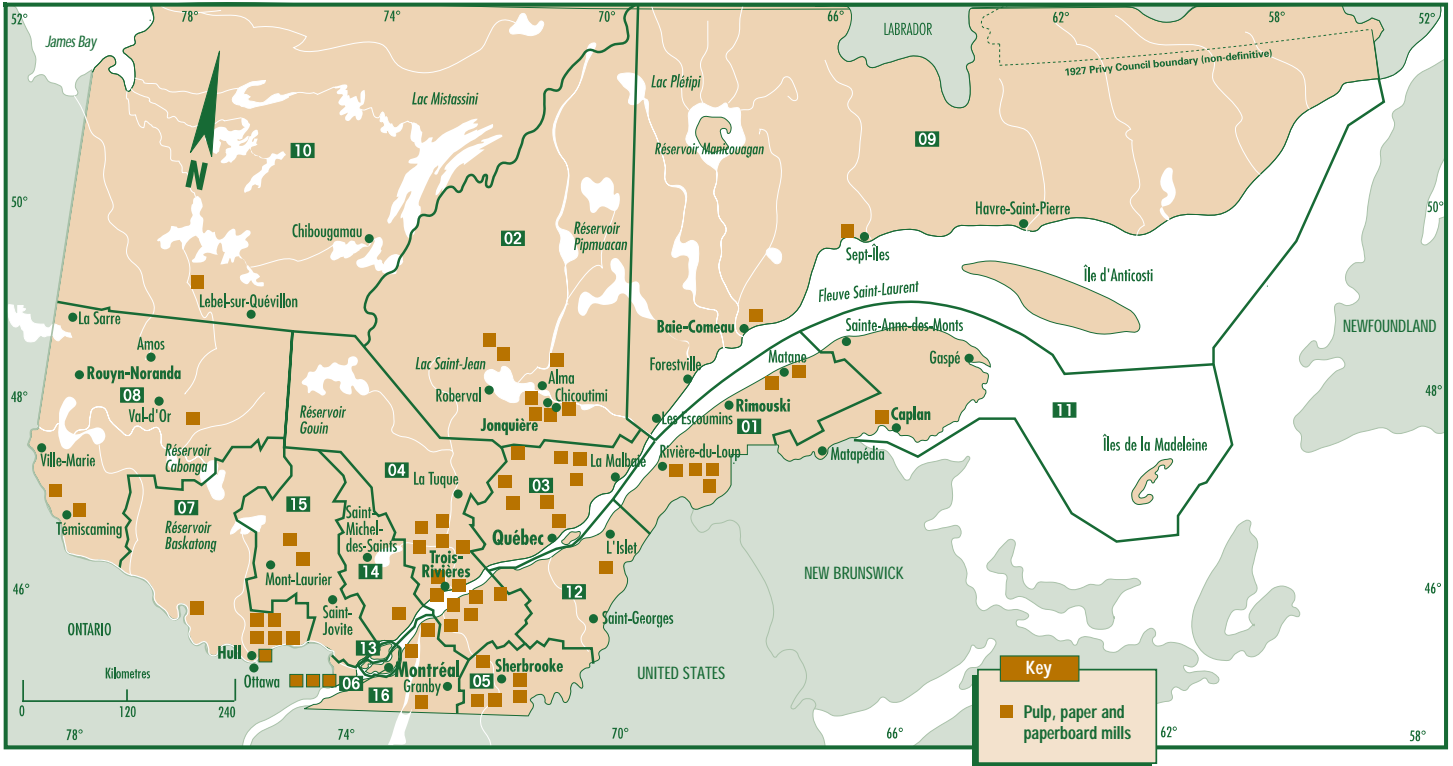
Québec investments (\$, 000s)	15 467
Canadian investments (\$, 000s)	47 058
<b>Québec/Canada (%)</b>	<b>32.9</b>

# THE PULP AND PAPER INDUSTRY

## Production Capacity

PULP, PAPER AND PAPERBOARD MILLS (JUNE 2001)

10.01.01

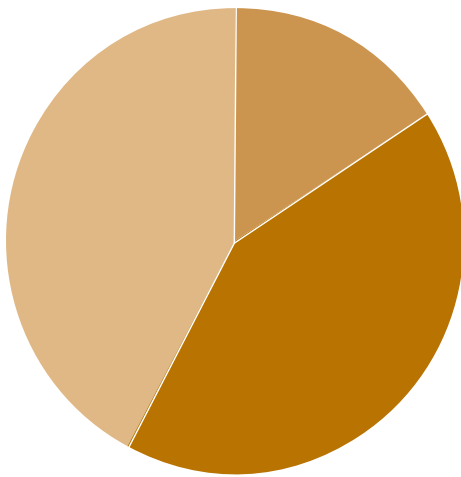


# THE PULP AND PAPER INDUSTRY

## Production

### BREAKDOWN OF PRODUCTION BY PRODUCT

10.02.05



Production (%)			Products	Production (mt. 000s)		
1998	1999	2000 <sup>1</sup>		1998	1999	2000 <sup>1</sup>
40	40	38	Newsprint	3 812	4 007	3 848
15	16	16	Pulp destined for sale	1 459	1 600	1 666
44	44	46	Paper and paperboard other than newsprint	4 215	4 476	4 692
100	100	100	TOTAL	9 486	10 084	10 206

<sup>1</sup> Preliminary figures

Source: Association des industries forestières du Québec (AIFO)



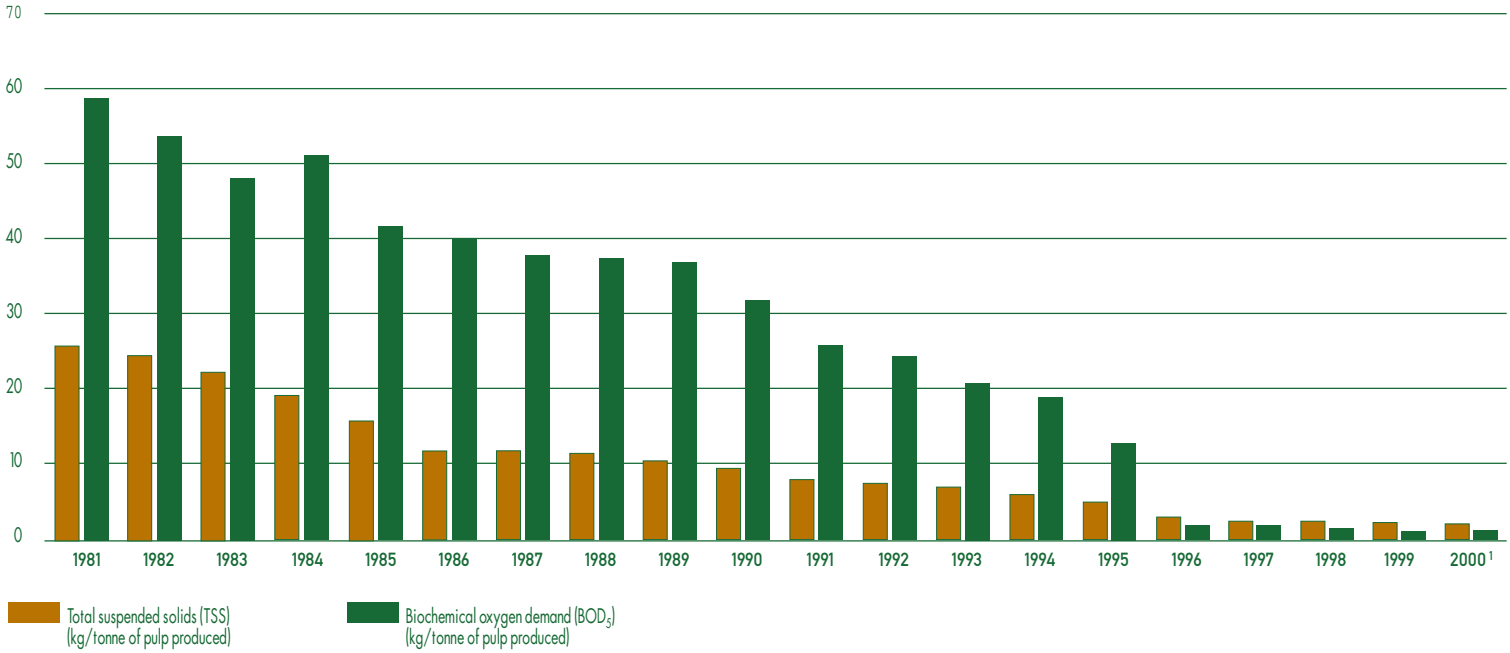
# THE PULP AND PAPER INDUSTRY

## Environment

### TRENDS IN THE QUALITY OF EFFLUENTS FROM QUÉBEC'S PULP AND PAPER MILLS

10.06.02

(kg/tonne of pulp produced)



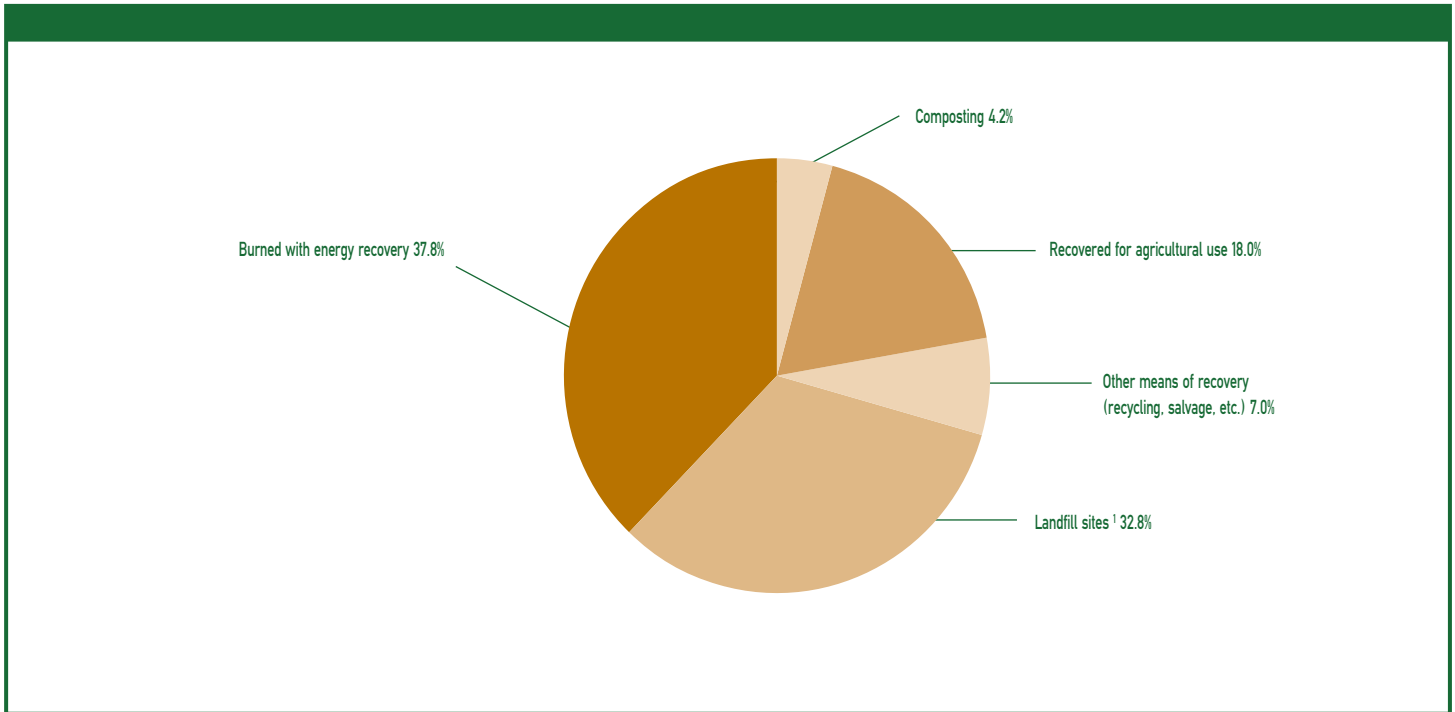
<sup>1</sup> As forecast by the ministère de l'Environnement et de la Faune

# THE PULP AND PAPER INDUSTRY

## Environment (cont'd)

WHERE DID QUÉBEC'S PAPER MILL WASTE GO IN 1999?

10.06.05



<sup>1</sup> Including sites set aside for production waste or solid waste landfill sites  
 Source: Association des industries forestières du Québec (AIFQ)

# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

## Highlights

11.00.01

### ECONOMIC INDICATORS FOR QUÉBEC'S FOREST PRODUCTS INDUSTRY (1998)

	Total jobs	Total salaries and wages	Value of shipments and other revenue	Value added 1 to total activity
	(no.)	(\$, 000s)	(\$, 000s)	(\$, 000s)
Logging (SIC 041) <sup>2</sup>	12 142	357 000	2 348 200	705 700
Wood products industry (NIACS 321)	34 497	1 068 156	7 019 462	2 732 133
Paper products industry (NIACS 322)	34 029	1 726 325	10 861 591	5 072 113
<b>TOTAL (forest sector)</b>	<b>80 668</b>	<b>3 151 481</b>	<b>20 229 253</b>	<b>8 509 946</b>
Overall manufacturing activity in Québec	505 266	17 993 435	118 980 507	48 651 002

1 Including purchase of services

2 Estimates

### ECONOMIC IMPORTANCE OF QUÉBEC'S FOREST PRODUCT EXPORTS (\$, millions)

	1999	2000
Raw wood, sawn wood and lumber	4 549.9	4 309.2
Pulp, paper and paperboard	6 975.1	7 927.3
<b>TOTAL (forest sector)</b>	<b>11 525.0</b>	<b>12 236.5</b>

### GROSS DOMESTIC PRODUCT (GDP) <sup>1</sup> AT FACTOR COST BY ECONOMIC ACTIVITY (2000) <sup>2</sup>

	(\$, millions)	(% of GDP)
Logging and forestry services	882.0	0.5
Wood industry	1 934.2	1.2
Paper industry	2 126.0	1.3
<b>TOTAL for forest products</b>	<b>4 942.2</b>	<b>3.0</b>
Economy as a whole	165 450.1	100.0

1 GDP by sector of activity measures the added value of each industrial sector, i.e. production value less intermediate consumption value

2 In 1992 dollars (including purchase of services)

### VALUE OF QUÉBEC'S SHIPMENTS, PRINCIPAL FOREST PRODUCTS (\$, millions)

	1999	2000
Saw timber and planing mills	4 317	4 186
Veneer and plywood	360	385
Oriented strand board (OSB)	500	419
Wooden doors and windows	454	537
Wooden boxes and pallets	134	139
Coffins	73	68
Lumber	720	785
Pulp	1 134	1 479
Newsprint	4 093	4 658
Paperboard	1 103	1 237
Cardboard boxes and paper bags	1 253	1 432

### CONSTRUCTION STARTS IN CANADA AND THE UNITED STATES (no. of units)

	1999	2000
Canada	148 608	154 600
United States	1 647 250	1 574 833

# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

## Highlights (cont'd)

11.00.01

### QUÉBEC'S BALANCE OF TRADE <sup>1</sup> IN THE FOREST PRODUCTS SECTOR AND FOR ALL PRODUCTS, 2000 <sup>2</sup> (\$, millions)

	Imports	Exports	Balance of trade
Wood, charcoal and wood products	782.7	4 309.2	3 526.5
Pulp, paper and paperboard	1 129.8	7 927.3	6 797.5
<b>TOTAL (forest products sector)</b>	<b>1 912.5</b>	<b>12 236.5</b>	<b>10 324.0</b>
All products	69 134.1	74 152.1	5 018.0

<sup>1</sup> Based on customs figures, according to the Standard Classification of Goods

<sup>2</sup> Product descriptors consistent with the Harmonized Commodity Description and Coding System (World Customs Organization)

### FINANCIAL INDICATORS

	1999	2000
Average exchange rate (C\$/US\$)	1.486	1.485
Average exchange rate (C\$/£)	2.404	2.250
Average exchange rate (C\$/DM)	0.810	0.701
Average exchange rate (C\$/¥)	0.013	0.014
Average discount rate		
• Canada (%)	4.94	5.77
• United States (%)	4.60	5.77
Average prime rate		
• Canada (%)	6.44	7.27
• United States (%)	7.98	9.27
Stock market index (paper and forest product market prices, Toronto Exchange)	5 237	4 828

### AVERAGE PRICE OF PRINCIPAL FOREST PRODUCTS

	1999	2000
Softwood lumber, Toronto green (composite price) (C\$/1 000 bd ft)	378.6	329.0
Softwood lumber, Columbus dry (composite price) (C\$/1 000 bd ft)	552.2	457.2
Hardwood lumber, Montreal Exchange (weighted price) (C\$/1 000 bd ft)	644.1	700.9
Plywood (12.5 mm) (C\$/1 000 sq. ft.)	566.0	475.0
Waferboard 7/16" (C\$/1 000 sq. ft.)	383.0	302.0
Bleached softwood pulp (US\$/mt)	554.0	685.0
Bleached hardwood pulp (US\$/mt)	524.0	660.0
Newsprint (US\$/mt)	500.0	574.0

### ESTIMATED REVENUE FROM WOOD CHIPS IN QUÉBEC (C\$/1 000 bd ft) <sup>1</sup>

	1999	2000
	91.0	104.0

<sup>1</sup> Estimated revenue for every 1 000 bd ft produced

### PROFITS MADE BY CANADA'S FOREST PRODUCTS INDUSTRY, 2000

Profits (\$, millions)	938
Profits/sales (%)	5.3

### SHARE OF PAPER MILL-INTEGRATED SAWMILLS IN AUTHORIZED ROUNDWOOD CONSUMPTION

1987	28.9% of total consumption
2000	54.3% of total consumption

### BUDGET ALLOCATED TO THE SECTEUR DES FORÊTS AND THE SECTEUR DES SERVICES RÉGIONAUX, MRN <sup>1</sup>, 2000-2001 <sup>2</sup> (\$, 000s)

Research and development	17 112.3
Forestry policies and programs	55 573.0
Forest management planning and monitoring	113 019.0
Seedling production	38 455.0
Internal management and support	1 088.0
Forestry loans	827.0
<b>TOTAL</b>	<b>226 074.3</b>

<sup>1</sup> Ministère des Ressources naturelles

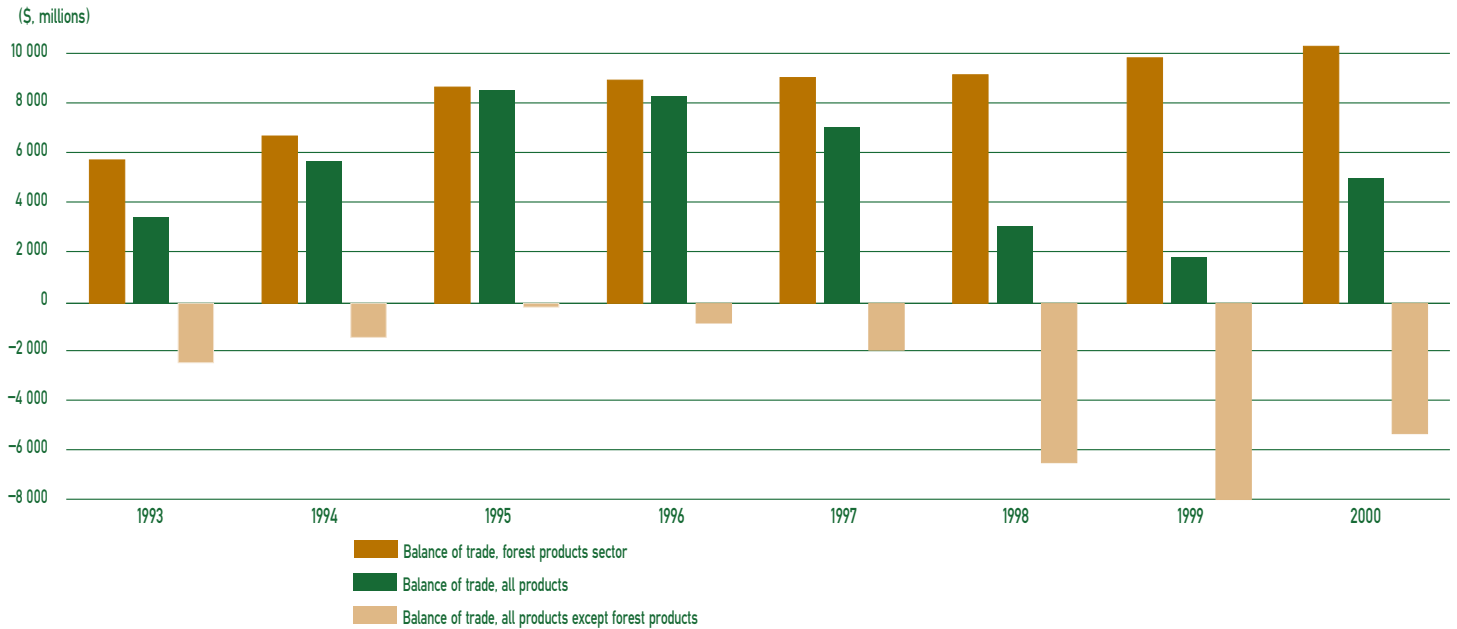
<sup>2</sup> Including Forestry Fund (financed jointly by the MRN and the industry)

# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

## Economic and Financial Indicators Economic Indicators for the Forest Sector

11.01.13

QUÉBEC'S BALANCE OF TRADE <sup>1</sup> IN THE FOREST PRODUCTS SECTOR AND FOR ALL PRODUCTS <sup>2</sup>



<sup>1</sup> Based on customs figures

<sup>2</sup> Descriptors consistent with the Harmonized Commodity Description and Coding System (World Customs Organization)

Source: Institut de la statistique du Québec, according to the Standard Classification of Goods

# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

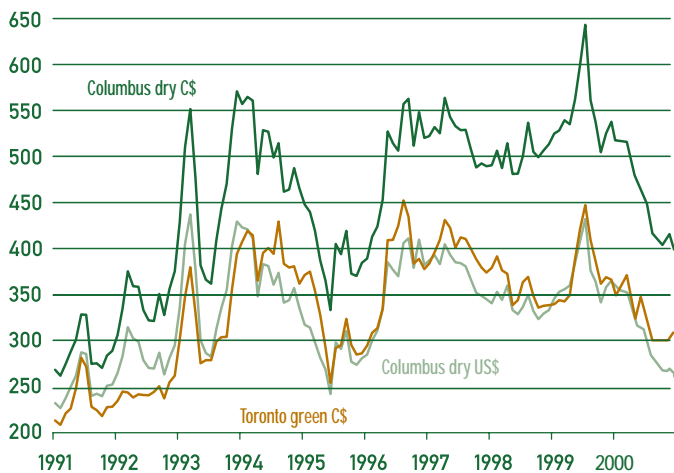
## Economic and Financial Indicators (cont'd) Financial Indicators for the Forest Sector

### PRICE TRENDS

11.01.36

#### 1) SOFTWOOD LUMBER (composite price)

(\$/1 000 bd ft)

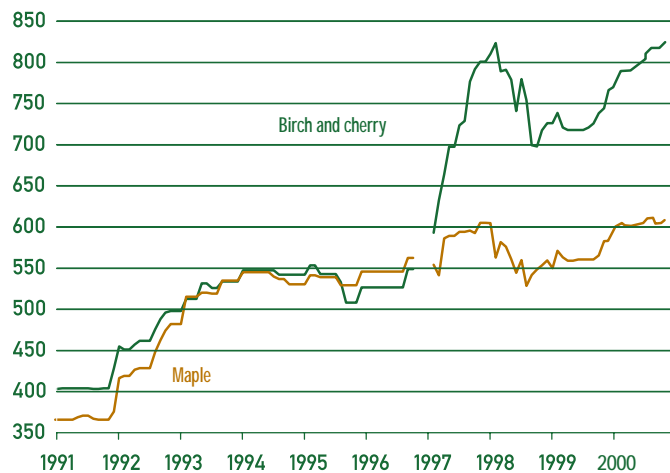


Source : Pribec

11.01.37

#### 2) HARDWOOD LUMBER (weighted price)<sup>1, 2</sup>

(\$/1 000 bd ft)



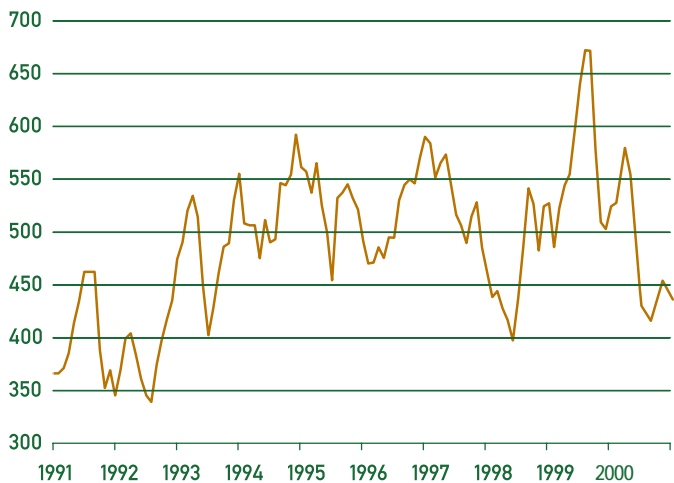
1 4/4 raw, FOB Montreal, valid to November 1996  
2 4/4 raw, FOB mill, beginning 1997

Source: Pribec

11.01.38

#### 3) PLYWOOD (12.5 mm)

(C\$/1 000 bd ft)

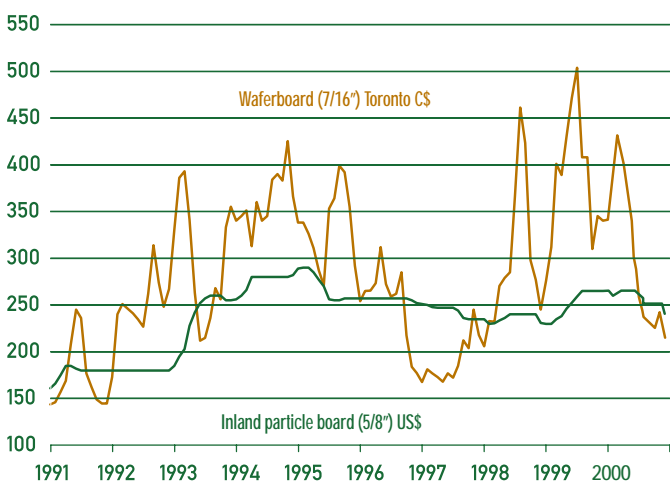


Source: Madison's Canadian Lumber Reporter

11.01.39

#### 4) BOARDS

(\$/1 000 bd ft)



Source: Random Lengths

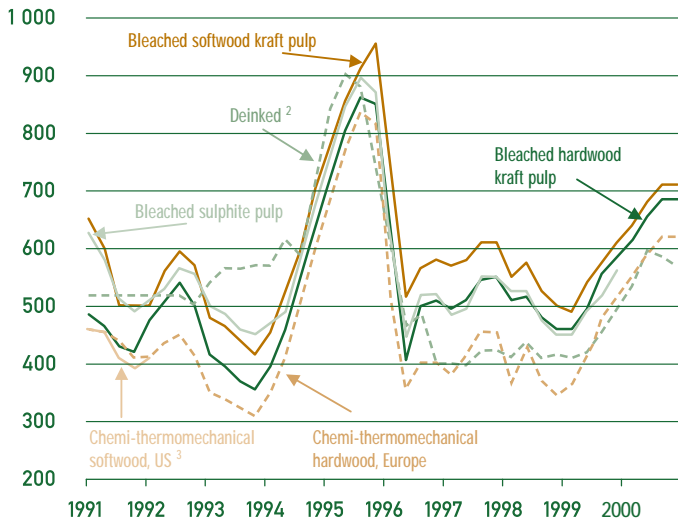
# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

## Economic and Financial Indicators (cont'd) Financial Indicators for the Forest Sector (cont'd)

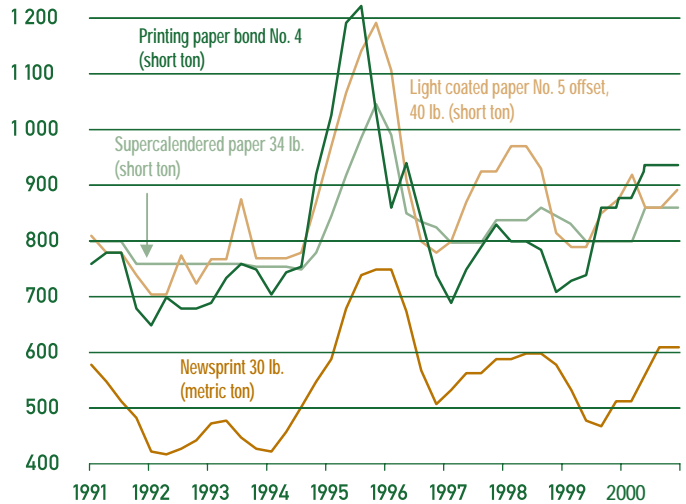
### PRICE TRENDS (CONT'D)

11.01.40

#### 5) MARKET PULP<sup>1</sup> (US\$/mt)



#### 6) PAPER<sup>1</sup> (US\$)



11.01.41

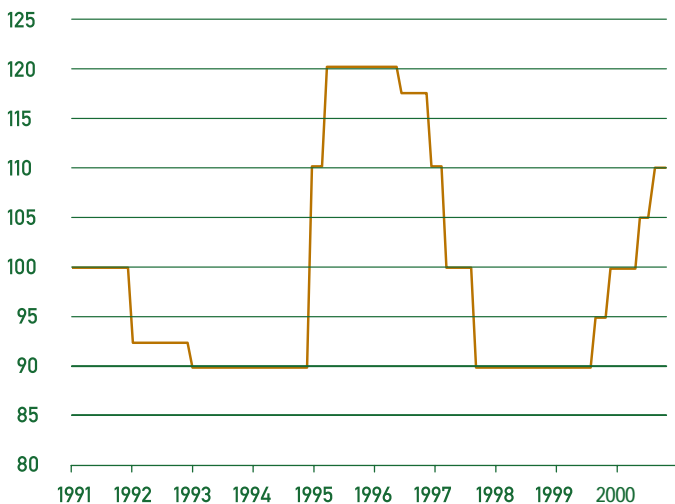
1 Price at end of quarter  
2 1992: 20% post-consumer (paper recovered from consumers)  
1993: (first and second quarters): 75% post-consumer  
1993: (third and fourth quarters), 1994 and 1995: 100 post-consumer  
3 Data not available as of second quarter 1992

Note: Postconsumption means paper salvaged from consumers.  
Source: Pulp & Paper Week

1 Price at end of quarter  
Source: Pulp & Paper Week

11.01.42

#### 7) REVENUE FROM CHIPS<sup>1</sup> (C\$/1,000 bd ft)



1 Estimated revenue for each 1 000 bd ft produced  
Sources: Pribec and Ministère des Ressources naturelles (MRN)

# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

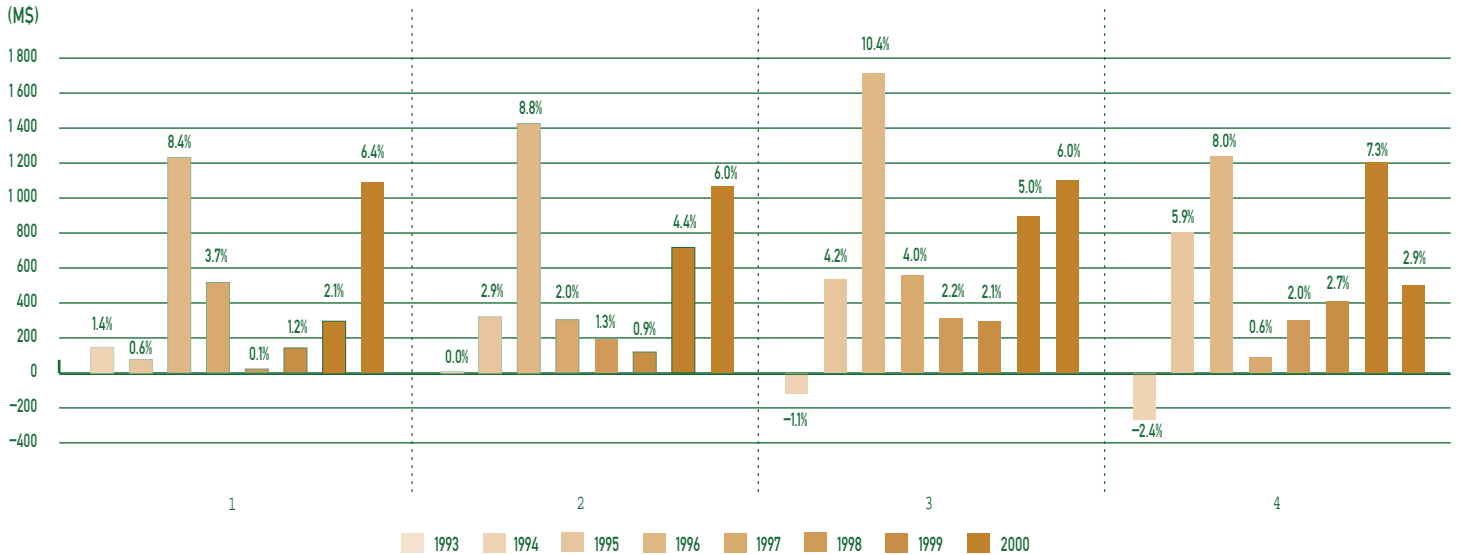
Economic and Financial Indicators (cont'd)

Financial Indicators for the Forest Sector (cont'd)

QUARTERLY PROFITS  
WOOD AND PAPER (CANADA)

11.01.43

Profits before extraordinary items/sales (%)





# THE FOREST SECTOR IN QUÉBEC'S ECONOMY

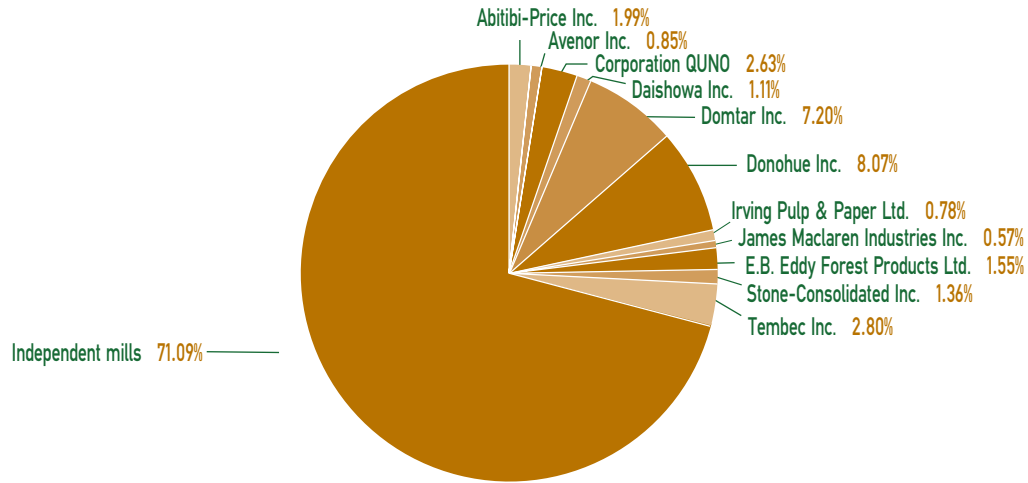
Economic and Financial Indicators (cont'd)

Financial Indicators for the Forest Sector (cont'd)

SHARE OF PAPER MILL-INTEGRATED SAWMILLS IN QUÉBEC'S AUTHORIZED ROUNDWOOD CONSUMPTION (%)

11.01.45

MARCH 1987



11.01.46

DECEMBER 2000

