



Washington Mill Survey 2004

Series Report #18



May 2007



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

Acknowledgements

DNR appreciates the support of the major forest industry associations, mill owners, mill operators and log exporters who provided data for this survey

Appreciation is also extended to the USDA Forest Service's Pacific Northwest Research Station for their assistance in supporting the database application that was used to compile the data for this report.

This report was prepared by:

DNR Office of Budget and Economics Natural Resource Economist Group

Bob Van Schoorl	Budget Director
Phil Aust	Lead Economist
Dorian Smith	Economist
Mariam Lankoande	Economic Analyst
Don Krug	Economist

Additional Assistance

Kyra Nourse	Interim Editor
-------------	----------------

This report was significantly aided by the database application written by:

Bruce Hiserote
Pacific Northwest Research Station
USDA Forest Service
Portland, OR

Address requests regarding this report to:

Dorian Smith
Office of Budget and Economics
Department of Natural Resources
PO Box 47041
Olympia, WA 98504-7041

Phone: 360-902-1026 **FAX:** 360-902-1780

E-mail: dorian.smith@dnrwa.gov

http://www.dnr.wa.gov/BusinessPermits/Topics/EconomicReports/Pages/obe_washington_state_millsurvey.aspx

People who need this information in an alternate format may call:

360-902-1120 or 711

Cover photos: A contrast of generations:

Top: Monty Pfaff posed in front of the sawmill he built 38 years ago south of Olympia. When he closed the mill and retired in the summer of 2006, he had worked 52 years in the sawmill industry.

Bottom: Employee-owners of Hardel Mutual Plywood (a co-operative business) in Chehalis pull off imperfect sheets of veneer in the first of several quality control lines. The 10-year-old plywood operation is the largest in Washington and in the top five in the United States.

Washington Mill Survey 2004

Series Report #18



May 2007

Prepared by:
Dorian Smith
Economist

Bruce Hiserote
Pacific Northwest Research Station, USDA Forest Service



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

Table of Contents

Acknowledgements -----	Inside front cover
Introduction -----	vi
Map of Economic Areas -----	vii
Abbreviations and Conversions -----	viii
Statewide summary	
Mill industry highlights -----	2-3
Table 1: Number of operations — by county and industry -----	4
Table 2: Log consumption — by type -----	5
Table 3: Log consumption — by state of origin -----	6
Table 4: Washington log consumption — by location of operation and county of harvest	
State total and Puget Sound -----	7
Olympic Peninsula -----	8
Lower Columbia -----	9
Central Washington -----	10
Inland Empire -----	11
Out-of-state log consumption -----	12
Mill photos -----	13
Table 5: Log consumption — by national forests -----	14-15
Table 6: Number of operations — by area and percentage of logs from original owners -----	16-18
Table 7: Number of operations — by industry and percentage of logs from original owners ---	19-21
Table 8: Log consumption — by original log owners -----	22-23
Table 9: Log consumption — by species -----	24-25
Table 10: Wood and bark residues — by production and use -----	26-27
Table 11: Log consumption — by diameter in inches -----	28
Sawmills	
Table 12: Number of sawmills — by size -----	30
Table 13: Sawmills' production capacity — by 8-eight-hour single shift and mill size -----	31
Table 14: Number of sawmills — by selected equipment and mill size -----	32
Table 15: Number of sawmills — by selected equipment and counties -----	33
Table 16: Number of sawmills — by size and headrig -----	34
Table 17: Average number of operating days -----	35
Table 18: Log consumption by sawmills — by log type -----	36
Table 19: Log consumption by sawmills — by diameter in inches -----	37
Table 20: Log consumption by sawmills — by original owners and mill size -----	38-39
Table 21: Log consumption by sawmills — by original owners and counties -----	40-41
Table 22: Number of sawmills — by percentage of logs from various sources -----	42-44
Figure 1: Rising sawmill production -----	45
Table 23: Log consumption by sawmills — by species and mill size -----	46-47
Table 24: Log consumption by sawmills — by species and county -----	48-49
Table 25: Wood and bark residues — by county -----	50-51
Table 26: Wood residue — by use and county -----	52-55
Table 27: Bark residues — by use and county -----	56
Table 28: Lumber production — by headrig type and county -----	57
Table 29: Lumber production — by degree of manufacture and mill size -----	58
Table 30: Log consumption by sawmills — by softwood and hardwood -----	59
Table 30a: Number of mills consuming hardwoods — by industry -----	59
Figure 2: Species consumed by Washington sawmills -----	60
Figure 3: Mills' consumption of hardwood and softwood logs -----	60
Figure 4: Types of mills that consumed hardwood -----	60

Veneer and plywood mills

Table 31: Number of veneer and plywood mills — by log diameter limit in inches -----	62
Table 32: Number of veneer and plywood mills — by minimum core size -----	62
Table 33: Veneer and plywood mills — by average number of operating days -----	63
Table 34: Wood consumed by veneer and plywood mills — by diameter and purchase/transfer --	63
Table 35: Veneer and plywood production -----	63
Table 36: Wood and bark residues from veneer and plywood mills -----	64

Pulp mills

Table 37: Number of pulp mills — by processing type -----	66
Table 38: Pulp mills' capacity — by mill type -----	66
Table 39: Average operating days of pulp mills -----	67
Table 40: Pulp mill production — by product and type of operation -----	67
Table 41: Wood fiber consumption by pulp mills — by fiber type -----	68
Table 42: Roundwood chip consumption by pulp mills — by species -----	68
Table 43: Residue and chip use by pulp mills — by state of source -----	69
Figure 5: Pulp mill products -----	70
Figure 6: Material used by pulp mills -----	70

Shake and shingle mills

Table 44: Shake and shingle mills' capacity and operating days -----	72
Table 45: Number of shake and shingle mills — by selected equipment -----	72
Table 46: Log consumption by shake and shingle mills — by type -----	73
Table 47: Log consumption by shake and shingle mills — by original owners -----	73
Table 48: Wood and bark residues — production and use by shake and shingle mills -----	74
Table 49: Wood residues — by type and use by shake and shingle mills -----	75
Table 50: Bark residues — by use by shake and shingle mills -----	76
Table 51: Shake and shingle mills' production -----	76

Log export operations

Table 52: Export logs — by type -----	78
Table 53: Export logs — by diameter in inches -----	78
Table 54: Export logs — by port and county -----	79
Table 55: Export logs — by port and original owners -----	80
Table 56: Export logs — by species -----	80

Post, pole and piling mills

Table 57: Number of post, pole and piling mills — by operating days and capacity -----	82
Table 58: Number of post, pole and piling mills — by selected equipment -----	82
Table 59: Log consumption by post, pole and piling mills — by diameter in inches -----	83
Table 60: Post, pole and piling mills production — by treatment -----	83
Photos -----	84

Log chipping mills

Table 61: Number of log chipping mills — by capacity and operating days -----	86
Table 62: Log consumption by log chipping mills — by diameter in inches -----	86
Table 63: Log consumption by log chipping mills — by original owners -----	87
Table 64: Log consumption by log chipping mills — by species -----	87
Table 65: Chip production — by economic area -----	87

Introduction

Based on responses from questionnaires sent to managers and owners of Washington's timber mills, this report covers product manufacture, wood utilization, and mill characteristics during the year 2004.

Although other government agencies and private business associations offer generalized summaries of the forest product industry this survey provides details and statistics not available elsewhere, including sources for logs, mill capacities, log species, days of operation, and the use of wood residues.

Published biennially, the Washington Mill Survey is organized as a comprehensive look at this major state industry. As the aerospace and computer software businesses gain attention, Washington's original top industry produces a significant value of output. Washington is the largest producer of softwood products in the United States.

This survey is intended to provide information for a broad audience of business managers, national and international economists and public officials. Most measurements are in thousand board feet Scribner scale, which is an early 20th century measurement to predict a log's potential to produce lumber. Due to mill efficiencies, lumber tally (the actual lumber measurement) output usually exceeds log input in Scribner scale.

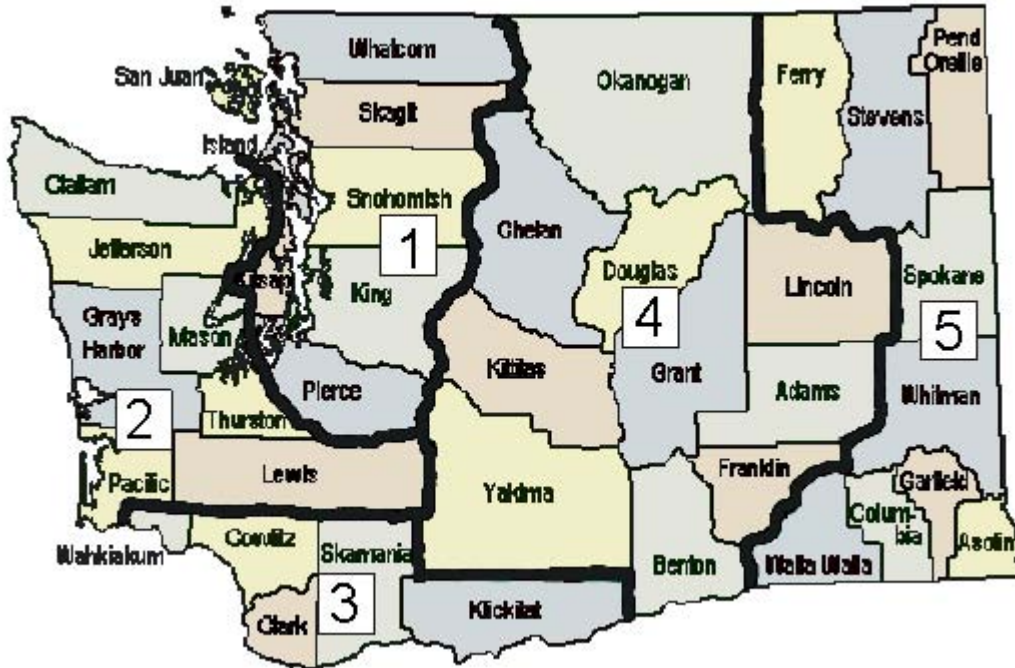
Tables refer to mills (such as saw mills, pulp mills, etc.) and log export businesses. The seven wood industries include:

- Lumber
- Pulp
- Shake and shingle
- Veneer and plywood
- Post, pole and piling
- Log export
- Log chipping

Since this survey covers the entire industry sampling errors are not a factor. However, when some data was not provided by mill owners or managers, estimates were calculated from data in previous years.

In some tables, categories (industries or counties) are combined into an "Other" category to avoid disclosing an individual operation's data.

The Economic Areas used in this report



Throughout this report, these economic areas are used to indicate the location of mill operations and where timber is harvested.

1. Puget Sound
2. Olympic Peninsula
3. Lower Columbia
4. Central Washington
5. Inland Empire

Abbreviations and Conversions

Lumber (volume)

- board foot = 12-inches x 12-inches x 1-inch
- mbf = 1,000 board feet
- mmbf = 1 million board feet
- 1 mbf Scribner scale = 1.5 lumber tally (roughly)

Plywood / Veneer

- msf 3/8-inch basis = thousand square feet 3/8-inch thick

Pulp (weight)

- ton = 2,000 pounds
- bone dry tons (BDT) = 2,200 pounds, with 10% water content
- mbf of logs = 7.5 tons of pulp

Shake and shingle (area)

- square = 10 square feet
- 1 cord = 5 squares or
 - 1/2 mbf or
 - 128 cubic feet (stacked) or
 - 80 cubic feet of solid wood
- mbf = 10 squares
- bundle = 1/5 square (5 bundles equal a square)



Finished plywood at Hardel Mutual Plywood

Statewide Summary

Mill industry highlights	2-3
Table 1: Number of operations — by county and industry	4
Table 2: Log consumption — by type	5
Table 3: Log consumption — by state of origin	6
Table 4: Log consumption — by location of operation and county of harvest	
State Total and Puget Sound)	7
Olympic Peninsula	8
Lower Columbia	9
Central Washington	10
Inland Empire.....	11
Out-of-State.....	12
Mill photos	13
Table 5: Log consumption — by national forests	14-15
Table 6: Number of operations — by region and percent age of logs from original owners	16-18
Table 7: Number of operations — by industry and percent age of logs from original owners	19-21
Table 8: Log consumption — by original log owners	22-23
Table 9: Log consumption — by species	24-25
Table 10: Wood and bark residues — by production and use	26-27
Table 11: Log consumption — by diameter in inches	28

Mill Industry Highlights

Top 10 counties*

Counties where timber was harvested for state mills or export (Scribner scale)

1992

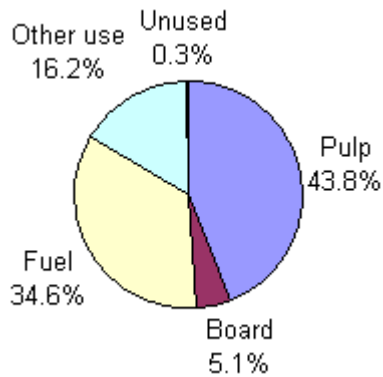
1. Lewis (497,448 mbf)
2. Grays Harbor (474,386 mbf)
3. Cowlitz (414,620 mbf)
4. Pierce (306,959 mbf)
5. Snohomish (301,479 mbf)
6. King (246,790 mbf)
7. Clark (209,417 mbf)
8. Mason (208,480 mbf)
9. Pacific (201,955 mbf)
10. Thurston (199,963 mbf)

2004

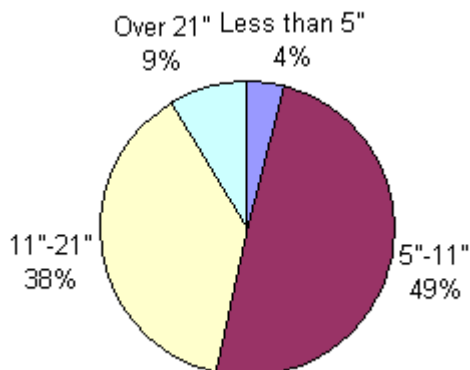
1. Yakima (513,493 mbf)
2. Lewis (438,780 mbf)
3. Cowlitz (376,319 mbf)
4. Grays Harbor (367,518 mbf)
5. Snohomish (205,597 mbf)
6. Clallam (201,489 mbf)
7. Pacific (192,823 mbf)
8. Mason (176,460 mbf)
9. Pierce (161,931 mbf)
10. Thurston (153,918 mbf)

*Year comparisons based on statistics from editions of the Washington State Mill Survey

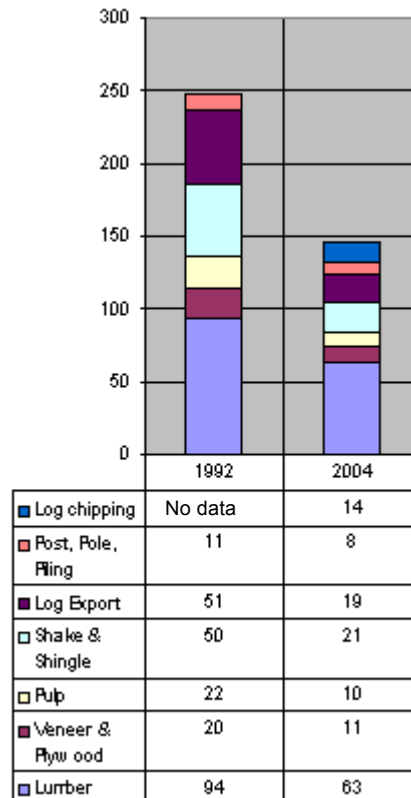
Use of 5.9 billion dry tons of bark and wood residues by Washington mills in 2004



Diameter of logs used by Washington mills in 2004



Number of mills* 1992-2004



*Year comparisons based on statistics from editions of the Washington State Mill Survey

Log use by industry*

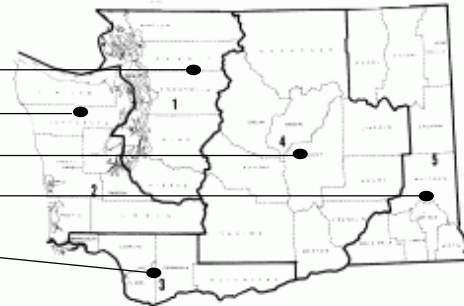
A 12-year look at the growth and decrease of log use by various forest industries (thousand board feet, Scribner scale).

	1992	1998	2004
Lumber	2,511,632	2,416,536	3,080,259
Veneer and plywood	282,354	352,194	291,311
Pulp	304,321	0	0
Shake and shingle	17,258	4,278	9,122
Export	1,844,205	794,036	897,949
Post, pole and piling	36,067	2,474	21,949
Chip	Not recorded	318,148	280,562
Total	4,995,837	3,909,666	4,581,144

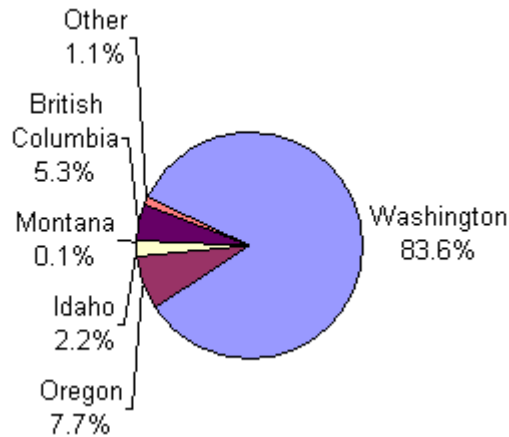
*Year comparisons based on statistics from editions of the Washington State Mill Survey

Where the logs came from in 2004:

- Puget Sound: **15.4%**
- Olympic Peninsula: **34.5%**
- Central Washington: **14.3%**
- Inland Empire: **6%**
- Lower Columbia: **13.4%**
- Out-of-state: **16.4%**



Sources of logs for Washington mills and export



Owner sources of logs*

Original owners of timber harvested for export and Washington mills

1998

- 30.0% Industrial forests (from others)
- 24.0% Industrial forests (from own land)
- 22.0% Small private forests
- * Tribal forests (not reported)
- 11.0% State (DNR-managed)
- 10.0% National forests
- 3.0% Other public forests

2004

- 31.6% Industrial forests (from others)
- 24.0% Industrial forests (from own)
- 15.6% Small private forests
- 14.7% Tribal forests
- 11.4% State (DNR-managed)
- 1.5% National forests
- 2.0% Other public forests

*Year comparisons based on statistics from editions of the Washington State Mill Survey

Table 1
Number of operations — by county and industry (mills and export businesses)

Economic area and county	All industries	Industry						
		Lumber	Veneer and plywood	Pulp	Shake and shingle	Log export	Post, pole, and piling	Log chipping
Puget Sound								
King	12	1	0	0	0	11	0	0
Kitsap	2	0	0	0	0	0	0	2
Pierce	12	4	1	1	0	4	1	1
Skagit	4	3	0	0	1	0	0	0
Snohomish	14	8	0	1	3	0	1	1
Whatcom	4	2	1	0	0	0	1	0
Total	48	18	2	2	4	15	3	4
Olympic Peninsula								
Clallam	10	3	1	0	5	0	0	1
Grays Harbor	20	4	3	1	9	0	0	3
Lewis	15	8	1	0	2	0	1	3
Mason	6	3	1	0	0	0	1	1
Pacific	1	1	0	0	0	0	0	0
Thurston	4	2	0	0	0	1	1	0
Total	56	21	6	1	16	1	3	8
Lower Columbia								
Clark	3	2	0	1	0	0	0	0
Cowlitz	11	4	0	3	0	3	0	1
Klickitat	2	1	1	0	0	0	0	0
Skamania	1	1	0	0	0	0	0	0
Wahkiakum	1	0	0	0	1	0	0	0
Total	18	8	1	4	1	3	0	1
Central Washington								
Chelan	1	1	0	0	0	0	0	0
Okanogan	3	2	1	0	0	0	0	0
Yakima	4	3	1	0	0	0	0	0
Total	8	6	2	0	0	0	0	0
Inland Empire								
Asotin	1	0	0	0	0	0	0	1
Ferry	1	1	0	0	0	0	0	0
Pend Orielle	4	3	0	1	0	0	0	0
Spokane	1	0	0	1	0	0	0	0
Stevens	7	5	0	0	0	0	2	0
Walla Walla	1	0	0	1	0	0	0	0
Whitman	1	1	0	0	0	0	0	0
Total	16	10	0	3	0	0	2	1
State Total	146	63	11	10	21	19	8	14

Table 2

Log consumption — by type (thousand board feet, Scribner scale)

Economic area and industry	All roundwood	Sound logs	Utility logs	Other wood	Residue (bone dry tons)
Puget Sound					
Lumber	688,707	681,664	7,043	9,912	0
Log export	648,310	648,310	0	0	0
Other *	5,341	52,671	870	0	0
Total	1,444,890	1,436,977	7,913	11,862	1,207,513
Olympic Peninsula					
Lumber	1,217,334	1,211,905	5,429	0	0
Veneer and plywood	146,039	113,539	32,500	0	0
Shake and shingle	8,622	8,522	100	9,363	0
Post, pole and piling	12,370	12,370	0	0	0
Log chipping	166,276	165,496	780	0	0
Other *	5,500	5,500	0	0	400,000
Total	1,556,141	1,517,332	38,809	9,363	400,000
Lower Columbia					
Lumber	282,051	277,710	4,341	0	0
Pulp	0	0	0	0	3,054,029
Other *	262,906	262,906	0	250	0
Total	551,578	547,237	4,341	250	3,054,029
Central Washington					
Lumber	536,122	534,865	1,257	4,320	0
Other *	83,000	74,000	9,000	0	0
Total	619,122	608,865	10,257	4,320	0
Inland Empire					
Lumber	356,045	340,377	15,668	12,081	0
Pulp	0	0	0	0	1,202,515
Other *	53,368	53,368	0	0	0
Total	409,413	393,745	15,668	12,081	1,202,515
State Total					
Lumber	3,080,259	3,046,521	33,738	26,313	0
Veneer and plywood	291,311	248,941	42,370	0	0
Pulp	0	0	0	0	5,864,057
Shake and shingle	9,122	9,022	100	11,563	0
Log export	897,949	897,949	0	0	0
Post, pole and piling	21,941	21,941	0	0	0
Log chipping	280,562	279,782	780	0	0
Total	4,581,144	4,504,156	76,988	37,876	5,864,057

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 3

Log consumption — by state of origin (thousand board feet, Scribner scale)

Economic area and industry	All sources	Origin					
		Washington	Oregon	Idaho	Montana	British Columbia	Other states
Puget Sound							
Lumber	688,707	599,385	0	0	0	85,782	3,540
Log export	648,310	383,385	201,555	0	0	54,370	9,000
Other *	53,541	47,315	1,426	700	0	1,426	500
Total	1,444,890	1,084,416	202,981	700	0	141,578	15,215
Olympic Peninsula							
Lumber	1,217,334	1,172,546	16,892	1,200	0	18,536	8,160
Veneer and plywood	146,039	131,126	0	0	0	13,927	986
Shake and shingle	8,622	8,546	0	0	0	0	5
Post, pole and piling	12,370	12,107	263	0	0	0	0
Log chipping	166,276	166,276	0	0	0	0	0
Other *	5,500	5,500	0	0	0	0	0
Total	1,556,141	1,496,101	17,155	1,200	0	32,463	9,151
Lower Columbia							
Lumber	282,051	222,941	55,563	0	0	3,547	0
Pulp	0	0	0	0	0	0	0
Log chipping	6,621	4,635	1,986	0	0	0	0
Other *	262,906	111,621	61,285	0	0	63,000	27,000
Total	551,578	339,196	118,834	0	0	66,547	27,000
Central Washington							
Lumber	536,122	535,459	0	0	0	663	0
Other *	83,000	81,940	1,060	0	0	0	0
Total	619,122	617,399	1,060	0	0	663	0
Inland Empire							
Lumber	356,045	281,994	2,658	63,333	6,784	1,275	0
Pulp	0	0	0	0	0	0	0
Other *	53,368	5,368	10,667	37,333	0	0	0
Total	409,413	287,362	13,325	100,666	6,784	1,275	0
State Total							
Lumber	3,080,259	2,812,325	75,113	64,533	6,784	109,804	11,700
Veneer and plywood	291,311	269,409	4,813	0	0	13,927	3,161
Pulp	0	0	0	0	0	0	0
Shake and shingle	9,122	8,546	0	0	0	0	505
Log export	897,949	485,492	259,087	0	0	117,370	36,000
Post, pole and piling	21,941	18,127	1,689	700	0	1,426	0
Log chipping	280,562	230,576	12,653	37,333	0	0	0
Total	4,581,144	3,824,475	353,355	102,566	6,784	242,526	51,366

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified

Table 4

Washington log consumption — by location of operation and county of harvest

(Logs harvested in Washington — thousand board feet, Scribner scale)

Economic area and county of mill or export	County of log harvest (Puget Sound economic area)							
	Total Washington	Island	King	Kitsap	Pierce	Skagit	Snohomish	Whatcom
Puget Sound								
Pierce	557,996	0	42,039	22,550	115,754	7,955	42,160	7,955
Skagit	11,230	0	0	0	0	4,123	3,005	4,102
Snohomish	313,970	1,105	7,335	140	295	95,538	123,039	70,947
Whatcom	15,479	138	0	0	0	3,439	860	10,871
Other *	185,741	0	2,072	2,773	4,760	0	17,600	0
Total	1,084,416	1,243	51,446	25,463	120,810	111,055	186,664	93,875
Olympic Peninsula								
Clallam	166,182	0	0	0	1,233	2,465	4,931	1,233
Grays Harbor	370,446	0	3,964	812	4,045	2,695	2,266	243
Lewis	622,070	0	1,938	1,077	23,165	304	304	304
Mason	249,316	0	10,340	23,022	10,340	1,093	11,433	0
Other *	88,086	0	0	0	1,100	0	0	0
Total	1,496,101	0	16,242	24,911	39,883	6,557	18,933	1,780
Lower Columbia								
Clark	31,126	0	1,258	0	927	0	0	0
Cowlitz	222,952	0	0	0	311	0	0	0
Other *	85,118	0	0	0	0	0	0	0
Total	339,196	0	1,258	0	1,238	0	0	0
Central Washington								
Yakima	549,282	0	0	0	0	0	0	0
Other *	68,117	0	0	0	0	0	0	0
Total	617,399	0	0	0	0	0	0	0
Inland Empire								
Pend Orielle	95,135	0	0	0	0	0	0	0
Stevens	154,869	0	0	0	0	0	0	0
Other *	37,358	0	0	0	0	0	0	0
Total	287,362	0	0	0	0	0	0	0
State Total	3,824,475	1,243	68,946	50,374	161,931	117,612	205,597	95,655

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Washington log consumption — by location of operation and county of harvest

(Logs harvested in Washington — thousand board feet, Scribner scale)

Economic area and county of mill or export	County of log harvest (Olympic Peninsula economic area)						
	Clallam	Grays Harbor	Jefferson	Lewis	Mason	Pacific	Thurston
Puget Sound							
Pierce	23,865	33,656	0	84,864	31,478	19,620	51,453
Skagit	0	0	0	0	0	0	0
Snohomish	11,505	0	1,768	140	1,505	0	319
Whatcom	0	0	172	0	0	0	0
Other *	0	29,160	2,773	27,348	11,320	8,438	0
Total	35,370	53,816	4,712	112,352	44,303	28,057	60,201
Olympic Peninsula							
Clallam	127,266	1,824	25,998	0	0	0	1,233
Grays Harbor	27,345	188,744	8,750	3,883	17,422	93,817	14,518
Lewis	1,168	35,983	517	201,964	26,635	31,359	53,461
Mason	10,340	74,766	1,971	0	83,119	0	22,599
Other *	0	16,744	745	13,052	699	41,800	5,802
Total	166,119	318,061	37,981	218,599	127,874	166,976	97,613
Lower Columbia							
Clark	0	556	0	927	9,273	0	1,855
Cowlitz	0	0	0	116,117	0	3,780	3,465
Other *	0	0	0	0	0	0	0
Total	0	556	0	117,044	9,273	3,780	5,320
Central Washington							
Yakima	0	0	0	0	0	0	0
Other *	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Inland Empire							
Pend Orielle	0	4,299	0	0	0	0	0
Stevens	0	0	0	0	0	0	0
Other *	0	0	0	0	0	0	0
Total	0	4,299	0	0	0	0	0
State Total	201,489	376,733	42,694	447,995	181,450	198,812	163,133

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Washington log consumption — by location of operation and county of harvest

(Logs harvested in Washington — thousand board feet, Scribner scale)

County of log harvest (Lower Columbia economic area)					
Economic area and county of mill or export	Clark	Cowlitz	Klickitat	Skamania	Wahkiakum
Puget Sound					
Pierce	7,962	58,723	0	0	7,962
Skagit	0	0	0	0	0
Snohomish	0	0	0	0	0
Whatcom	0	0	0	0	0
Other *	36,986	34,636	0	8,438	0
Total	44,949	93,359	0	8,438	7,962
Olympic Peninsula					
Clallam	0	0	0	0	0
Grays Harbor	0	1,942	0	0	0
Lewis	304	221,834	0	0	10,304
Mason	0	0	0	0	0
Other *	520	325	0	0	7,600
Total	824	224,101	0	0	17,904
Lower Columbia					
Clark	2,861	10,991	927	623	927
Cowlitz	18,721	47,868	139	3,697	28,853
Other *	9,300	0	49,503	25,930	0
Total	30,882	58,860	50,569	30,250	29,780
Central Washington					
Yakima	0	0	12,470	0	0
Other *	0	0	0	0	0
Total	0	0	12,470	0	0
Inland Empire					
Pend Orielle	0	0	0	0	0
Stevens	0	0	0	0	0
Other *	0	0	0	0	0
Total	0	0	0	0	0
State Total	76,655	376,319	63,039	38,687	55,647

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Washington log consumption — by location of operation and county of harvest

(Logs harvested in Washington — thousand board feet, Scribner scale)

Economic area and county of mill or export	County of log harvest (Central Washington)					
	Chelan	Douglas	Kittitas	Lincoln	Okanogan	Yakima
Puget Sound						
Pierce	0	0	0	0	0	0
Skagit	0	0	0	0	0	0
Snohomish	155	0	179	0	0	0
Whatcom	0	0	0	0	0	0
Other *	0	0	8	0	0	0
Total	155	0	187	0	0	0
Olympic Peninsula						
Clallam	0	0	0	0	0	0
Grays Harbor	0	0	0	0	0	0
Lewis	0	0	0	0	0	5,000
Mason	0	0	0	0	0	0
Other *	0	0	0	0	0	0
Total	0	0	0	0	0	5,000
Lower Columbia						
Clark	0	0	0	0	0	0
Cowlitz	0	0	0	0	0	0
Other *	0	0	0	0	0	386
Total	0	0	0	0	0	386
Central Washington						
Yakima	519	0	29,786	0	0	506,507
Other *	11,200	0	1,600	0	29,317	1,600
Total	11,719	0	31,386	0	29,317	508,107
Inland Empire						
Pend Orielle	0	0	2,150	0	27,220	0
Stevens	445	0	1,336	1,279	2,227	0
Other *	0	0	0	0	0	0
Total	445	0	3,486	1,279	29,447	0
State Total	12,320	0	35,059	1,279	58,764	513,493

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Washington log consumption — by location of operation and county of harvest

(Logs harvested in Washington — thousand board feet, Scribner scale)

Economic area and county of mill or export	County of log harvest (Inland Empire economic area)							
	Asotin	Columbia	Ferry	Garfield	Pend Orielle	Spokane	Stevens	Whitman
Puget Sound								
Pierce	0	0	0	0	0	0	0	0
Skagit	0	0	0	0	0	0	0	0
Snohomish	0	0	0	0	0	0	0	0
Whatcom	0	0	0	0	0	0	0	0
Other *	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Olympic Peninsula								
Clallam	0	0	0	0	0	0	0	0
Grays Harbor	0	0	0	0	0	0	0	0
Lewis	0	0	0	0	0	0	0	0
Mason	0	0	0	0	0	0	0	0
Other *	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Lower Columbia								
Clark	0	0	0	0	0	0	0	0
Cowlitz	0	0	0	0	0	0	0	0
Other *	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Central Washington								
Yakima	0	0	0	0	0	0	0	0
Other *	0	0	19,600	0	1,600	1,600	1,600	0
Total	0	0	19,600	0	1,600	1,600	1,600	0
Inland Empire								
Pend Orielle	860	0	28,080	0	17,198	0	15,328	0
Stevens	0	0	24,266	0	27,252	5,646	92,418	0
Other *	10,006	12,441	48,346	3,404	4,050	5,887	2,430	0
Total	10,006	12,441	52,346	3,404	48,500	11,533	110,176	0
State Total	10,006	12,441	71,946	3,404	50,100	13,133	111,776	0

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Out-of-state log consumption — by location of operation and state of harvest
(thousand board feet, Scribner scale)

Economic area and county of mill or export	State or province of log harvest				
	Oregon	Idaho	Montana	British Columbia	Other states
Puget Sound					
Pierce	171,666	0	0	68,696	2,175
Skagit	0	0	0	335	0
Snohomish	0	700	0	45,649	4,040
Whatcom	0	0	0	5,899	0
Other *	31,315	0	0	21,000	9,000
Total	202,981	700	0	141,578	15,215
Olympic Peninsula					
Clallam	0	0	0	3,123	986
Grays Harbor	492	0	0	20,419	5
Lewis	12,462	1,200	0	2,425	8,160
Mason	0	0	0	6,496	0
Other *	4,201	0	0	0	0
Total	17,155	1,200	0	32,463	9,151
Lower Columbia					
Clark	8,155	0	0	247	0
Cowlitz	95,858	0	0	66,300	27,000
Klickitat	9,655	0	0	0	0
Other *	5,167	0	0	0	0
Total	118,834	0	0	66,547	27,000
Central Washington					
Yakima	1,060	0	0	0	0
Other *	0	0	0	663	0
Total	1,060	0	0	663	0
Inland Empire					
Pend Orielle	0	19,182	3,307	1,185	0
Spokane	0	0	0	0	0
Stevens	0	16,757	3,477	0	0
Walla Walla	0	0	0	0	0
Other *	13,325	64,727	0	1,275	0
Total	13,325	100,666	6,784	1,275	0
State Total	353,355	102,566	6,784	242,526	51,366

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Standing at 6-foot-2, David Lyon, a quality control employee at Hardel Mutual Plywood, provides some sense of the size of the spare saw blade.



William Nguyen, a plugger at Hardel Mutual Plywood, repairs veneer sheets.

Table 5

Log consumption — by national forests (thousand board feet, Scribner scale)

Economic area	All national forests	Westside national forests		
		Olympic	Gifford Pinchot	Mount Baker/Snoqualmie
Puget Sound	5,101	1,217	0	3,184
Olympic Peninsula	14,972	12,616	970	1,387
Lower Columbia	5,661	0	2,339	0
Central Washington	14,206	0	0	10,560
Inland Empire	26,984	0	0	0
State Total	66,924	13,832	3,309	15,131
Industry				
Lumber	52,425	4,640	3,309	11,384
Veneer and plywood	5,729	4,669	0	0
Shake and shingle	500	0	0	0
Post, pole and piling	1,080	0	0	1,080
Log chipping	7,190	4,523	0	2,667
State Total	66,924	13,832	3,309	15,131

Continued:

Log consumption — by national forests (thousand board feet, Scribner scale)

Eastside national forests					
Economic area	Wenatchee	Okanogan	Colville	Umatilla	Other
Puget Sound	200	0	0	0	500
Olympic Peninsula	0	0	0	0	0
Lower Columbia	0	0	0	0	3,323
Central Washington	1,908	1,738	0	0	0
Inland Empire	0	1,590	13,715	2,712	8,967
State Total	2,108	3,328	13,715	2,712	12,790
Industry					
Lumber	2,108	2,268	13,715	2,712	12,290
Veneer and plywood	0	1,060	0	0	0
Shake and shingle	0	0	0	0	500
Post, pole and piling	0	0	0	0	0
Log chipping	0	0	0	0	0
State Total	2,108	3,328	13,715	2,712	12,790

Table 6

Number of operations — by economic area and percentage of logs from original owners

Economic area and industry	National forest				State				Bureau of Land Management			
					Percentage of log dependency							
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound												
Lumber	15	3	0	0	6	7	4	1	18	0	0	0
Shake and shingle	3	0	0	1	4	0	0	0	4	0	0	0
Log export	15	0	0	0	15	0	0	0	15	0	0	0
Post, pole and piling	2	1	0	0	0	1	1	1	3	0	0	0
Log chipping	1	3	0	0	1	3	0	0	4	0	0	0
Other *	3	1	0	0	3	1	0	0	4	0	0	0
Total	39	8	0	1	29	12	5	2	48	0	0	0
Olympic Peninsula												
Lumber	17	4	0	0	4	15	1	1	21	0	0	0
Veneer and plywood	4	2	0	0	3	2	1	0	6	0	0	0
Shake and shingle	16	0	0	0	15	1	0	0	16	0	0	0
Post, pole and piling	3	0	0	0	1	0	0	2	3	0	0	0
Log chipping	4	4	0	0	2	6	0	0	8	0	0	0
Other *	2	0	0	0	2	1	0	0	2	0	0	0
Total	46	10	0	0	27	24	2	3	56	0	0	0
Lower Columbia												
Lumber	6	2	0	0	2	5	1	0	8	0	0	0
Pulp	4	0	0	0	4	0	0	0	4	0	0	0
Log export	3	0	0	0	3	0	0	0	3	0	0	0
Other *	3	0	0	0	1	2	0	0	3	0	0	0
Total	16	2	0	0	10	7	1	0	18	0	0	0
Central Washington												
Other *	3	5	0	0	3	5	0	0	8	0	0	0
Total	3	5	0	0	3	5	0	0	8	0	0	0
Inland Empire												
Lumber	4	6	0	0	3	7	0	0	10	0	0	0
Pulp	3	0	0	0	3	0	0	0	3	0	0	0
Other *	2	1	0	0	2	1	0	0	3	0	0	0
Total	9	7	0	0	8	8	0	0	16	0	0	0
State Total												
Lumber	44	19	0	0	17	38	6	2	63	0	0	0
Veneer and plywood	7	4	0	0	5	5	1	0	11	0	0	0
Pulp	10	0	0	0	10	0	0	0	10	0	0	0
Shake and shingle	21	0	0	1	21	1	0	0	22	0	0	0
Log export	20	0	0	0	20	0	0	0	20	0	0	0
Post, pole and piling	7	1	0	0	3	1	1	3	8	0	0	0
Log chipping	6	8	0	0	3	11	0	0	14	0	0	0
Total	115	32	0	1	79	56	8	5	148	0	0	0

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified .

Continued:

Number of operations — by economic area and percentage of logs from original owners

Economic area and industry	Forest industry											
	Other public				Own wood supply				Other wood supply			
	Percentage of log dependency				Percentage of log dependency				Percentage of log dependency			
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound												
Lumber	15	2	1	0	16	1	1	0	8	3	7	0
Shake and shingle	4	0	0	0	4	0	0	0	3	0	0	1
Log export	15	0	0	0	7	1	3	4	0	7	0	8
Post, pole and piling	3	0	0	0	2	0	1	0	2	1	0	0
Log chipping	4	0	0	0	4	0	0	0	1	0	3	0
Other *	3	1	0	0	3	0	1	0	4	0	0	0
Total	44	3	1	0	36	2	6	4	18	11	10	9
Olympic Peninsula												
Lumber	16	5	0	0	17	1	2	1	3	1	11	6
Veneer and plywood	4	2	0	0	4	0	2	0	2	1	3	0
Shake and shingle	16	0	0	0	16	0	0	0	13	1	1	1
Post, pole and piling	2	1	0	0	2	0	0	1	3	0	0	0
Log chipping	6	2	0	0	8	0	0	0	0	1	5	2
Other *	2	0	0	0	1	1	0	0	1	0	1	0
Total	46	10	0	0	48	2	4	2	22	4	21	9
Lower Columbia												
Lumber	4	4	0	0	5	1	1	1	1	2	4	1
Pulp	4	0	0	0	4	0	0	0	4	0	0	0
Log export	3	0	0	0	1	0	1	1	2	1	0	0
Other *	2	1	0	0	1	1	0	1	2	1	1	0
Total	13	5	0	0	11	2	2	3	8	4	5	1
Central Washington												
Lumber	6	0	0	0	5	1	0	0	3	1	2	0
Other *	2	0	0	0	2	0	0	0	1	0	1	0
Total	8	0	0	0	7	1	0	0	4	1	3	0
Inland Empire												
Lumber	6	3	1	0	6	4	0	0	3	3	3	1
Pulp	3	0	0	0	3	0	0	0	3	0	0	0
Other *	3	0	0	0	3	0	0	0	2	0	0	1
Total	12	3	1	0	12	4	0	0	8	3	3	2
State Total												
Lumber	47	14	2	0	49	8	4	2	18	10	27	8
Veneer and plywood	7	4	0	0	7	1	3	0	5	1	5	0
Pulp	10	0	0	0	10	0	0	0	10	0	0	0
Shake and shingle	22	0	0	0	22	0	0	0	18	1	1	2
Log export	20	0	0	0	9	2	4	5	3	8	1	8
Post, pole and piling	7	1	0	0	6	0	1	1	7	1	0	0
Log chipping	12	2	0	0	13	0	0	1	1	2	8	3
Total	125	21	2	0	116	11	12	9	62	23	42	21

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Number of operations — by economic area and percentage of logs from original owners

Economic area and industry	Farmer and miscellaneous private							
	Native American				miscellaneous private			
	Percentage of log dependency							
	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound								
Lumber	17	1	0	0	3	9	1	5
Shake and shingle	4	0	0	0	2	1	0	1
Log export	8	7	0	0	5	10	0	0
Post, pole and piling	3	0	0	0	1	1	1	0
Log chipping	1	3	0	0	0	3	0	1
Other *	4	0	0	0	3	1	0	0
Total	37	11	0	0	14	25	2	7
Olympic Peninsula								
Lumber	11	10	0	0	5	12	3	1
Veneer and plywood	5	1	0	0	4	2	0	0
Shake and shingle	13	2	0	1	14	1	0	1
Post, pole and piling	3	0	0	0	1	2	0	0
Log chipping	2	6	0	0	0	7	1	0
Other *	2	0	0	0	1	0	1	0
Total	36	19	0	1	25	24	5	2
Lower Columbia								
Lumber	7	1	0	0	0	6	2	0
Pulp	5	1	0	0	4	2	0	0
Log export	2	1	0	0	2	0	0	1
Other *	2	1	0	0	1	2	0	0
Total	15	3	0	0	7	8	2	1
Central Washington								
Lumber	2	2	0	2	2	2	2	0
Other *	0	1	0	1	1	1	0	0
Total	2	3	0	3	3	3	2	0
Inland Empire								
Lumber	4	4	0	2	2	4	3	1
Pulp	3	0	0	0	3	0	0	0
Other *	2	0	0	1	1	1	0	1
Total	9	4	0	3	6	5	3	2
State Total								
Lumber	41	18	0	4	12	33	11	7
Veneer and plywood	7	3	0	1	6	5	0	0
Pulp	10	0	0	0	10	0	0	0
Shake and shingle	19	2	0	1	18	2	0	2
Log export	12	8	0	0	8	10	1	1
Post, pole and piling	7	0	0	1	3	3	1	1
Log chipping	5	9	0	0	0	12	1	1
Total	101	40	0	7	57	65	14	12

Table 7

Number of operations — by industry and percentage of logs from original owners

Economic area and industry of operation	National forest				State				Bureau of Land Management			
	Percentage of log dependency				Percentage of log dependency				Percentage of log dependency			
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Log export												
Puget Sound	15	0	0	0	15	0	0	0	15	0	0	0
Other *	4	0	0	0	4	0	0	0	4	0	0	0
Total	19	0	0	0	19	0	0	0	19	0	0	0
Lumber												
Olympic Peninsula	17	4	0	0	4	15	1	1	21	0	0	0
Lower Columbia	6	2	0	0	2	5	1	0	8	0	0	0
Central Washington	2	4	0	0	2	4	0	0	6	0	0	0
Inland Empire	4	6	0	0	3	7	0	0	10	0	0	0
Puget Sound	15	3	0	0	6	7	4	1	18	0	0	0
Total	44	19	0	0	17	38	6	2	63	0	0	0
Post, pole and piling												
Puget Sound	2	1	0	0	0	1	1	1	3	0	0	0
Other *	5	0	0	0	3	0	0	2	5	0	0	0
Total	7	1	0	0	3	1	1	3	8	0	0	0
Pulp												
Inland Empire	3	0	0	0	3	0	0	0	3	0	0	0
Lower Columbia	4	0	0	0	4	0	0	0	4	0	0	0
Other *	3	0	0	0	3	0	0	0	3	0	0	0
Total	10	0	0	0	10	0	0	0	10	0	0	0
Log chipping												
Puget Sound	1	3	0	0	1	3	0	0	4	0	0	0
Olympic Peninsula	4	4	0	0	2	6	0	0	8	0	0	0
Other *	1	1	0	0	0	2	0	0	2	0	0	0
Total	6	8	0	0	3	11	0	0	14	0	0	0
Shake and shingle												
Olympic Peninsula	16	0	0	0	15	1	0	0	16	0	0	0
Other *	4	0	0	1	5	0	0	0	5	0	0	0
Total	20	0	0	1	20	1	0	0	21	0	0	0
Veneer and plywood												
Olympic Peninsula	4	2	0	0	3	2	1	0	6	0	0	0
Other *	3	2	0	0	2	3	0	0	5	0	0	0
Total	7	4	0	0	5	5	1	0	11	0	0	0
State Total	113	32	0	1	77	56	8	5	146	0	0	0

* "Other" indicates economic areas were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Number of operations — by industry and percentage of logs from original owners

Industry and economic area	Other public				Own wood supply				Other wood supply			
	Percentage of log dependency				Percentage of log dependency				Percentage of log dependency			
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Log export												
Puget Sound	15	0	0	0	7	1	3	4	0	7	0	8
Other *	4	0	0	0	1	1	1	1	2	1	1	0
Total	19	0	0	0	8	2	4	5	2	8	1	8
Lumber												
Olympic Peninsula	16	5	0	0	17	1	2	1	3	1	11	6
Lower Columbia	4	4	0	0	5	1	1	1	1	2	4	1
Central Washington	6	0	0	0	5	1	0	0	3	1	2	0
Inland Empire	6	3	1	0	6	4	0	0	3	3	3	1
Puget Sound	15	2	1	0	16	1	1	0	8	3	7	0
Total	47	14	2	0	49	8	4	2	18	10	27	8
Post, pole and piling												
Puget Sound	3	0	0	0	2	0	1	0	2	1	0	0
Other *	4	1	0	0	4	0	0	1	5	0	0	0
Total	7	1	0	0	6	0	1	1	7	1	0	0
Pulp												
Puget Sound	3	0	0	0	2	0	1	0	2	1	0	0
Other *	4	1	0	0	4	0	0	1	5	0	0	0
Total	10	0	0	0	10	0	0	0	10	0	0	0
Log chipping												
Lower Columbia	1	0	0	0	0	0	0	1	0	1	0	0
Other *	2	0	0	0	6	0	0	0	6	0	0	0
Total	12	2	0	0	13	0	0	1	1	2	8	3
Shake and shingle												
Olympic Peninsula	16	0	0	0	16	0	0	0	13	1	1	1
Other *	5	0	0	0	5	0	0	0	4	0	0	1
Total	21	0	0	0	21	0	0	0	17	1	1	2
Veneer and plywood												
Olympic Peninsula	4	2	0	0	4	0	2	0	2	1	3	0
Other *	3	2	0	0	3	1	1	0	3	0	2	0
Total	7	4	0	0	7	1	3	0	5	1	5	0
State Total	123	21	2	0	114	11	12	9	60	23	42	21

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Number of operations — by industry and percentage of logs from original owners

Industry and economic area	Percentage of log dependency							
	Native American				Farmer and miscellaneous private			
	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Log export								
Puget Sound	8	7	0	0	5	10	0	0
Other *	3	1	0	0	2	0	1	1
Total	11	8	0	0	7	10	1	1
Lumber								
Olympic Peninsula	11	10	0	0	5	12	3	1
Lower Columbia	7	1	0	0	0	6	2	0
Central Washington	2	2	0	2	2	2	2	0
Inland Empire	4	4	0	2	2	4	3	1
Puget Sound	17	1	0	0	3	9	1	5
Total	41	18	0	4	12	33	11	7
Post, pole and piling								
Puget Sound	3	0	0	0	1	1	1	0
Other *	4	0	0	1	2	2	0	1
Total	7	0	0	1	3	3	1	1
Pulp								
Inland Empire	3	0	0	0	3	0	0	0
Lower Columbia	4	0	0	0	4	0	0	0
Other *	3	0	0	0	3	0	0	0
Total	10	0	0	0	10	0	0	0
Log chipping								
Puget Sound	1	3	0	0	0	3	0	1
Olympic Peninsula	2	6	0	0	0	7	1	0
Other *	2	0	0	0	0	2	0	0
Total	5	9	0	0	0	12	1	1
Shake and shingle								
Olympic Peninsula	13	2	0	1	14	1	0	1
Other *	5	0	0	0	3	1	0	1
Total	18	2	0	1	17	2	0	2
Veneer and plywood								
Olympic Peninsula	5	1	0	0	4	2	0	0
Other *	2	2	0	1	2	3	0	0
Total	7	3	0	1	6	5	0	0
State Total	99	40	0	7	55	65	14	12

* "Other" indicates counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 8

Log consumption — by original log owners (thousand board feet, Scribner scale)

Economic area and industry	All source ownerships	State	National forest	Other public
Puget Sound				
Lumber	688,707	184,552	1,024	8,323
Log export	648,310	0	0	0
Other *	53,541	18,220	5,997	1,305
Total	1,444,890	202,772	7,021	9,628
Olympic Peninsula				
Lumber	1,217,334	149,235	5,610	5,620
Veneer and plywood	146,039	17,141	3,799	5,892
Shake and shingle	8,622	760	0	0
Post, pole and piling	12,370	8,175	0	310
Log chipping	166,276	21,456	5,910	2,303
Other *	5,500	0	0	0
Total	1,556,141	196,767	15,319	14,125
Lower Columbia				
Lumber	282,051	58,277	5,661	10,054
Pulp	0	0	0	0
Log chipping	6,621	132	0	0
Other *	262,906	1,877	0	2,440
Total	551,578	60,287	5,661	12,493
Central Washington				
Lumber	536,122	5,622	13,146	0
Other *	83,000	13,780	1,060	0
Total	619,122	19,402	14,206	0
Inland Empire				
Lumber	356,045	33,686	24,272	20,633
Pulp	0	0	0	0
Other *	53,368	8,000	2,667	0
Total	409,413	41,686	26,939	20,633
State Total				
Lumber	3,080,259	431,372	49,714	44,629
Veneer and plywood	291,311	43,674	5,729	9,637
Pulp	0	0	0	0
Shake and shingle	9,122	760	500	0
Log export	897,949	0	0	0
Post, pole and piling	21,941	11,732	1,080	310
Log chipping	280,562	33,375	12,123	2,303
Total	4,581,144	520,913	69,145	56,879

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified .

Continued:

Log consumption — by original log owners (thousand board feet, Scribner scale)

Economic area and industry	Forest industry		Native American	Farmer and miscellaneous private
	Own wood supply	Other wood supply		
Puget Sound				
Lumber	54,750	268,302	424	171,333
Log export	405,820	151,902	31,610	58,978
Other *	23,913	15,009	3,520	39,910
Total	484,483	435,213	35,554	270,221
Olympic Peninsula				
Lumber	278,800	533,694	24,184	220,191
Veneer and plywood	55,160	54,765	2,600	6,682
Shake and shingle	0	3,944	1,260	2,586
Post, pole and piling	2,570	0	0	1,315
Log chipping	0	103,077	7,826	25,704
Other *	55	2,750	0	2,695
Total	336,585	698,231	35,870	259,173
Lower Columbia				
Lumber	53,289	90,882	885	63,003
Pulp	0	0	0	0
Log chipping	4,502	662	0	1,324
Other *	175,461	61,131	18,563	3,432
Total	233,254	152,675	19,448	67,760
Central Washington				
Lumber	10,560	9,810	478,812	18,172
Other *	0	34,450	31,590	2,120
Total	10,560	44,260	510,402	20,292
Inland Empire				
Lumber	34,881	82,513	70,970	89,089
Pulp	0	0	0	0
Other *	0	37,333	0	5,368
Total	34,881	119,846	70,970	94,457
State Total				
Lumber	432,280	985,200	575,276	561,788
Veneer and plywood	82,167	96,347	34,753	19,004
Pulp	0	0	0	0
Shake and shingle	0	3,944	1,260	2,586
Log export	576,083	208,652	49,610	63,604
Post, pole and piling	4,730	343	0	3,746
Log chipping	4,502	155,739	11,346	61,174
Total	1,099,762	1,450,225	672,245	711,903

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 9
Log consumption — by species (thousand board feet, Scribner scale)

Economic area and industry	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine
Puget Sound						
Lumber	688,707	304,382	292,070	2,090	777	0
Log export	648,310	588,121	40,149	8,300	7,540	0
Other *	107,873	52,135	37,805	0	0	0
Total	1,444,890	944,880	370,024	10,390	8,317	0
Olympic Peninsula						
Lumber	1,217,334	446,000	577,816	11,850	22,745	0
Veneer and plywood	146,039	77,393	55,700	0	3,250	0
Shake and shingle	8,622	0	0	0	0	0
Post, pole and piling	12,370	12,370	0	0	0	0
Log chipping	166,276	54,192	59,400	1,560	8,970	0
Other *	5,500	5,225	165	110	0	0
Total	1,556,141	595,180	693,081	13,520	34,965	0
Lower Columbia						
Lumber	282,051	155,578	10,405	25,834	590	0
Pulp	0	0	0	0	0	0
Log chipping	6,621	4,635	993	993	0	0
Other *	262,906	189,995	41,748	0	18,000	375
Total	551,578	350,207	53,146	26,827	18,590	375
Central Washington						
Lumber	536,122	144,449	5,147	250,948	347	65,656
Other *	83,000	71,700	0	5,300	0	0
Total	619,122	216,149	5,147	256,248	347	65,656
Inland Empire						
Lumber	356,045	99,685	3,500	39,914	2,695	152,729
Pulp	0	0	0	0	0	0
Other *	53,368	0	0	48,000	0	2,667
Total	409,413	99,685	3,500	87,914	2,695	155,395
State Total						
Lumber	3,080,259	1,150,093	888,938	330,635	27,154	218,384
Veneer and plywood	291,311	187,155	78,476	5,300	3,250	375
Pulp	0	0	0	0	0	0
Shake and shingle	9,122	0	0	0	0	0
Log export	897,949	769,641	77,558	8,410	25,540	0
Post, pole and piling	21,941	18,118	0	0	0	0
Log chipping	280,562	81,093	79,926	50,553	8,970	2,667
Total	4,581,144	2,206,101	1,124,897	394,898	64,914	221,426

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified .

Continued:

Log consumption — by species (thousand board feet, Scribner scale)

Economic area and industry	Lodgepole pine	Western redcedar	Other softwoods	Red alder	Other hardwoods
Puget Sound					
Lumber	0	46,701	0	39,010	3,678
Log export	0	3,000	1,200	0	0
Other *	0	800	0	0	870
Total	0	53,989	1,200	47,293	8,798
Olympic Peninsula					
Lumber	2,000	57,986	3,000	89,313	6,624
Veneer and plywood	0	986	0	0	8,711
Shake and shingle	0	8,550	0	0	0
Post, pole and piling	0	0	0	0	0
Log chipping	0	843	0	30,769	10,542
Other *	0	0	0	0	0
Total	2,000	68,365	3,000	120,082	25,876
Lower Columbia					
Lumber	0	45,000	295	40,359	3,992
Pulp	0	0	0	0	0
Log chipping	0	0	0	0	0
Other *	0	9,000	3,788	0	0
Total	0	54,000	4,083	40,359	3,992
Central Washington					
Lumber	68,882	0	694	0	0
Other *	0	0	0	0	6,000
Total	68,882	0	694	0	6,000
Inland Empire					
Lumber	41,108	16,414	0	0	0
Pulp	0	0	0	0	0
Other *	0	0	2,667	0	0
Total	41,108	16,414	2,667	0	0
State Total					
Lumber	111,990	166,101	3,989	168,682	14,293
Veneer and plywood	0	986	188	0	15,581
Pulp	0	0	0	0	0
Shake and shingle	0	9,050	0	0	0
Log export	0	12,000	4,800	0	0
Post, pole and piling	35	3,788	0	0	0
Log chipping	0	843	2,667	39,052	14,792
Total	112,025	192,768	11,643	207,734	44,665

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 10

Wood and bark residues — by production and use (tons, dry weight)

Economic area and industry	All residues	Wood residue						Unused
		All wood	Total	Pulp	Used			
					Board	Fuel	Other	
Puget Sound								
Lumber	1,622,284	1,269,544	1,268,281	671,299	77,166	359,713	160,103	1,263
Veneer and plywood	91,562	86,573	86,573	60,098	9,147	9,844	7,484	0
Shake and shingle	11,648	4,368	4,368	0	0	3,993	375	0
Total	1,725,494	1,360,485	1,359,222	731,397	86,313	373,550	167,962	1,263
Olympic Peninsula								
Lumber	2,254,144	1,733,089	1,733,089	1,011,649	64,584	624,330	32,526	0
Veneer and plywood	372,414	337,667	337,619	168,366	12,672	125,918	30,663	48
Shake and shingle	100,835	80,135	65,862	5,575	0	45,701	14,586	14,273
Total	2,727,393	2,150,891	2,136,570	1,185,590	77,256	795,949	77,775	14,321
Lower Columbia								
Lumber	582,212	437,277	437,277	306,124	0	34,874	96,279	0
Veneer and plywood	33,774	33,774	33,774	3,108	3,108	27,558	0	0
Shake and shingle	2,425	2,425	2,425	0	0	1,405	1,020	0
Total	618,411	473,476	473,476	309,232	3,108	63,837	97,299	0
Central Washington								
Lumber	252,004	177,688	177,688	92,356	51,196	7,384	26,752	0
Veneer and plywood	120,586	120,586	120,586	95,154	0	25,432	0	0
Total	372,590	298,274	298,274	187,510	51,196	32,816	26,752	0
Inland Empire								
Lumber	512,125	364,992	364,992	194,162	88,751	81,733	346	0
Total	512,125	364,992	364,992	194,162	88,751	81,733	346	0
State Total								
Lumber	5,222,769	3,982,590	3,981,327	2,275,590	281,697	1,108,034	316,006	1,263
Veneer and plywood	618,336	578,600	578,552	326,726	24,927	188,752	38,147	48
Shake and shingle	114,908	86,928	72,655	5,575	0	51,099	15,981	14,273
Total	5,956,013	4,648,118	4,632,534	2,607,891	306,624	1,347,885	370,134	15,584

Mill residues (sawdust, bark, shavings, etc.) are by-products of manufacturing lumber and other wood products and nearly all (99.75%) of it from Washington mills is used for other products or purposes. Table 10 tracks the quantity of the main categories of use of mill residues:

- **board:** Oriented strand board (sheathing panels), particle board
- **pulp:** paper products
- **fuel:** heating mill site boilers for the manufacturing process (pulp mills) or drying wood products
- **other:** garden mulch, barn shavings

Continued:
Wood and bark residues — by production and use

Economic area and industry	Bark residue						
	All bark	Total	Used				Unused
			Pulp	Board	Fuel	Other	
Puget Sound							
Lumber	352,740	352,740	0	0	48,288	304,452	0
Veneer and plywood	4,989	4,989	0	0	0	4,989	0
Shake and shingle	7,280	7,280	0	0	1,120	6,160	0
Total	365,009	365,009	0	0	49,408	315,601	0
Olympic Peninsula							
Lumber	521,055	521,055	0	0	347,879	173,176	0
Veneer and plywood	34,747	34,747	0	0	21,155	13,592	0
Shake and shingle	20,700	19,860	577	0	16,282	3,001	840
Total	576,502	575,662	577	0	385,316	189,769	840
Lower Columbia							
Lumber	144,935	144,935	0	0	91,740	53,195	0
Veneer and plywood	0	0	0	0	0	0	0
Shake and shingle	0	0	0	0	0	0	0
Total	144,935	144,935	0	0	91,740	53,195	0
Central Washington							
Lumber	74,316	74,301	0	0	40,276	34,025	15
Veneer and plywood	0	0	0	0	0	0	0
Total	74,316	74,301	0	0	40,276	34,025	15
Inland Empire							
Lumber	147,133	147,133	0	0	145,109	2,024	0
Total	147,133	147,133	0	0	145,109	2,024	0
State Total							
Lumber	1,240,179	1,240,164	0	0	673,292	566,872	15
Veneer and plywood	39,736	39,736	0	0	21,155	18,581	0
Shake and shingle	27,980	27,140	577	0	17,402	9,161	840
Total	1,307,895	1,307,040	577	0	711,849	594,614	855

* "Other" indicates industries were combined to avoid disclosing individual corporate data. The region totals were not modified.

6 million

bone dry tons (BDT) of bark and wood residues created by Washington mills in 2004. Only 15,600 BDTs were unused, about one quarter of a percent.

Table 11

Log consumption — by diameter in inches (thousand board feet, Scribner scale)

Economic area and industry	Log diameter in inches				
	Total	less than 5	5 to 10	10 to 20	21 or more
Puget Sound					
Lumber	688,707	11,721	342,740	286,781	47,466
Shake and shingle	500	0	0	0	500
Log export	648,310	676	122,190	418,489	106,955
Post, pole and piling	9,536	0	7,934	1,602	0
Log chipping	54,332	36,500	8,020	6,346	3,466
Other *	43,505	0	15,227	28,278	0
Total	1,444,890	48,896	496,111	741,496	158,387
Olympic Peninsula					
Lumber	1,217,334	12,428	789,459	368,537	46,911
Veneer and plywood	146,039	0	75,818	63,162	7,059
Shake and shingle	8,622	0	3,797	3,855	899
Post, pole and piling	12,370	771	9,566	2,033	0
Log chipping	166,276	72,064	34,788	29,895	29,529
Other *	5,500	0	1,100	3,850	550
Total	1,556,141	85,264	914,527	471,331	84,948
Lower Columbia					
Lumber	282,051	1,404	118,019	131,829	30,800
Pulp	0	0	0	0	0
Log export	244,139	0	38,100	160,224	45,815
Other *	25,388	5,297	8,169	11,591	331
Total	551,578	6,700	164,288	303,644	76,946
Central Washington					
Lumber	536,122	6,960	434,891	62,102	32,169
Other *	83,000	0	36,380	43,530	3,090
Total	619,122	6,960	471,271	105,632	35,259
Inland Empire					
Lumber	356,045	41,229	180,932	101,039	32,845
Pulp	0	0	0	0	0
Other *	53,368	5,361	10,674	26,667	10,667
Total	409,413	46,591	191,605	127,706	43,512
State Total					
Lumber	3,080,259	73,742	1,866,040	950,287	190,190
Veneer and plywood	291,311	0	134,931	146,231	10,149
Pulp	0	0	0	0	0
Shake and shingle	9,122	0	3,797	3,855	1,399
Log export	897,949	676	161,389	582,563	153,320
Post, pole and piling	21,941	799	17,507	3,635	0
Log chipping	280,562	119,194	54,136	63,239	43,993
Total	4,581,144	194,411	2,237,801	1,749,808	399,051

Washington Mill Survey 2004

Sawmills

Table 12:	Number of sawmills — by size -----	30
Table 13:	Sawmills' production capacity — by 8-eight-hour shift and mill size -----	31
Table 14:	Number of sawmills — by selected equipment and mill size -----	32
Table 15:	Number of sawmills — by selected equipment and counties -----	33
Table 16:	Number of sawmills — by size and headrig -----	34
Table 17:	Average number of operating days-----	35
Table 18:	Log consumption by sawmills — by log type -----	36
Table 19:	Log consumption by sawmills — by diameter in inches -----	37
Table 20:	Log consumption by sawmills — by original owners and mill size-----	38-39
Table 21:	Log consumption by sawmills — by original owners and counties -----	40-41
Table 22:	Number of sawmills — by percentage of logs from various sources -----	42-44
Figure 1:	Rising sawmill production -----	45
Table 23:	Log consumption by sawmills — by species and mill size -----	46-47
Table 24:	Log consumption by sawmills — by species and county -----	48-49
Table 25:	Wood and bark residues — by county -----	50-51
Table 26:	Wood residue — by use and county-----	52-55
Table 27:	Bark residues — by distribution and county -----	56
Table 28:	Lumber production — by headrig type and county-----	57
Table 29:	Lumber production — by degree of manufacture and mill size -----	58
Table 30:	Log consumption by sawmills — by softwood and hardwood -----	59
Table 30a:	Number of mills consuming hardwoods — by industry -----	59
Figure 2:	Species consumed by Washington sawmills -----	60
Figure 3:	Mills' consumption of hardwood and softwood logs-----	60
Figure 4:	Types of mills that consumed hardwood -----	60

Table 12

Number of sawmills — by mill size

Economic area and county	All Classes	Mill size class*			
		D	C	B	A
Puget Sound					
King	1	1	0	0	0
Pierce	4	0	0	1	3
Skagit	3	1	2	0	0
Snohomish	8	0	1	2	5
Whatcom	2	0	0	1	1
Total	18	2	3	4	9
Olympic Peninsula					
Clallam	3	0	0	0	3
Grays Harbor	4	0	1	0	3
Lewis	8	2	0	1	5
Mason	3	0	1	0	2
Pacific	1	0	0	0	1
Thurston	2	2	0	0	0
Total	21	4	2	1	14
Lower Columbia					
Clark	2	0	0	1	1
Cowlitz	4	0	0	0	4
Klickitat	1	0	0	0	1
Skamania	1	0	0	0	1
Total	8	0	0	1	7
Central Washington					
Chelan	1	0	0	0	1
Okanogan	2	0	2	0	0
Yakima	3	0	0	0	3
Total	6	0	2	0	4
Inland Empire					
Ferry	1	0	0	1	0
Pend Orielle	3	1	0	0	2
Stevens	5	3	0	0	2
Whitman	1	0	0	0	1
Total	10	4	0	1	5
State Total	63	10	7	7	39

* Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120 mbf
Class B: 80-120 mbf
Class C: 40-80 mbf
Class D: less than 40 mbf

Table 13

Sawmills' production capacity — by 8-hour shift and mill size(thousand board feet, lumber tally¹)

Economic area and county	Total Capacity	Mill size class *					
		D	C	B	A	AA	AAA
Puget Sound							
King	4	4	0	0	0	0	0
Pierce	1,065	0	0	100	450	0	515
Skagit	112	2	110	0	0	0	0
Snohomish	1,843	0	50	173	400	620	600
Whatcom	260	0	0	100	160	0	0
Total	3,284	6	160	373	1,010	620	1,115
Olympic Peninsula							
Clallam	645	0	0	0	345	300	0
Grays Harbor	1,090	0	50	0	390	0	650
Lewis	1,787	36	0	110	330	671	640
Mason	874	0	70	0	0	254	550
Pacific	400	0	0	0	0	400	0
Thurston	3	3	0	0	0	0	0
Total	4,799	39	120	110	1,065	1,625	1,840
Lower Columbia							
Clark	381	0	0	96	0	285	0
Cowlitz	1,310	0	0	0	310	1,000	0
Klickitat	240	0	0	0	240	0	0
Skamania	450	0	0	0	0	450	0
Total	2,381	0	0	96	550	1,735	0
Central Washington							
Chelan	250	0	0	0	250	0	0
Okanogan	110	0	110	0	0	0	0
Yakima	670	0	0	0	370	300	0
Total	1,030	0	110	0	620	300	0
Inland Empire							
Ferry	80	0	0	80	0	0	0
Pend Orielle	485	25	0	0	160	300	0
Stevens	720	26	0	0	194	500	0
Whitman	185	0	0	0	185	0	0
Total	1,470	51	0	80	539	800	0
State Total	12,964	96	390	659	3,784	5,080	2,955

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class AAA: More than 500 mbf

Class AA: 250-500 mbf

Class A: 120-250 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

¹ Due to the growth of large sawmills, this table uses six mill size categories. Other tables in this Mill Survey still use the four traditional size categories.

Table 14

Number of sawmills — by selected equipment and mill size

Economic area and mill size class	Barker	Chipper	Planner	Burner	Kiln
Puget Sound					
D	0	1	1	0	0
C	3	2	1	0	0
B	3	4	3	0	3
A	8	7	6	2	5
Total	14	14	11	2	8
Olympic Peninsula					
D	0	2	2	0	1
C	2	2	1	1	1
B	1	1	1	1	1
A	14	14	10	3	10
Total	17	19	14	5	13
Lower Columbia					
B	1	1	1	0	0
A	5	5	3	0	3
Total	6	6	4	0	3
Central Washington					
C	2	2	2	0	1
A	4	4	4	1	4
Total	6	6	6	1	5
Inland Empire					
D	1	2	3	0	1
B	1	1	1	0	1
A	4	4	3	2	3
Total	6	7	7	2	5
State Total					
D	1	5	6	0	2
C	7	6	4	1	2
B	6	7	6	1	5
A	35	34	26	8	25
Total	49	52	42	10	34

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120 mbf
Class B: 80-120 mbf
Class C: 40-80 mbf
Class D: less than 40 mbf

Table 15
Number of sawmills — by selected equipment and counties

Economic area and county	Barker	Chipper	Planner	Burner	Kiln
Puget Sound					
King	0	0	1	0	0
Pierce	4	3	3	0	2
Skagit	2	3	0	0	0
Snohomish	7	6	6	2	5
Whatcom	1	2	1	0	1
Total	14	14	11	2	8
Olympic Peninsula					
Clallam	3	3	3	0	3
Grays Harbor	4	4	2	1	2
Lewis	6	8	5	2	5
Mason	3	3	2	1	2
Pacific	1	1	1	1	1
Thurston	0	0	1	0	0
Total	17	19	14	5	13
Lower Columbia					
Clark	2	2	2	0	1
Cowlitz	2	2	0	0	0
Klickitat	1	1	1	0	1
Skamania	1	1	1	0	1
Total	6	6	4	0	3
Central Washington					
Chelan	1	1	1	1	1
Okanogan	2	2	2	0	1
Yakima	3	3	3	0	3
Total	6	6	6	1	5
Inland Empire					
Ferry	1	1	1	0	1
Pend Orielle	2	3	2	1	1
Stevens	3	3	4	1	3
Whitman	0	0	0	0	0
Total	6	7	7	2	5
State Total	49	52	42	10	34

Table 16
Number of sawmills — by size and headrig

Economic area and mill size	Circular saw				Bandsaw			Gang saw	Chipping saw	Scragg
	2ft	4ft	6ft	8ft	2ft	4ft	6ft	2ft	2ft	2ft
Puget Sound										
D	0	2	0	0	0	0	0	0	0	0
C	0	0	0	0	0	3	0	0	0	0
B	0	0	1	0	1	3	0	0	1	0
A	0	0	0	0	0	4	4	2	2	0
Total	0	2	1	0	1	10	4	2	3	0
Olympic Peninsula										
D	0	2	0	0	0	1	1	0	0	0
C	0	0	0	0	1	0	1	0	0	0
B	0	0	0	0	0	1	0	1	0	0
A	1	1	0	0	3	8	0	3	3	3
Total	1	3	0	0	4	10	2	4	3	3
Lower Columbia										
B	0	0	0	0	0	0	1	0	0	0
A	0	1	0	0	3	2	2	1	1	2
Total	0	1	0	0	3	2	3	1	1	2
Central Washington										
C	0	0	0	0	0	1	1	0	1	0
A	0	0	0	0	1	1	1	0	1	1
Total	0	0	0	0	1	2	2	0	2	1
Inland Empire										
D	2	1	0	0	0	1	0	0	1	0
B	0	0	0	0	0	1	0	0	0	0
A	1	0	1	0	0	3	0	0	2	0
Total	3	1	1	0	0	5	0	0	3	0
State Total										
D	2	5	0	0	0	2	1	0	1	0
C	0	0	0	0	1	4	2	0	1	0
B	0	0	1	0	1	5	1	1	1	0
A	2	2	1	0	7	18	7	6	9	6
Total	4	7	2	0	9	29	11	7	12	6

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120 mbf
Class B: 80-120 mbf
Class C: 40-80 mbf
Class D: less than 40 mbf

Table 17
Average number of operating days

Economic area and mill size	Average annual operating days
Puget Sound	
C and D	183
B	237
A	240
Average	224
Olympic Peninsula	
D, C and B	213
A	260
Average	244
Lower Columbia	
B and A	228
Average	228
Central Washington	
C, B and A	232
Average	232
Inland Empire	
D	123
B and A	253
Average	201
Statewide average	228

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.



Bandsaw at Monty Pfaff's sawmill operations south of Olympia

Table 18

Log consumption by sawmills — by log type (thousand board feet)

Economic area and mill size	Roundwood		Utility logs	Other	
	All roundwood	Sound logs		Peeler cores	Other
	— Scribner log scale —			— Lumber tally —	
Puget Sound					
C and D	15,645	14,946	699	0	80
B	45,000	45,000	0	0	9,832
A	628,062	621,718	6,344	0	0
Total	688,707	681,664	7,043	0	9,912
Olympic Peninsula					
D, C and B	59,824	58,164	1,660	0	0
A	1,157,510	1,153,741	3,769	0	0
Total	1,217,334	1,211,905	5,429	0	0
Lower Columbia					
B and A	282,051	277,710	4,341	0	0
Total	282,051	277,710	4,341	0	0
Central Washington					
C, B and A	536,122	534,865	1,257	3,500	4,320
Total	536,122	534,865	1,257	3,500	4,320
Inland Empire					
D	49,808	48,818	990	0	0
B and A	306,237	291,559	14,678	0	12,081
Total	356,045	340,377	15,668	0	12,081
State Total					
D	109,632	106,982	2,650	0	0
C	551,767	549,811	1,956	3,500	4,400
B	633,288	614,269	19,019	0	21,913
A	1,785,572	1,775,459	10,113	0	0
Total	3,080,259	3,046,521	33,738	3,500	26,313

Mill size classes are determined by the capacity to process lumber (measured in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120,000 mbf

Class B: 80,000-120,000 mbf

Class C: 40,000-80,000 mbf

Class D: less than 40,000 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 19

Log consumption by sawmills — by diameter in inches (thousand board feet, Scribner scale)

Economic area and mill size	Log diameter in inches				
	Total	less than 5	5 to 10	10 to 20	21 or more
Puget Sound					
C and D	15,645	1,100	5,964	5,822	2,759
B	45,000	10,000	11,940	13,760	9,300
A	628,062	621	324,837	267,198	35,406
Total	688,707	11,721	342,740	286,781	47,466
Olympic Peninsula					
D, C and B	59,824	388	39,389	13,599	6,448
A	1,157,510	12,040	750,070	354,938	40,463
Total	1,217,334	12,428	789,459	368,537	46,911
Lower Columbia					
B and A	282,051	1,404	118,019	131,829	30,800
Total	282,051	1,404	118,019	131,829	30,800
Central Washington					
C, B and A	536,122	6,960	434,891	62,102	32,169
Total	536,122	6,960	434,891	62,102	32,169
Inland Empire					
D	49,808	0	19,861	27,357	2,590
B and A	306,237	41,229	161,071	73,682	30,255
Total	356,045	41,229	180,932	101,039	32,845
State Total					
D	109,632	388	59,250	40,956	9,038
C	551,767	8,060	440,855	67,924	34,929
B	633,288	52,633	291,030	219,271	70,354
A	1,785,572	12,660	1,074,906	622,136	75,869
Total	3,080,259	73,742	1,866,040	950,287	190,190

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift. A log's lumber tally is usually higher than its Scribner scale, because lumber tally is the actual volume of lumber produced, whereas Scribner is an early 20th Century estimate of a log's potential to produce lumber and does not take into account modern mill efficiencies.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 20

Log consumption by sawmills — by original owners and mill size

(thousand board feet, Scribner scale)

Economic area and mill size	All owners	State	National forest	Bureau of Land Management	Other public
Puget Sound					
C and D	15,645	4,550	200	0	2,000
B	45,000	12,600	0	0	0
A	628,062	167,402	824	0	6,323
Total	688,707	184,552	1,024	0	8,323
Olympic					
D, C and B	59,824	6,701	0	0	3,574
A	1,157,510	142,534	5,610	0	2,045
Total	1,217,334	149,235	5,610	0	5,620
Lower Columbia					
B and A	282,051	58,277	5,661	0	10,054
Total	282,051	58,277	5,661	0	10,054
Central					
C, B and A	536,122	5,622	13,146	0	0
Total	536,122	5,622	13,146	0	0
Inland Empire					
D	49,808	4,468	1,485	0	495
B and A	306,237	29,218	22,788	0	20,138
Total	356,045	33,686	24,272	0	20,633
State Total					
D	109,632	11,169	1,485	0	4,069
C	551,767	10,172	13,346	0	2,000
B	633,288	100,095	28,449	0	30,192
A	1,785,572	309,936	6,434	0	8,368
Total	3,080,259	431,372	49,714	0	44,629

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Log consumption by sawmills — by original owners and mill size

Economic area and mill size	Forest industry			Farmer and miscellaneous private
	Own wood supply	Other wood supply	Native American	
Puget Sound				
C and D	0	3,700	0	5,195
B	0	0	0	32,400
A	54,750	264,602	424	133,738
Total	54,750	268,302	424	171,333
Olympic Peninsula				
D, C and B	800	31,564	820	16,365
A	278,000	502,131	23,364	203,826
Total	278,800	533,694	24,184	220,191
Lower Columbia				
B and A	53,289	90,882	885	63,003
Total	53,289	90,882	885	63,003
Central Washington				
C, B and A	10,560	9,810	478,812	18,172
Total	10,560	9,810	478,812	18,172
Inland Empire				
D	10,393	2,148	4,490	26,329
B and A	24,488	80,365	66,480	62,760
Total	34,881	82,513	70,970	89,089
State Total				
D	11,193	33,711	5,310	42,695
C	10,560	13,510	478,812	23,367
B	77,777	171,247	67,365	158,163
A	332,750	766,732	23,788	337,563
Total	432,280	985,200	575,276	561,788

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The totals were not modified.

Table 21

Log consumption by sawmills — by original owners and counties

(thousand board feet, Scribner scale)

Economic area and county	All owners	State	National forest	Bureau of Land Management	Other public
Puget Sound					
King and Whatcom	19,742	4,916	0	0	5,899
Pierce	307,707	41,000	400	0	0
Skagit	11,565	3,550	0	0	0
Snohomish	349,693	135,087	624	0	2,424
Total	688,707	184,552	1,024	0	8,323
Olympic					
Clallam	136,990	33,306	3,990	0	1,035
Grays Harbor	179,220	32,173	650	0	2,650
Lewis	600,037	42,944	970	0	1,934
Mason, Pacific and Thurston	301,087	40,812	0	0	0
Total	1,217,334	149,235	5,610	0	5,620
Lower Columbia					
Clark, Klickitat and Skamania	120,701	28,068	5,661	0	5,567
Cowlitz	161,350	30,209	0	0	4,487
Total	282,051	58,277	5,661	0	10,054
Central					
Chelan and Okanogan	38,780	822	11,238	0	0
Yakima	497,342	4,800	1,908	0	0
Total	536,122	5,622	13,146	0	0
Inland Empire					
Ferry, Pend Orielle and Whitman	180,977	11,899	11,732	0	18,738
Stevens	175,068	21,787	12,540	0	1,895
Total	356,045	33,686	24,272	0	20,633
State Total	3,080,259	431,372	49,714	0	44,629

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Log consumption by sawmills — by original owners and counties

Economic area and county	Forest industry		Native American	Farmer and miscellaneous private
	Own wood supply	Other wood supply		
Puget Sound				
King and Whatcom	0	2,949	0	5,979
Pierce	26,000	118,600	0	121,707
Skagit	0	3,700	0	4,315
Snohomish	28,750	143,053	424	39,332
Total	54,750	268,302	424	171,333
Olympic Peninsula				
Clallam	0	90,567	4,312	3,780
Grays Harbor	0	130,334	5,222	8,191
Lewis	218,800	159,994	10,000	165,395
Mason, Pacific and Thurston	60,000	152,800	4,650	42,825
Total	278,800	533,694	24,184	220,191
Lower Columbia				
Clark, Klickitat and Skamania	8,262	58,560	885	13,698
Cowlitz	45,027	32,322	0	49,305
Total	53,289	90,882	885	63,003
Central Washington				
Chelan and Okanogan	10,560	2,526	144	13,490
Yakima	0	7,284	478,668	4,682
Total	10,560	9,810	478,812	18,172
Inland Empire				
Ferry, Pend Orielle and Whitman	6,380	45,984	50,426	35,817
Stevens	28,501	36,529	20,544	53,272
Total	34,881	82,513	70,970	89,089
State Total	432,280	985,200	575,276	561,788

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 22

Number of sawmills — by percentage of logs from various sources

(percentage level of dependency for logs)

Economic area and mill size	National forest				State				Bureau of Land Mgmt.			
	Percentage of dependency				Percentage of dependency				Percentage of dependency			
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound												
C and D	4	1	0	0	2	2	1	0	5	0	0	0
B	4	0	0	0	3	0	0	1	4	0	0	0
A	7	2	0	0	1	5	3	0	9	0	0	0
Total	15	3	0	0	6	7	4	1	18	0	0	0
Olympic Peninsula												
D, C and B	7	0	0	0	3	3	0	1	7	0	0	0
A	10	4	0	0	1	12	1	0	14	0	0	0
Total	17	4	0	0	4	15	1	1	21	0	0	0
Lower Columbia												
B and A	6	2	0	0	2	5	1	0	8	0	0	0
Total	6	2	0	0	2	5	1	0	8	0	0	0
Central Washington												
C, B and A	2	4	0	0	2	4	0	0	6	0	0	0
Total	2	4	0	0	2	4	0	0	6	0	0	0
Inland Empire												
D	3	1	0	0	2	2	0	0	4	0	0	0
B and A	1	5	0	0	1	5	0	0	6	0	0	0
Total	4	6	0	0	3	7	0	0	10	0	0	0
State Total												
D	10	1	0	0	5	5	0	1	11	0	0	0
C	6	5	0	0	4	6	1	0	11	0	0	0
B	11	7	0	0	6	10	1	1	18	0	0	0
A	17	6	0	0	2	17	4	0	23	0	0	0
Total	44	19	0	0	17	38	6	2	63	0	0	0

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Number of sawmills — by percentage of logs from various sources

Economic area and mill size	Forest industry											
	Other public				Own wood supply				Other wood supply			
	Percentage of dependency											
	0	1-33	34-66	67-100	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound												
C and D	4	0	1	0	5	0	0	0	3	1	1	0
B	4	0	0	0	4	0	0	0	4	0	0	0
A	7	2	0	0	7	1	1	0	1	2	6	0
Total	15	2	1	0	16	1	1	0	8	3	7	0
Olympic Peninsula												
D, C and B	5	2	0	0	6	0	1	0	2	0	5	0
A	11	3	0	0	11	1	1	1	1	1	6	6
Total	16	5	0	0	17	1	2	1	3	1	11	6
Lower Columbia												
B and A	4	4	0	0	5	1	1	1	1	2	4	1
Total	4	4	0	0	5	1	1	1	1	2	4	1
Central Washington												
C, and B a	6	0	0	0	5	1	0	0	3	1	2	0
Total	6	0	0	0	5	1	0	0	3	1	2	0
Inland Empire												
D	3	1	0	0	3	1	0	0	2	1	1	0
B and A	3	2	1	0	3	3	0	0	1	2	2	1
Total	6	3	1	0	6	4	0	0	3	3	3	1
State Total												
D	8	3	0	0	9	1	1	0	4	1	6	0
C	10	0	1	0	10	1	0	0	6	2	3	0
B	11	6	1	0	12	4	1	1	6	4	6	2
A	18	5	0	0	18	2	2	1	2	3	12	6
Total	47	14	2	0	49	8	4	2	18	10	27	8

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Number of sawmills — by percentage of logs from various sources

Economic area and mill size	Native American				Farmer and miscellaneous private			
	Percentage of dependency							
	0	1-33	34-66	67-100	0	1-33	34-66	67-100
Puget Sound								
C and D	5	0	0	0	0	2	1	2
B	4	0	0	0	1	1	0	2
A	8	1	0	0	2	6	0	1
Total	17	1	0	0	3	9	1	5
Olympic Peninsula								
D, C and B	6	1	0	0	3	1	2	1
A	5	9	0	0	2	11	1	0
Total	11	10	0	0	5	12	3	1
Lower Columbia								
B and A	7	1	0	0	0	6	2	0
Total	7	1	0	0	0	6	2	0
Central Washington								
C, B and A	2	2	0	2	2	2	2	0
Total	2	2	0	2	2	2	2	0
Inland Empire								
D	2	1	0	1	1	0	2	1
B and A	2	3	0	1	1	4	1	0
Total	4	4	0	2	2	4	3	1
State Total								
D	8	2	0	1	4	1	4	2
C	7	2	0	2	2	4	3	2
B	13	4	0	1	2	11	3	2
A	13	10	0	0	4	17	1	1
Total	41	18	0	4	12	33	11	7

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Figure 1

Rising sawmill production

Even as the number of Washington sawmills **declined** by more than 60% in the past 12 years, total finished lumber production **increased** by about 73%.

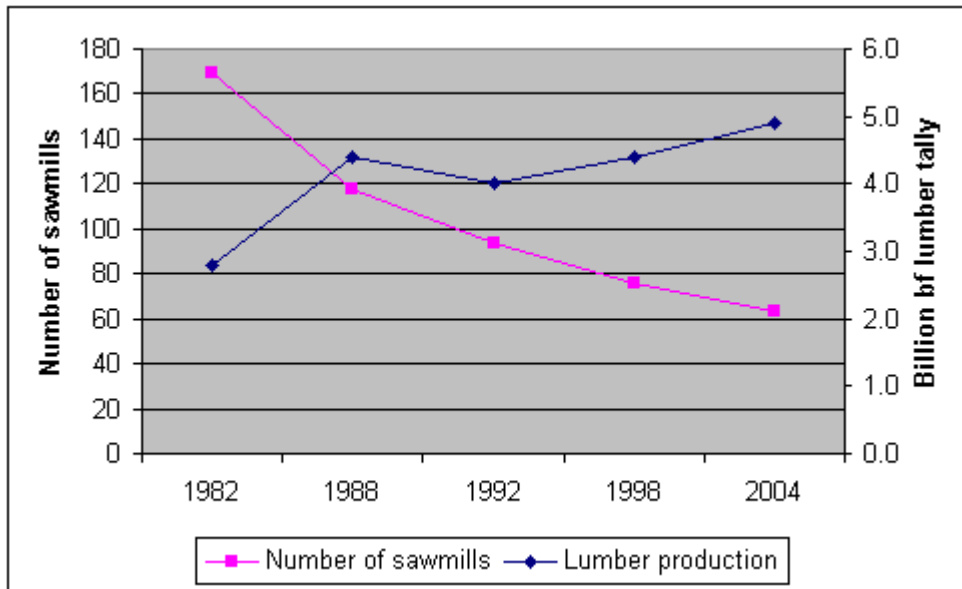


Table 23

Log consumption by sawmills — by species and mill size

(thousand board feet, Scribner scale)

Economic area and mill size	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine
Puget Sound						
C and D	15,645	2,208	1,368	0	80	0
B	45,000	24,000	21,000	0	0	0
A	628,062	278,174	269,702	2,090	697	0
Total	688,707	304,382	292,070	2,090	777	0
Olympic Peninsula						
D, C and B	59,824	11	5,658	1,640	902	0
A	1,157,510	445,989	572,158	10,210	21,843	0
Total	1,217,334	446,000	577,816	11,850	22,745	0
Lower Columbia						
B and A	282,051	155,578	10,405	25,834	590	0
Total	282,051	155,578	10,405	25,834	590	0
Central Washington						
C, B and A	536,122	144,449	5,147	250,948	347	65,656
Total	536,122	144,449	5,147	250,948	347	65,656
Inland Empire						
D	49,808	140	0	0	36	47,053
B and A	306,237	99,545	3,500	39,914	2,658	105,676
Total	356,045	99,685	3,500	39,914	2,695	152,729
State Total						
D	109,632	152	5,658	1,640	938	47,053
C	551,767	146,657	6,515	250,948	427	65,656
B	633,288	279,123	34,905	65,747	3,248	105,676
A	1,785,572	724,162	841,860	12,300	22,540	0
Total	3,080,259	1,150,093	888,938	330,635	27,154	218,384

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Log consumption by sawmills — by species and mill size

(thousand board feet, Scribner scale)

Economic area and mill size	Lodgepole pine	Western redcedar	Other softwoods	Red alder	Other hardwoods
Puget Sound					
C and D	0	11,701	0	2	286
B	0	0	0	0	0
A	0	35,000	0	39,008	3,392
Total	0	46,701	0	39,010	3,678
Olympic Peninsula					
D, C and B	0	11,676	0	38,913	1,024
A	2,000	46,310	3,000	50,400	5,600
Total	2,000	57,986	3,000	89,313	6,624
Lower Columbia					
B and A	0	45,000	295	40,359	3,992
Total	0	45,000	295	40,359	3,992
Central Washington					
C, B and A	68,882	0	694	0	0
Total	68,882	0	694	0	0
Inland Empire					
D	2,041	537	0	0	0
B and A	39,067	15,877	0	0	0
Total	41,108	16,414	0	0	0
State Total					
D	2,041	12,213	0	38,913	1,024
C	68,882	11,701	694	2	286
B	39,067	60,877	295	40,359	3,992
A	2,000	81,310	3,000	89,408	8,992
Total	111,990	166,101	3,989	168,682	14,293

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Some mill size classes were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 24

Log consumption by sawmills — by species and county (thousand board feet, Scribner scale)

Economic area and county	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine
Puget Sound						
King and Whatcom	19,742	10,665	8,266	590	197	0
Pierce	307,707	136,580	171,127	0	0	0
Skagit	11,565	0	0	0	0	0
Snohomish	349,693	157,136	112,677	1,500	580	0
Total	688,707	304,382	292,070	2,090	777	0
Olympic Peninsula						
Clallam	136,990	18,439	99,208	6,210	13,133	0
Grays Harbor	179,220	28,000	117,658	1,640	9,612	0
Lewis	600,037	299,500	174,000	0	0	0
Mason, Pacific and Thurston	301,087	100,061	186,950	4,000	0	0
Total	1,217,334	446,000	577,816	11,850	22,745	0
Lower Columbia						
Clark, Klickitat and Skamania	120,701	83,578	10,405	25,834	590	0
Cowlitz	161,350	72,000	0	0	0	0
Total	282,051	155,578	10,405	25,834	590	0
Central Washington						
Chelan and Okanogan	38,780	17,165	4,800	8,000	0	4,800
Yakima	497,342	127,284	347	242,948	347	60,856
Total	536,122	144,449	5,147	250,948	347	65,656
Inland Empire						
Ferry, Pend Orielle and Whitman	180,977	57,685	0	29,414	2,695	59,578
Stevens	175,068	42,000	3,500	10,500	0	93,151
Total	356,045	99,685	3,500	39,914	2,695	152,729
State Total	3,080,259	1,150,093	888,938	330,635	27,154	218,384

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Log consumption by sawmills — by species and county (thousand board feet, Scribner scale)

Economic area and county	Lodgepole pine	Western redcedar	Other softwoods	Red alder	Other hardwoods
Puget Sound					
King and Whatcom	0	16	0	2	6
Pierce	0	0	0	0	0
Skagit	0	11,565	0	0	0
Snohomish	0	35,120	0	39,008	3,672
Total	0	46,701	0	39,010	3,678
Olympic Peninsula					
Clallam	0	0	0	0	0
Grays Harbor	0	22,310	0	0	0
Lewis	2,000	25,600	3,000	89,313	6,624
Mason, Pacific and Thurston	0	10,076	0	0	0
Total	2,000	57,986	3,000	89,313	6,624
Lower Columbia					
Clark, Klickitat and Skamania	0	0	295	0	0
Cowlitz	0	45,000	0	40,359	3,992
Total	0	45,000	295	40,359	3,992
Central Washington					
Chelan and Okanogan	4,015	0	0	0	0
Yakima	64,867	0	694	0	0
Total	68,882	0	694	0	0
Inland Empire					
Ferry, Pend Orielle and Whitman	21,241	10,365	0	0	0
Stevens	19,867	6,049	0	0	0
Total	41,108	16,414	0	0	0
State Total	111,990	166,101	3,989	168,682	14,293

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 25

Wood and bark residues — by county (dry weight tons)

Economic area and county	All residues			Wood residues		
	Total	Used	Unused	Total	Used	Unused
Puget Sound						
King and Whatcom	56,064	54,801	1,263	47,292	46,029	1,263
Pierce	725,749	725,749	0	560,199	560,199	0
Skagit	15,274	15,274	0	10,127	10,127	0
Snohomish	825,197	825,197	0	651,926	651,926	0
Total	1,622,284	1,621,021	1,263	1,269,544	1,268,281	1,263
Olympic Peninsula						
Clallam	288,530	288,530	0	213,448	213,448	0
Grays Harbor	444,510	444,510	0	344,803	344,803	0
Mason, Pacific and Thurston	764,264	764,264	0	593,043	593,043	0
Lewis	756,840	756,840	0	581,795	581,795	0
Total	2,254,144	2,254,144	0	1,733,089	1,733,089	0
Lower Columbia						
Clark, Klickitat and Skamania	271,241	271,241	0	206,080	206,080	0
Cowlitz	310,971	310,971	0	231,197	231,197	0
Total	582,212	582,212	0	437,277	437,277	0
Central Washington						
Chelan and Okanogan	93,220	93,205	15	73,458	73,458	0
Yakima	158,784	158,784	0	104,230	104,230	0
Total	252,004	251,989	15	177,688	177,688	0
Inland Empire						
Ferry, Pend Orielle and Whitman	220,123	220,123	0	142,267	142,267	0
Stevens	292,002	292,002	0	222,725	222,725	0
Total	512,125	512,125	0	364,992	364,992	0
State Total	5,222,769	5,221,491	1,278	3,982,590	3,981,327	1,263

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Wood and bark residues — by county (dry weight tons)

Economic area and county	Bark residues		
	Total	Used	Unused
Puget Sound			
King and Whatcom	8,772	8,772	0
Pierce	165,550	165,550	0
Skagit	5,147	5,147	0
Snohomish	173,271	173,271	0
Total	352,740	352,740	0
Olympic Peninsula			
Clallam	75,082	75,082	0
Grays Harbor	99,707	99,707	0
Mason, Pacific and Thurston	171,221	171,221	0
Lewis	175,045	175,045	0
Total	521,055	521,055	0
Lower Columbia			
Clark, Klickitat and Skamania	65,160	65,160	0
Cowlitz	79,774	79,774	0
Total	144,934	144,934	0
Central Washington			
Chelan and Okanogan	19,763	19,748	15
Yakima	54,554	54,554	0
Total	74,317	74,302	15
Inland Empire			
Ferry, Pend Orielle and Whitman	77,855	77,855	0
Stevens	69,278	69,278	0
Total	147,133	147,133	0
State Total	1,240,179	1,240,164	15

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 26

Wood residue — by use and county (dry weight tons)

Economic area and county	Total	Total used	All types				Unused
			Pulp	Board	Fuel	Other	
Puget Sound							
King and Whatcom	47,293	46,030	26,488	0	0	19,541	1,263
Pierce	560,198	560,198	400,107	42,876	58,860	58,356	0
Skagit	10,127	10,127	5,797	0	1,933	2,397	0
Snohomish	651,928	651,928	238,907	34,290	298,920	79,809	0
Total	1,269,546	1,268,283	671,299	77,166	359,713	160,103	1,263
Olympic Peninsula							
Clallam	213,448	213,448	115,138	0	98,310	0	0
Grays Harbor	344,802	344,802	171,424	0	172,666	713	0
Mason, Pacific and Thurston	593,042	593,042	405,274	0	187,715	54	0
Lewis	581,797	581,797	319,813	64,584	165,639	31,759	0
Total	1,733,089	1,733,089	1,011,649	64,584	624,330	32,526	0
Lower Columbia							
Clark, Klickitat and Skamania	206,079	206,079	114,324	0	17,767	73,989	0
Cowlitz	231,197	231,197	191,800	0	17,107	22,290	0
Total	437,276	437,276	306,124	0	34,874	96,279	0
Central Washington							
Chelan and Okanogan	73,459	73,459	40,368	10,804	5,832	16,454	0
Yakima	104,231	104,231	51,988	40,392	1,552	10,298	0
Total	177,690	177,690	92,356	51,196	7,384	26,752	0
Inland Empire							
Ferry, Pend Orielle and Whitman	142,267	142,267	73,775	12,255	55,897	340	0
Stevens	222,726	222,726	120,387	76,496	25,836	6	0
Total	364,993	364,993	194,162	88,751	81,733	346	0
State Total	3,982,594	3,981,331	2,275,590	281,697	1,108,034	316,006	1,263

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Wood residue — by use and county

Economic area and county	Coarse						Unused
	Total	Total used	Pulp	Board	Fuel	Other	
Puget Sound							
King and Whatcom	28,323	27,427	26,488	0	0	939	896
Pierce	282,999	282,999	282,999	0	0	0	0
Skagit	5,797	5,797	5,797	0	0	0	0
Snohomish	348,452	348,452	194,946	34,290	118,618	598	0
Total	665,571	664,675	510,230	34,290	118,618	1,537	896
Olympic Peninsula							
Clallam	87,728	87,728	87,728	0	0	0	0
Grays Harbor	186,275	186,275	165,722	0	20,553	0	0
Mason, Pacific and Thurston	349,665	349,665	349,665	0	0	0	0
Lewis	344,044	344,044	302,373	0	40,565	1,106	0
Total	967,712	967,712	905,488	0	61,118	1,106	0
Lower Columbia							
Clark, Klickitat and Skamania	96,975	96,975	96,975	0	0	0	0
Cowlitz	121,210	121,210	105,400	0	0	15,810	0
Total	218,185	218,185	202,375	0	0	15,810	0
Central Washington							
Chelan and Okanogan	40,368	40,368	40,368	0	0	0	0
Yakima	12,884	12,884	11,596	0	1,288	0	0
Total	53,252	53,252	51,964	0	1,288	0	0
Inland Empire							
Ferry, Pend Orielle and Whitman	40,079	40,079	40,079	0	0	0	0
Stevens	106,728	106,728	102,640	0	4,088	0	0
Total	146,807	146,807	142,719	0	4,088	0	0
State Total	2,051,527	2,050,631	1,812,776	34,290	185,112	18,453	896

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Wood residue — by use and county

Economic area and county	Total	Total used	Fine				Unused
			Pulp	Board	Fuel	Other	
Puget Sound							
King and Whatcom	11,608	11,241	0	0	0	11,241	367
Pierce	138,600	138,600	94,500	0	12,744	31,356	0
Skagit	4,330	4,330	0	0	1,933	2,397	0
Snohomish	160,343	160,343	43,961	0	81,691	34,691	0
Total	314,881	314,514	138,461	0	96,368	79,685	367
Olympic Peninsula							
Clallam	62,860	62,860	27,410	0	35,450	0	0
Grays Harbor	83,476	83,476	5,702	0	77,774	0	0
Mason, Pacific and Thurston	143,348	143,348	52,661	0	90,655	32	0
Lewis	138,302	138,302	17,360	14,040	79,057	27,845	0
Total	427,986	427,986	103,133	14,040	282,936	27,877	0
Lower Columbia							
Clark, Klickitat and Skamania	54,553	54,553	5,029	0	14,806	34,718	0
Cowlitz	66,787	66,787	43,200	0	17,107	6,480	0
Total	121,340	121,340	48,229	0	31,913	41,198	0
Central Washington							
Chelan and Okanogan	16,545	16,545	0	4,430	3,888	8,227	0
Yakima	45,673	45,673	40,392	0	264	5,017	0
Total	62,218	62,218	40,392	4,430	4,152	13,244	0
Inland Empire							
Ferry, Pend Orielle and Whitman	65,266	65,266	17,018	0	48,248	0	0
Stevens	58,001	58,001	16,408	27,000	14,588	5	0
Total	123,267	123,267	33,426	27,000	62,836	5	0
State Total	1,049,692	1,049,325	363,641	45,470	478,205	162,009	367

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Continued:

Wood residue — by use and county

Economic area and county	Total	Total used	Medium				Unused
			Pulp	Board	Fuel	Other	
Puget Sound							
King and Whatcom	7,361	7,361	0	0	0	7,361	0
Pierce	138,600	138,600	22,608	42,876	46,116	27,000	0
Skagit	0	0	0	0	0	0	0
Snohomish	143,131	143,131	0	0	98,611	44,520	0
Total	289,092	289,092	22,608	42,876	144,727	78,881	0
Olympic Peninsula							
Clallam	62,860	62,860	0	0	62,860	0	0
Grays Harbor	75,052	75,052	0	0	74,339	713	0
Mason, Pacific and Thurston	100,030	100,030	2,948	0	97,060	22	0
Lewis	99,449	99,449	80	50,544	46,017	2,808	0
Total	337,391	337,391	3,028	50,544	280,276	3,543	0
Lower Columbia							
Clark, Klickitat and Skamania	54,552	54,552	12,320	0	2,961	39,271	0
Cowlitz	43,200	43,200	43,200	0	0	0	0
Total	97,752	97,752	55,520	0	2,961	39,271	0
Central Washington							
Chelan and Okanogan	16,545	16,545	0	6,374	1,944	8,227	0
Yakima	45,673	45,673	0	40,392	0	5,281	0
Total	62,218	62,218	0	46,766	1,944	13,508	0
Inland Empire							
Ferry, Pend Orielle and Whitman	36,922	36,922	16,678	12,255	7,649	340	0
Stevens	57,996	57,996	1,339	49,496	7,160	1	0
Total	94,918	94,918	18,017	61,751	14,809	341	0
State Total	881,371	881,371	99,173	201,937	444,717	135,544	0

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 27

Bark residues — by use and county (dry weight tons)

Economic area and county	Total	Used				Unused	
		Total used	Pulp	Board	Fuel		Other
Puget Sound							
King and Whatcom	8,772	8,772	0	0	0	8,772	0
Pierce	165,550	165,550	0	0	232	165,318	0
Skagit	5,147	5,147	0	0	2,309	2,838	0
Snohomish	173,271	173,271	0	0	45,747	127,524	0
Total	352,740	352,740	0	0	48,288	304,452	0
Olympic Peninsula							
Clallam	75,082	75,082	0	0	75,082	0	0
Grays Harbor	99,707	99,707	0	0	91,193	8,514	0
Mason, Pacific and Thurston	171,221	171,221	0	0	75,335	95,886	0
Lewis	175,045	175,045	0	0	106,269	68,776	0
Total	521,055	521,055	0	0	347,879	173,176	0
Lower Columbia							
Clark, Klickitat and Skamania	65,160	65,160	0	0	32,400	32,761	0
Cowlitz	79,774	79,774	0	0	59,340	20,434	0
Total	144,934	144,934	0	0	91,740	53,195	0
Central Washington							
Chelan and Okanogan	19,763	19,748	0	0	14,576	5,171	15
Yakima	54,554	54,554	0	0	25,700	28,854	0
Total	74,317	74,302	0	0	40,276	34,025	15
Inland Empire							
Ferry, Pend Orielle and Whitman	77,855	77,855	0	0	77,449	407	0
Stevens	69,278	69,278	0	0	67,660	1,617	0
Total	147,133	147,133	0	0	145,109	2,024	0
State Total	1,240,179	1,240,164	0	0	673,292	566,872	15

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 28

Lumber production — by headrig and county(thousand board feet, lumber tally)

Economic area and county	All headrig types	Circular			Chipping saw	Scragg double cut saw
		saw	Band saw	Gang saw		
Puget Sound						
King and Whatcom	53,743	80	27,200	0	6,800	0
Pierce	641,665	0	135,933	480,732	25,000	0
Skagit	20,044	95	19,949	0	0	0
Snohomish	738,573	10,000	657,528	53,900	17,145	0
Total	1,454,025	10,175	840,610	534,632	48,945	0
Olympic Peninsula						
Clallam	291,018	12,734	83,234	70,500	0	124,551
Grays Harbor	386,462	3,900	317,762	29,700	0	35,100
Mason, Pacific and Thurston	663,648	0	250,208	413,440	0	0
Lewis	631,761	6,498	387,907	44,515	184,111	8,730
Total	1,972,889	23,132	1,039,110	558,155	184,111	168,381
Lower Columbia						
Clark, Klickitat and Skamania	252,557	0	218,335	0	1,141	33,081
Cowlitz	377,943	15,840	320,857	27,497	0	13,749
Total	630,500	15,840	539,192	27,497	1,141	46,830
Central Washington						
Chelan and Okanogan	76,600	0	41,440	0	0	35,160
Yakima	211,449	0	147,449	0	64,000	0
Total	288,049	0	188,889	0	64,000	35,160
Inland Empire						
Ferry, Pend Orielle and Whitman	302,161	45,790	125,547	0	130,824	0
Stevens	268,524	54,286	52,947	0	36,291	0
Total	570,685	100,076	178,494	0	167,115	0
State Total	4,916,148	149,222	2,786,296	1,120,284	465,312	250,371

Some counties were combined to avoid disclosing individual corporate data. The region totals were not modified.

Table 29

Lumber production — by degree of manufacture and mill size

(thousand board feet, lumber tally)

Economic area and mill size	Moisture			Total	Surface	
	Green	Kiln-dried	Air-dried		Rough	Surfaced
Puget Sound						
C and D	27,764	288	72	28,124	22,869	5,255
B	43,000	72,663	0	115,663	32,613	83,050
A	645,894	664,344	0	1,310,238	148,111	1,162,127
Total	716,658	737,295	72	1,454,025	203,593	1,250,432
Olympic Peninsula						
D, C and B	81,579	39,406	54	121,039	81,734	39,305
A	479,348	1,372,502	0	1,851,850	160,285	1,691,565
Total	560,928	1,411,907	54	1,972,889	242,018	1,730,871
Lower Columbia						
A and B	291,312	259,988	0	551,300	62,529	488,771
Total	291,312	259,988	0	551,300	62,529	488,771
Central Washington						
A, B and C	21,412	255,837	10,800	288,049	11,377	276,672
Total	21,412	255,837	10,800	288,049	11,377	276,672
Inland Empire						
D	405	65,984	20	66,409	882	65,527
A and B	137,287	365,439	1,550	504,276	134,812	369,464
Total	137,692	431,423	1,570	570,685	135,694	434,991
State Total						
D	81,984	105,390	74	187,448	82,616	104,832
C	27,764	288	72	28,124	22,869	5,255
B	43,000	72,663	0	115,663	32,613	83,050
A	1,575,254	2,918,109	12,350	4,505,713	517,113	3,988,600
Total	1,728,002	3,096,450	12,496	4,836,948	655,211	4,181,737

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf**Class B:** 80-120 mbf**Class C:** 40-80 mbf**Class D:** less than 40 mbf

Table 30
Log consumption by sawmills — by softwood and hardwood
 (thousand board feet, lumber tally)

Economic area and mill size	Total	Softwood	Hardwood
Central			
A, B and C	288,049	288,049	0
Total	288,049	288,049	0
Inland Empire			
D	66,409	66,409	0
A and B	504,276	504,276	0
Total	570,685	570,685	0
Lower Columbia			
A and B	551,300	482,557	68,743
Total	551,300	482,557	68,743
Olympic Peninsula			
D, C and B	121,039	56,196	64,843
A	1,851,850	1,764,550	87,300
Total	1,972,889	1,820,746	152,143
Puget Sound			
C and D	28,124	27,316	808
B	115,663	115,663	0
A	1,310,238	1,253,088	57,150
Total	1,454,025	1,396,067	57,958
State Total	4,836,948	4,558,104	278,844

Mill size classes indicate the capacity to process lumber (in thousand board feet, lumber tally) during an 8-hour shift.

Class A: More than 120 mbf

Class B: 80-120 mbf

Class C: 40-80 mbf

Class D: less than 40 mbf

Table 30a
Number of mills consuming hardwoods — by industry

Lumber	6
Veneer and plywood	3
Pulp	3
Shake and shingle	0
Log export	0
Post, pole and piling	0
Chipping	11
State Total	23

Figure 2

Species consumed by Washington sawmills

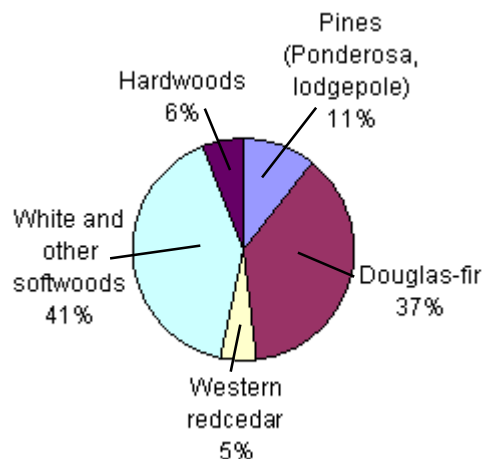


Figure 3

Mills' consumption of hardwood and softwood logs

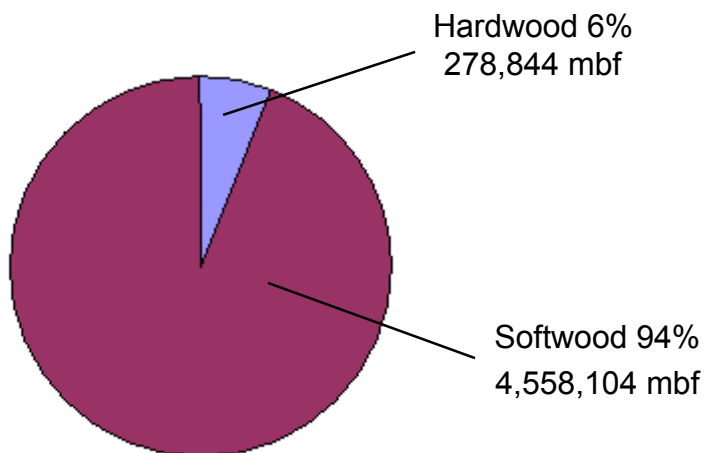
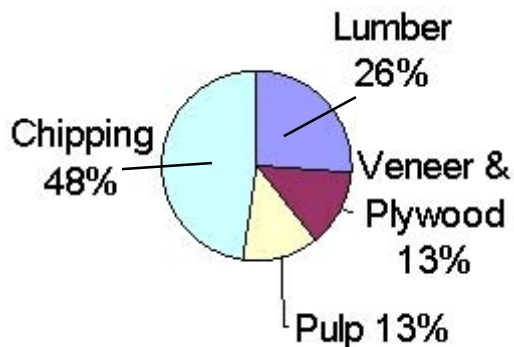


Figure 4

Types of mills that consumed hardwood



Veneer and plywood Mills

Table 31: Number of veneer and plywood mills — by log diameter limit in inches -----	62
Table 32: Number of veneer and plywood mills — by minimum core size -----	62
Table 33: Veneer and plywood mills — by average number of operating days-----	63
Table 34: Wood consumed by veneer and plywood mills — by diameter and purchase/transfer	63
Table 35: Veneer and plywood production-----	63
Table 36: Wood and bark residues from veneer and plywood mills -----	64

Table 31

Number of Veneer and plywood Mills — by log diameter limit in inches

Economic area of mill	Layup only	Lathe log diameter limit in inches								Total
		10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	
Puget Sound	1	0	0	1	0	0	0	0	0	2
Olympic Peninsula	2	0	0	3	0	0	0	0	1	6
Lower Columbia	0	0	1	0	0	0	0	0	0	1
Central Washington	0	0	0	2	0	0	0	0	0	2
State Total	3	0	1	6	0	0	0	0	1	11

Table 32

Number of Veneer and plywood Mills — by minimum core size

Economic area of mill	Lathe log diameter limit in inches										No Lathe or core	Total
	3	4	5	6	7	8	9	10	11			
Puget Sound	1	0	0	0	0	0	0	0	0	0	1	2
Olympic Peninsula	0	2	1	0	0	0	0	0	0	0	3	6
Lower Columbia	0	1	0	0	0	0	0	0	0	0	0	1
Central Washington	0	1	1	0	0	0	0	0	0	0	0	2
State Total	1	4	2	0	0	0	0	0	0	0	3	11

Table 33

Veneer and plywood Mills — by average number of operating days

Mill type	Average statewide days	Mills
Veneer only	258	3
Layup only	297	3
Veneer and layup	247	5
State Average	268	11

Table 34

Wood consumed by veneer and plywood mills — by diameter and purchase/transfer
(thousand board feet, Scribner scale)

Minimum log diameter	Volume	Percent
Less than 5 inches	0	0
5.0 to 10.9 inches	134,931	46
11.0 to 20.9 inches	146,231	50
21 inches or more	10,149	3
State Total	291,311	100

Veneer transferred or purchased	Volume
State Total	458,744

Table 35

Veneer and plywood production (thousand square feet, 3/8-inch basis)

Veneer	558,459
Plywood	890,316

Table 36

Wood and bark residues from veneer and plywood mills

(dry weight tons)

Economic area and residue type	Total	Used					Unused
		Total used	Pulp	Board	Fuel	Other	
Puget Sound							
Coarse	84,604	84,604	60,098	9,147	7,875	7,484	0
Medium	0	0	0	0	0	0	0
Fine	1,969	1,969	0	0	1,969	0	0
Total	86,573	86,573	60,098	9,147	9,844	7,484	0
Olympic Peninsula							
Coarse	326,898	326,898	168,366	12,672	115,197	30,663	0
Medium	0	0	0	0	0	0	0
Fine	10,769	10,721	0	0	10,721	0	48
Total	337,667	337,619	168,366	12,672	125,918	30,663	48
Lower Columbia							
Coarse	32,754	32,754	3,108	3,108	26,538	0	0
Medium	0	0	0	0	0	0	0
Fine	1,020	1,020	0	0	1,020	0	0
Total	33,774	33,774	3,108	3,108	27,558	0	0
Central							
Coarse	118,474	118,474	95,154	0	23,320	0	0
Medium	0	0	0	0	0	0	0
Fine	2,112	2,112	0	0	2,112	0	0
Total	120,586	120,586	95,154	0	25,432	0	0
State Total							
Coarse	562,730	562,730	326,726	24,927	172,930	38,147	0
Medium	0	0	0	0	0	0	0
Fine	15,870	15,822	0	0	15,822	0	48
Total	578,600	578,552	326,726	24,927	188,752	38,147	48

Pulp Mills

Table 37: Number of pulp mills — by processing type -----	66
Table 38: Pulp mills' capacity — by mill type -----	66
Table 39: Average operating days of pulp mills -----	67
Table 40: Pulp mill production — by product and type of operation -----	67
Table 41: Wood fiber consumption by pulp mills — by fiber type -----	68
Table 42: Roundwood chip consumption by pulp mills — by species -----	68
Table 43: Residue and chip use by pulp mills — by state of source -----	69
Figure 5: Pulp mill products -----	70
Figure 6: Material used by pulp mills -----	70

Table 37
Number of pulp mills — by processing type

Economic area and county	All mills	Pulp mills type			
		Sulfite	Sulfate	Groundwood	Semi- chemical
Puget Sound					
Pierce	1	0	1	0	0
Snohomish	1	1	0	0	0
Total	2	1	1	0	0
Olympic Peninsula					
Grays Harbor	1	1	0	0	0
Total	1	1	0	0	0
Lower Columbia					
Clark	1	0	1	0	0
Cowlitz	3	0	2	0	1
Total	4	0	3	0	1
Inland Empire					
Pend Orielle	1	0	0	0	1
Spokane	1	0	0	1	0
Walla Walla	1	1	0	0	0
Total	3	1	0	1	1
State Total	10	3	4	1	2

Table 38
Pulp mill capacity — by mill type(bone dry tons)

Pulp mill type	Number	Capacity
Sulfite	3	2,360
Sulfate	4	7,550
Groundwood and semi-chemical	3	1,145
State Total	10	11,055

Table 39

Average operating days of pulp mills

Type of operation	Operating days	Number
Sulfite	350	3
Sulfate	349	4
Groundwood and semi-chemical	340	3
State Total	346	10

Table 40

Pulp mill production — by product and type of operation (bone dry tons)

Type of operation	Products					
	All products	Newsprint	Bleached paper	Unbleached paper	Other paper	Market pulp
Sulfite	640,430	0	290,000	100,000	430	250,000
Sulfate	2,373,662	0	744,018	812,326	710,000	107,318
Groundwood	181,740	181,740	0	0	0	0
Semi-chemical	367,057	286,663	0	80,394	0	0
State Total	3,562,889	468,403	1,034,018	992,720	710,430	357,318

Table 41

Wood fiber consumption by pulp mills — by fiber type (bone dry tons)

Economic area	Total	Chips			Sawdust and shavings	Waste paper
		Total chips	From mill residues	From roundwood chipping mill		
Puget Sound and Olympic Peninsula	1,607,513	1,430,013	1,412,044	17,969	0	177,500
Lower Columbia	3,054,029	2,596,630	1,820,749	775,881	160,096	297,303
Inland Empire	1,202,515	991,162	871,824	119,338	96,000	115,353
State Total	5,864,057	5,017,805	4,104,617	913,188	256,096	590,156

Table 42

Roundwood chip consumption by pulp mills — by species (bone dry tons)

Economic area	Roundwood chips species								
	All species	Douglas -fir	Hemlock	True fir	Spruce	Ponderosa pine	Lodgepole pine	Red alder	Other hardwood
Puget Sound and Olympic Peninsula	17,969	17,969	0	0	0	0	0	0	0
Lower Columbia	775,881	260,495	0	144,381	0	43,636	134,247	104,955	88,167
Inland Empire	119,338	7,800	14,796	7,828	8,357	7,800	15,957	0	46,800
State total	913,188	260,495	14,796	154,409	557	43,636	150,204	104,955	88,167

Table 43

Residue and chip use by pulp mills — by state of source

(bone dry tons)

Economic area	Total chips	Washington	Oregon	Idaho	Montana
Puget Sound					
Other wood fiber	1,207,513				
Roundwood chips	17,969	17,969	0	0	0
Total	1,225,482	17,969	0	0	0
Olympic Peninsula					
Other wood fiber	400,000				
Roundwood chips	0	0	0	0	0
Total	400,000	0	0	0	0
Lower Columbia					
Other wood fiber	3,054,029				
Roundwood chips	775,881	362,796	393,972	16,383	2,731
Total	3,829,910	362,796	393,972	16,383	2,731
Inland Empire					
Other wood fiber	1,202,515				
Roundwood chips	11,142	25,032	2,114	14,192	0
Total	1,213,657	25,032	0	0	0
State Total					
Other wood fiber	5,864,057				
Roundwood chips	835,188	405,797	396,086	30,575	2,731
Total	6,699,245	405,797	396,086	30,575	2,731

Figure 5

Pulp mill products

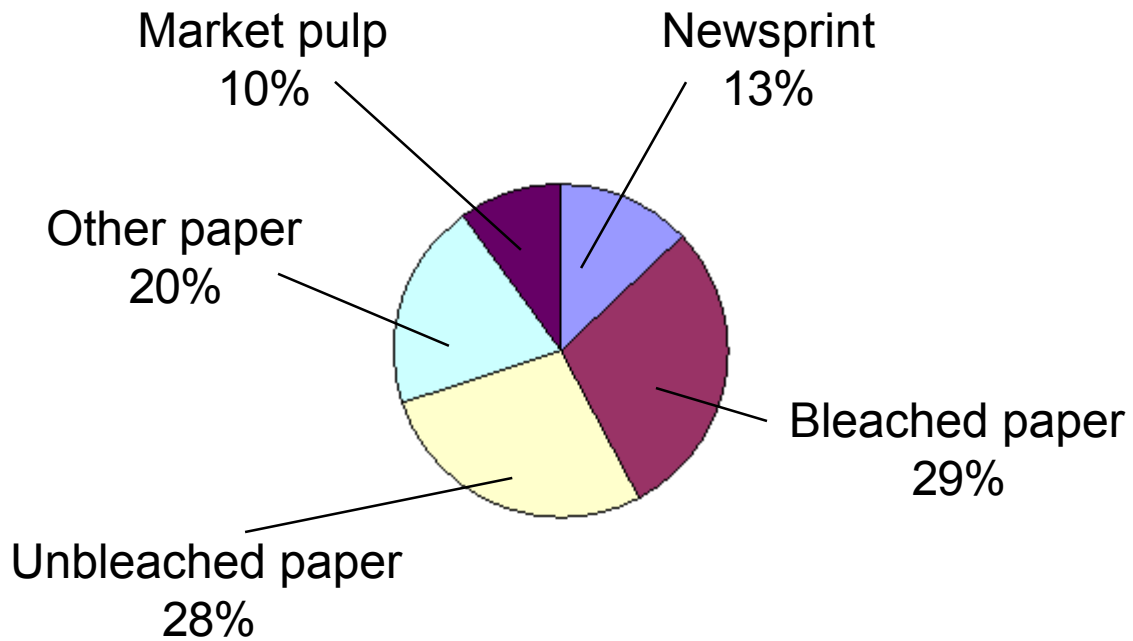
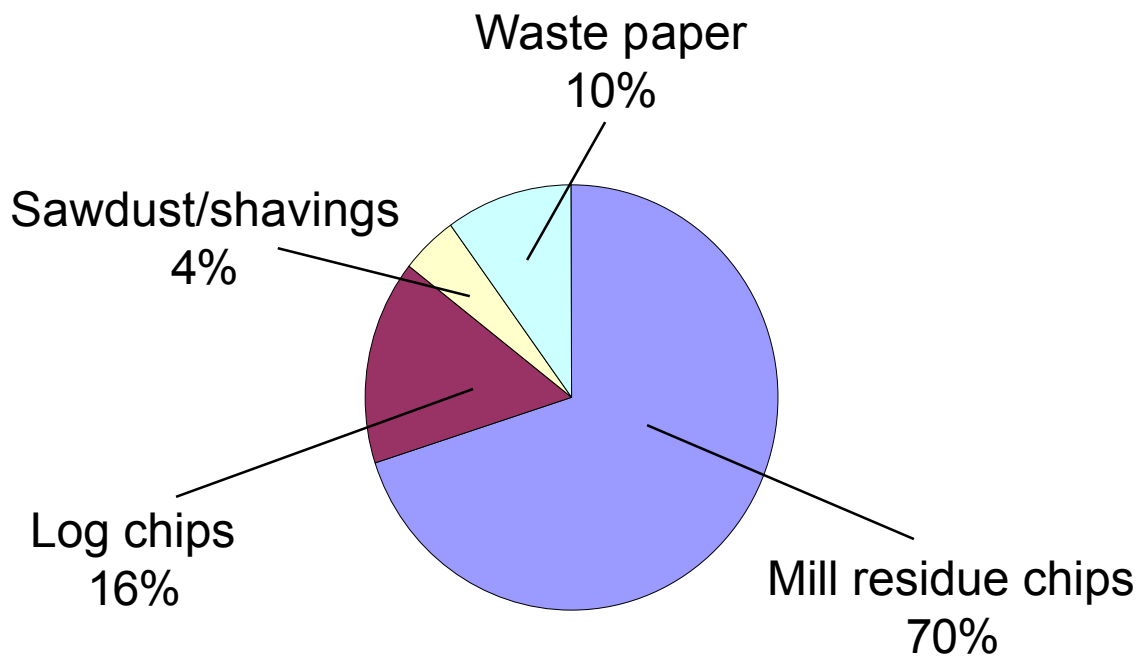


Figure 6

Material used by pulp mills



Shake and shingle mills

Table 44: Shake and shingle mills' capacity and operating days-----	72
Table 45: Number of shake and shingle mills — by selected equipment -----	72
Table 46: Log consumption by shake and shingle mills — by type-----	73
Table 47: Log consumption by shake and shingle mills — by original owners -----	73
Table 48: Wood and bark residues — production and use by shake and shingle mills -----	74
Table 49: Wood residues — by type and use by shake and shingle mills -----	75
Table 50: Bark residues — by use by shake and shingle mills -----	76
Table 51: Shake and shingle mills' production -----	76

Table 44

Shake and shingle mills' capacity and operating days

Economic area and county	Number	Total single shift capacity (Squares)			Average number of operating days / year
		Shake	Shingle	Other	
Puget Sound					
Skagit and Snohomish	4	252	24	0	180
Total	4	252	24	0	180
Olympic Peninsula and Lower Columbia					
Clallam, Grays Harbor	17	161	359	60	202
Lewis and Wahkiakum					
Total	17	161	359	60	202
State Total	21	413	383	60	198

Table 45

Number of shake and shingle mills — by selected equipment

Economic area and county	Chipper	Barker	Burner
Puget Sound			
Skagit and Snohomish	0	0	1
Total	0	0	1
Olympic Peninsula and Lower Columbia			
Clallam, Grays Harbor,	1	0	3
Lewis and Wahkiakum			
Total	1	0	3
State Total	1	0	4

Table 46

Log consumption by shake and shingle mills — by type

(thousand board feet, Scribner scale)

Economic area and county	All types	Sound logs	Utility logs	Other
Puget Sound				
Skagit and Snohomish	2,450	500	0	1,950
Total	2,450	500	0	1,950
Olympic Peninsula and Lower Columbia				
Clallam, Grays Harbor, Lewis and Wahkiakum	18,235	8,522	100	9,613
Total	18,235	8,522	100	9,613
State Total	20,685	9,022	100	11,563

Table 47

Log consumption by shake and shingle mills — by original owners

(thousand board feet, Scribner scale)

Economic area and county	All owners	— Forest industry —					Farmer and miscellaneous private
		State	National Forest	Own wood supply	Other wood supply	Native American	
Puget Sound							
Skagit and Snohomish	500	0	500	0	0	0	0
Total	500	0	500	0	0	0	0
Olympic Peninsula and Lower Columbia							
Clallam, Grays Harbor, Lewis and Wahkiakum	8,622	760	0	0	3,944	1,260	2,586
Total	8,622	760	0	0	3,944	1,260	2,586
State Total	9,122	760	500	0	3,944	1,260	2,586

Table 48

Wood and bark residues — production and use by shake and shingle mills

(tons, dry weight)

Economic area and county	— All residues —			— Wood residues —		
	Total	Used	Unused	Total	Used	Unused
Puget Sound						
Skagit and Snohomish	11,648	11,648	0	4,368	4,368	0
Total	11,648	11,648	0	4,368	4,368	0
Olympic Peninsula						
Clallam, Grays Harbor, Lewis and Wahkiakum	103,260	88,147	15,113	82,560	68,287	14,273
Total	103,260	88,147	15,113	82,560	68,287	14,273
State Total	114,908	99,795	15,113	86,928	72,655	14,273

Economic area and county	— Bark residues —		
	Total	Used	Unused
Puget Sound			
Skagit and Snohomish	7,280	7,280	0
Total	7,280	7,280	0
Olympic Peninsula			
Clallam, Grays Harbor, Lewis and Wahkiakum	20,700	19,860	840
Total	20,700	19,860	840
State Total	27,980	27,140	840

Table 49
Wood residues — by type and use by shake and shingle mills (dry weight tons)

All wood residues

Economic area and county	Total all wood	Total used	Pulp	Fuel	Other	Unused
Puget Sound						
Skagit and Snohomish	4,368	4,368	0	3,993	375	0
Total	4,368	4,368	0	3,993	375	0
Olympic Peninsula						
Clallam, Grays Harbor, Lewis and Wahkiakum	82,560	68,287	5,575	47,106	15,606	14,273
Total	82,560	68,287	5,575	47,106	15,606	14,273
State Total	86,928	72,655	5,575	51,099	15,981	14,273

Coarse wood residues

Economic area and county	Total coarse residue	Total used	Pulp	Fuel	Other	Unused
Puget Sound						
Skagit and Snohomish	935	935	0	935	0	0
Total	935	935	0	935	0	0
Olympic Peninsula and Lower Columbia						
Clallam, Grays Harbor Lewis and Wahkiakum	20,674	17,232	5,073	9,323	2,836	3,442
Total	20,674	17,232	5,073	9,323	2,836	3,442
State Total	21,609	18,167	5,073	10,258	2,836	3,442

Fine wood residues

Economic area and county	Total fine residue	Total used	Pulp	Fuel	Other	Unused
Puget Sound						
Skagit and Snohomish	3,433	3,433	0	3,058	375	0
Total	3,433	3,433	0	3,058	375	0
Olympic Peninsula and Lower Columbia						
Clallam, Grays Harbor and Wahkiakum	61,886	51,055	502	37,783	12,770	10,831
Total	61,886	51,055	502	37,783	12,770	10,831
State Total	65,319	54,488	502	40,841	13,145	10,831

Table 50

Bark residues — by use by shake and shingle mills(dry weight tons)

Economic area and county	Total					
	Total used	Pulp	Fuel	Other	Unused	
Puget Sound						
Skagit and Snohomish	7,280	7,280	0	1,120	6,160	0
Total	7,280	7,280	0	1,120	6,160	0
Olympic Peninsula						
Clallam, Grays Harbor, Lewis and Wahkiakum	20,700	19,860	577	16,282	3,001	840
Total	20,700	19,860	577	16,282	3,001	840
State Total	27,980	27,140	577	17,402	9,161	840

Table 51

Shake and shingle mills' production(squares)

Economic area and county	Product			Total
	Shakes	Shingles	Other	
Puget Sound				
Skagit and Snohomish	2,750	23,500	0	26,250
Total	2,750	23,500	0	26,250
Olympic Peninsula				
Clallam, Grays Harbor, Lewis and Wahkiakum	12,899	62,548	25,350	100,797
Total	12,899	62,548	25,350	100,797
State Total	15,649	86,048	25,350	127,047

Log export operations

Table 52: Export logs — by type -----	78
Table 53: Export logs — by diameter in inches -----	78
Table 54: Export logs — by port and county -----	79
Table 55: Export logs — by port and original owners -----	80
Table 56: Export logs — by species -----	80

Table 52

Export logs — by type(thousand board feet, Scribner scale)

	Port				
	Aberdeen	Everett	Longview	Olympia	Tacoma
Number of operations	2	2	8	5	2
Sound logs	113,000	21,600	654,552	34,797	74,000
Utility logs	0	0	0	0	0
State Total	113,000	21,600	654,552	34,797	74,000

Table 53

Export logs — by diameter in inches (thousand board feet, Scribner scale)

Diameter in inches	Total	Port				
		Aberdeen	Everett	Longview	Olympia	Tacoma
Less than 5	676	0	96	540	40	0
5 to 11	161,389	15,150	3,120	120,371	6,529	16,220
11 to 21	582,563	75,760	13,560	420,935	21,089	7,140
21 or more	153,320	22,090	4,824	112,706	7,140	6,560
State Total	897,949	113,000	21,600	654,552	34,797	74,000

Table 54

Export logs — by port and county(thousand board feet, Scribner scale)

Economic area of logs' origin	Port					
	Total	Longview	Aberdeen	Everett	Olympia	Tacoma
Lower Columbia						
Wahkiakum	8,584	8,584	0	0	0	0
Skamania	8,438	8,438	0	0	0	0
Cowlitz	98,490	98,490	0	0	0	0
Clark	45,103	45,103	0	0	0	0
Total	160,615	160,615	0	0	0	0
Olympic Peninsula						
Thurston	17,001	0	0	0	9,189	7,812
Pacific	28,057	8,438	19,620	0	0	0
Mason	6,134	0	2,264	0	3,870	0
Lewis	190,821	136,871	25,656	0	4,858	23,436
Jefferson	550	0	0	0	550	0
Grays Harbor	47,830	0	45,920	0	1,910	0
Total	290,393	145,308	93,460	0	20,377	31,248
Puget Sound						
Snohomish	17,600	0	0	15,600	2,000	0
Pierce	9,987	311	0	0	4,420	5,256
King	6,896	0	0	0	2,000	4,896
Total	34,483	311	0	15,600	8,420	10,152
State Total	485,492	306,235	93,460	15,600	28,797	41,400
Out-of-state logs	412,457	348,317	19,540	6,000	6,000	32,600
Grand Total	897,949	654,552	113,000	21,600	34,797	74,000

Table 55

Export logs — by port and original owners (thousand board feet, Scribner scale)

Port	Total	Forest industry		Native American	Farmer and miscellaneous private
		Own wood supply	Other wood supply		
Aberdeen	113,000	90,900	14,650	3,600	3,850
Everett	21,600	7,200	10,320	2,160	1,920
Longview	654,552	417,828	152,824	42,250	41,650
Olympia	34,797	7,255	18,958	1,600	6,984
Tacoma	74,000	52,900	11,900	0	9,200
State Total	897,949	576,083	208,652	49,610	63,604

* Federal law prohibits exporting logs harvested from public lands

Table 56

Export logs — by species (thousand board feet, Scribner scale)

Economic area and county of business *	All species	Douglas-fir	Hemlock	True fir	Spruce	Western red cedar	Other conifer
Puget Sound							
King	228,310	187,121	24,229	6,760	6,000	3,000	1,200
Pierce	420,000	401,000	15,920	1,540	1,540	0	0
Total	648,310	588,121	40,149	8,300	7,540	3,000	1,200
Olympic Peninsula							
Thurston	5,500	5,225	165	110	0	0	0
Total	5,500	5,225	165	110	0	0	0
Lower Columbia							
Cowlitz	244,139	176,295	37,244	0	18,000	9,000	3,600
Total	244,139	176,295	37,244	0	18,000	9,000	3,600
State Total	897,949	769,641	77,558	8,410	25,540	12,000	4,800

* County of business is not necessarily the county of the port

Post, pole and piling mills

Table 57: Number of post, pole and piling mills — by operating days and capacity-----	82
Table 58: Number of post, pole and piling mills — by selected equipment-----	82
Table 59: Log consumption by post, pole and piling mills — by diameter in inches -----	83
Table 60: Post, pole and piling mills production — by treatment-----	83
Photos -----	84

Table 57

Number of post, pole and piling mills — by operating days and capacity

Economic area and county	Number	Annual capacity (thousand board feet, Scribner scale)		Average number of operating days in 2004	
		Peeling	Treatment	Peeling	Treatment
Puget Sound	3	274	50	282	362
Olympic Peninsula	3	6,100	0	203	0
Inland Empire	2	1,000	100	170	0
State Total	8	7,374	150	216	362

Table 58

Number of post, pole and piling mills — by selected equipment

Economic area and county	Total number	Peeler	Burner
Puget Sound			
Pierce	1	0	0
Snohomish	1	1	0
Whatcom	1	0	0
Total	3	1	0
Olympic Peninsula			
Lewis	1	0	0
Mason	1	1	0
Thurston	1	1	0
Total	3	2	0
Inland Empire			
Stevens	2	2	0
Total	2	2	0
State Total	8	5	0

Table 59

Log consumption by post, pole and piling mills — by diameter in inches

(thousand board feet, Scribner scale)

Economic area and county	Total	Diameter in inches			
		Less than 5	5 to 11	11 to 21	21 or more
Puget Sound					
Pierce, Snohomish and Whatcom	9,536	0	7,934	1,602	0
Total	9,536	0	7,934	1,602	0
Olympic Peninsula and Inland Empire					
Lewis, Mason, Thurston and Stevens	12,405	799	9,573	2,033	0
Total	12,405	799	9,573	2,033	0
State Total	21,941	799	17,507	3,635	0

Table 60

Post, pole and piling mills' production — by treatment (thousand board feet, Scribner scale)

Economic area	Treated	Untreated	Total
Puget Sound	12,207	0	12,207
Olympic Peninsula	35	10,935	10,970
State Total	12,242	10,935	23,177



This peavey located at Monty Pfaff's mill was used to move logs by grappling and rolling them sideways.



This chain-driven conveyor (surrounded by mill residue) from Monty Pfaff's mill moved logs to and from the saw.

Log chipping mills

Table 61: Number of log chipping mills — by capacity and operating days -----	86
Table 62: Log consumption by log chipping mills — by diameter in inches -----	86
Table 63: Log consumption by log chipping mills — by original owners -----	87
Table 64: Log consumption by log chipping Mills — by species -----	87
Table 65: Chip production — by economic area -----	87

Table 61

Number of log chipping mills — by capacity and operating days

Economic area	Number	8-hour capacity bone dry tons	Average days operated
Puget Sound	4	849	212
Olympic Peninsula	8	3,160	196
Lower Columbia	1	250	126
Inland Empire	1	820	250
State Total	14	5,079	196

Table 62

Log consumption by log chipping mills — by diameter in inches
(thousand board feet, Scribner scale)

Economic area	Total	Diameter in inches			
		Less than 5	5 to 10	11 to 21	21 or more
Puget Sound	54,332	36,500	8,020	6,346	3,466
Olympic Peninsula	166,276	72,064	34,788	29,895	29,529
Lower Columbia	6,621	5,297	662	331	331
Inland Empire	53,333	5,333	10,667	26,667	10,667
State Total	280,562	119,194	54,136	63,239	43,993

Table 63

Log consumption by log chipping mills — by original owners

(thousand board feet, Scribner scale)

Economic area of operation	All owners	National State	Forest	Bureau of Land Mgt	Other public	Forest industry		Native American	Farmer and misc. private
						Own wood supply	Other wood supply		
Puget Sound	54,332	3,787	3,547	0	0	0	14,666	3,520	28,813
Olympic Peninsula	166,276	21,456	5,910	0	2,303	0	103,077	7,826	25,704
Lower Columbia	6,621	132	0	0	0	4,502	662	0	1,324
Inland Empire	53,333	8,000	2,667	0	0	0	37,333	0	5,333
State Total	280,562	33,375	12,123	0	2,303	4,502	155,739	11,346	61,174

Table 64

Log consumption by log chipping mills — by species (thousand board feet, Scribner scale)

Economic area of operation	All species	Douglas		True		Ponderosa	Lodgepole	Western	Other	Red	Other
		-fir	Hemlock	fir	Spruce	pine	pine	redcedar	conifer	alder	hardwood
Puget Sound	54,332	22,266	19,533	0	0	0	0	0	0	8,283	4,250
Olympic Peninsula	166,276	54,192	59,400	1,560	8,970	0	0	843	0	30,769	10,542
Lower Columbia	6,621	4,635	993	993	0	0	0	0	0	0	0
Inland Empire	53,333	0	0	48,000	0	2,667	0	0	2,667	0	0
State Total	280,562	81,093	79,926	50,553	8,970	2,667	0	843	2,667	39,052	14,792

Table 65

Chip production — by economic area (bone dry tons)

Economic area	
Puget Sound	338,216
Olympic Peninsula	1,035,068
Lower Columbia	41,215
Inland Empire	331,997
State Total	1,746,496