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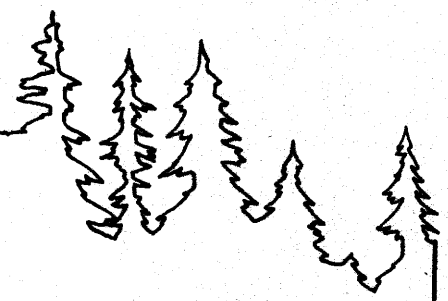

CALIFORNIA'S FOREST INDUSTRY, 1976

CALIFORNIA RESOURCES AGENCY
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U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE
PORTLAND, OREGON

Highlights

INDUSTRY CHARACTERISTICS

- Total number of mills was 200:

Type of mill	Number	Capacity
Sawmills	142	16.2 MMBF (8-hour shift)
Veneer and plywood	21	3.7 MMSF (8-hour shift)
Pulp	7	2,260 tons (daily)
Board	10	76.6 MMSF (annually)
Log export	7	--
Shake and shingle	7	138 squares (8-hour shift)
Post, pole, and piling	6	40.6 MMBF (annually)

- Humboldt, with 47 mills, was the leading county in number of mills.
- The 63 largest sawmills had 67 percent of the total sawmill capacity.

WOOD CONSUMPTION

- 4.69 billion board feet of roundwood (logs) were consumed.
- 2.3 million bone-dry tons of chips, shavings, sawdust, and bark were consumed by the pulp and board industry.
- Leading counties in roundwood use were:

	Million board feet
Humboldt	1,165
Mendocino	449
Shasta	417
Siskiyou	398

- Roundwood use by industry:

	Percent
Sawmills	86.0
Veneer and plywood	11.5
Log export	2.1
Other industries	.4

- Roundwood accounted for less than 1 percent of wood use by pulp and board industry.
- 70 percent of all logs were old growth.
- 96 percent of all logs were sound.
- 27 percent of all logs were Douglas-fir; 25 percent ponderosa and sugar pines; 20 percent redwood; and 19 percent true firs.
- 48 percent of all logs came from forest industry lands; 37 percent from National Forests.

MILL RESIDUES

- 7.3 million tons of wood and bark residue were generated, 89 percent from sawmills.
- 77 percent of all residue was wood; 23 percent was bark.
- 89 percent of wood residue and 65 percent of bark were used.
- 56 percent of wood residue went to the pulp and board industry; 26 percent for fuel; 7 percent miscellaneous; and 11 percent unused.
- 36 percent of bark residue was used as fuel; 29 percent miscellaneous; and 35 percent unused.

CALIFORNIA'S FOREST INDUSTRY, 1976

REFERENCE ABSTRACT

Hiserote, Bruce A., and James O. Howard.
1978. California's forest industry, 1976. USDA For. Serv. Resour. Bull. PNW-80, 95 p., illus. Pacific Northwest Forest and Range Experiment Station, Portland, Oregon.

This report presents the findings of a 100-percent canvas of the primary forest products industry in California for 1976. Tabular presentation includes characteristics of the industry log consumption and disposition of mill residues. Accompanying the tables is a descriptive analysis of conditions and trends in the industry.

KEYWORDS: Forest products industries, wood utilization, wood waste utilization, mill operation/products, California.

RESEARCH SUMMARY

Resource Bulletin PNW-80

1978

This report presents the findings of a survey of the primary wood processing industry in California, 1976. Data were obtained on log consumption and mill characteristics of the lumber; veneer and plywood; pulp and board; shake and shingle; post, pole, and piling; and export industries.

The 200 mills that comprised California's forest industry in 1976 consumed 4,687,813,000 board feet of logs and created 7,296,536 tons of mill residue. The lumber and veneer and plywood industries accounted for over 97 percent of the wood consumed and 99 percent of the residues produced.

Preface

This report presents the results of a survey of the primary wood processing industry in California for 1976. This survey identifies the raw material inputs, both logs and mill residues, and the characteristics of the forest products industries. Data are shown separately for the following industries: lumber, veneer and plywood, pulp and board, shake and shingle, post, pole, and piling, and export.

Surveys of wood use by the California forest industries were conducted by the Pacific Southwest Forest and Range Experiment Station in 1946, 1951, 1956, and 1962. Surveys similar to the present one were jointly conducted in 1968 by the California Division of Forestry and the Pacific Northwest Forest and Range Experiment Station and in 1972 by the Pacific Northwest Forest and Range Experiment Station. The earlier surveys differ principally from the latest three in that they did not include information about the processing facilities.

Data for 1976 were obtained from a 100-percent mail and telephone canvass of all primary processors of wood conducted during 1977. Industry contacts for the survey were based on a mill list from the 1972 survey, updated with the assistance of the California Division of Forestry.

As this survey represents a 100-percent canvass, no sampling error is involved. The information collected from each mill is assumed to be the most reliable and best available. Where possible, the data came from records; in some instances, however, estimates were made by mill officials. Information for individual mills is strictly confidential; information that could reveal critical detail of individual operations has been combined with other data to avoid disclosure.

Data for log consumption and product output are actual figures as reported by the mills. Subsequent classification of these data, i.e., by species, ownership origin, etc., are based on percentage distributions provided by the mills and may not agree precisely with other published figures. Statistics on mill residues are based on average factors applied to product output (see appendix). As such, they may differ from actual volumes for a given mill.

Supporting data is presented in tables 1-71 (Appendix II) at the end of this report. In the tables, "--" indicates the value is either "0" or not available.

Acknowledgments

Appreciation is extended to the mill owners and operators who cooperated in order to provide the data for this report and to the major forest industry associations for their support of this study. Special acknowledgment is made to the following:

- State of California, Division of Forestry, for assistance in updating the mill list, and sharing their knowledge of the forest industries of California.
- State of Washington, Department of Natural Resources, particularly John A. Bergvall, Forest Analyst, for assistance in processing the data and technical advice on methodology and questionnaires.

METRIC CONVERSIONS

1,000 cubic feet	=	28.317 cubic meters
1 ton (2,000 lbs.)	=	907.184 kilograms
1 square foot	=	0.092903 square meter
1,000 square feet, 3/8-inch basis	=	92.903 square meters, 0.9525 centimeter basis

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The Forest Industry in Perspective

California is a major producer of many wood products. In 1976, California produced 5.3 billion board feet of lumber, 14 percent of the Nation's total[1/] (fig. 1). Plywood production in 1976 amounted to just under 4 percent of the national total. California's pulp industry produced over 800,000 tons of wood pulp in 1976. Particleboard production for the year was nearly 20 percent of the Nation's total, while hardboard was only about 4 percent of the total national production. The volume of logs exported from California ports in 1976 accounted for 4 percent of the logs exported from the Western States.

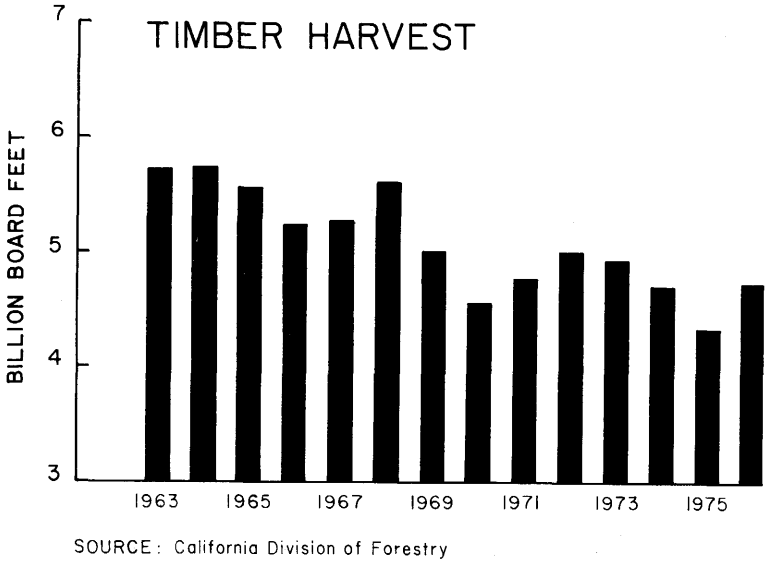
The forest industry has long been an important part of the State's economy. In 1976, the industry employed an average of 96,500 people, with an annual payroll of over $1 billion.[2/] These figures are total employment and payroll figures, including both primary and secondary wood and paper processing and manufacture. The industry's contribution extends beyond this in the form of payments of State and local taxes, and purchase of labor, services, and materials that generate income throughout the economy. The importance of the industry is felt more at local levels, particularly in the northern part of the State. Specific areas, such as Humboldt County, derive as much as 90 percent of their manufacturing employment from the timber industry. In some towns, the forest industry may represent the only nonservice employment. Urban areas, however, with large service sectors rely very little on employment from primary processing of wood, although secondary manufacturing may be of greater importance.

California has been divided into two timber producing regions--coastal and interior (fig. 2). The coastal region consists of the counties west of the crest of the Coast Ranges, from Monterey County to the Oregon border. This region contains all of the coastal redwood forests, as well as extensive stands of Douglas-fir. Within this region are two resource areas, defined by the nature of their timber resource and timber trading patterns. The north coast is the most important timber producing area in California, as well as the center for redwood and Douglas-fir processing (fig. 3). The forest industry of the north coast is the most diversified in California, with all types of primary wood processing represented (fig. 2). The forest industry of the central coast is not nearly as significant, having limited timber resources. Three of the State's pulpmills[3/], however, are located in the central coast area.

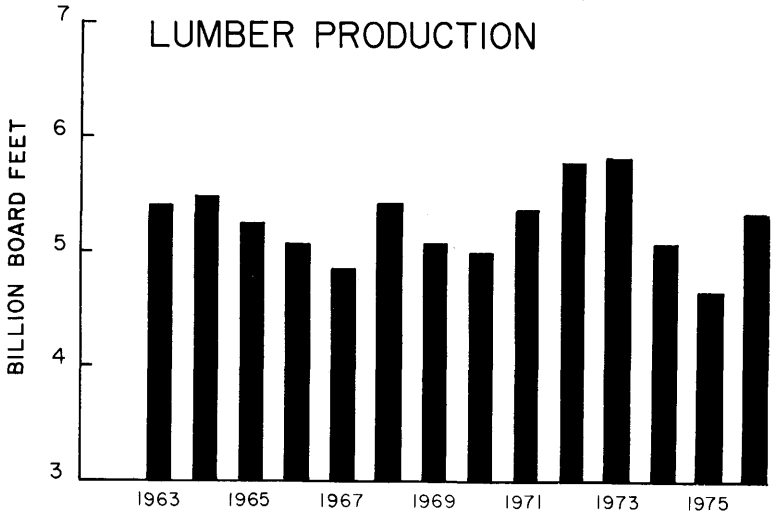
[1/] Western Wood Products Association. 1976 Statistical Yearbook. 1977.

[2/] California Department of Human Resources Development. California unemployment insurance reporting units by size, industry, and county. Published quarterly.

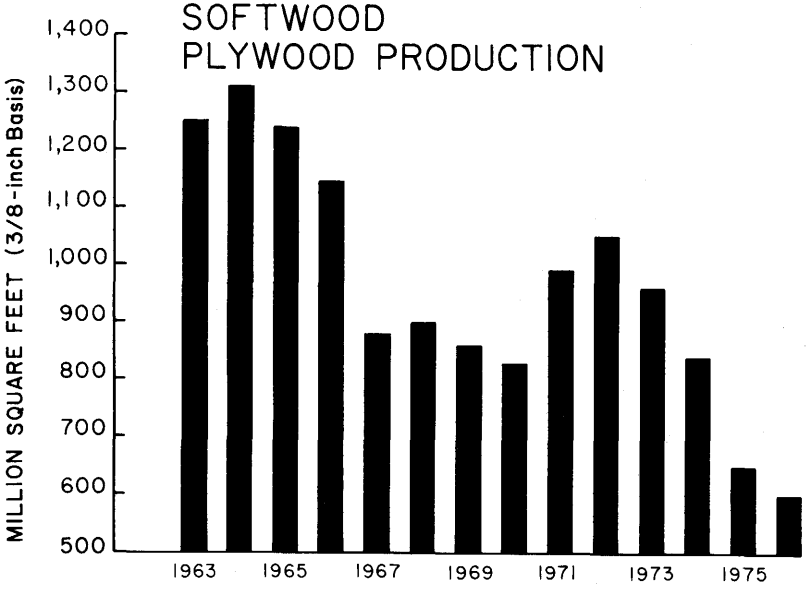
[3/] Each pulp or board process at a location is considered to be a "mill."



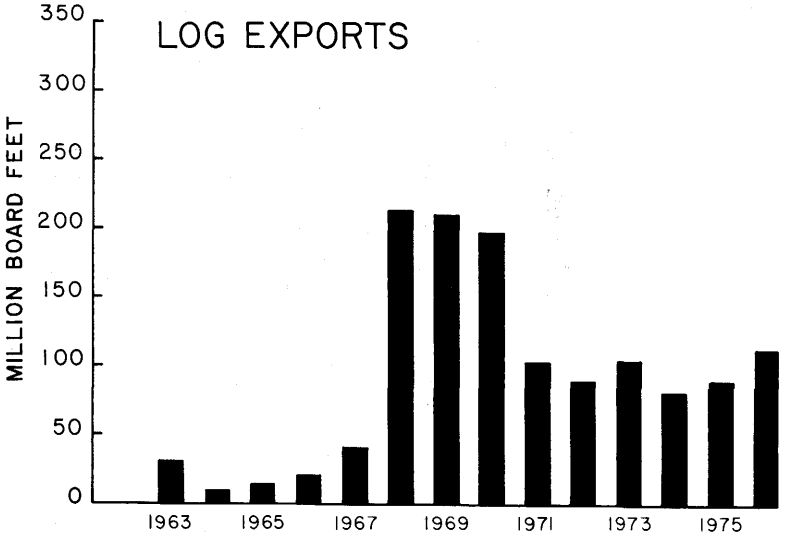
SOURCE: California Division of Forestry



SOURCE: Western Wood Products Association



SOURCE: American Plywood Association



SOURCE: U.S. Department of Commerce

Figure 1.--Output of major timber products in California, 1962-1976.

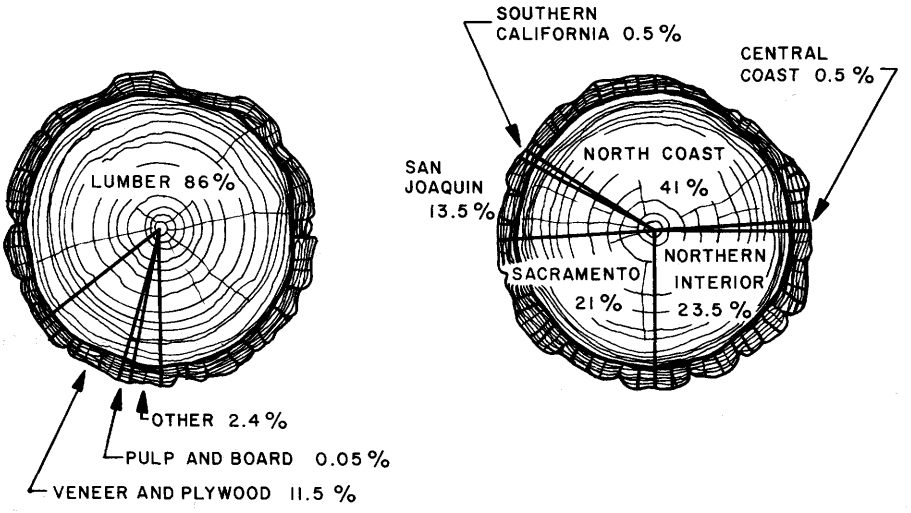


Figure 2.--Number of mills by wood producing regions and resource areas.

The interior region is divided into four resource areas, covering a wide diversity of forest types, including pines, incense-cedar, Douglas-fir, true firs, and a mixed-conifer type. The importance of the forest industry and resource decreases from north to south. The northern interior, Sacramento, and San Joaquin areas are major timber producers, and support a significant industry. The forest industry in the southern California area is very limited in size, supported by a small timber resource base. The forest industry of the interior region is less diversified than that of the coastal region. Sawmills comprise about 78 percent of its industry, compared with 63 percent for the coastal region.

Characteristics

NUMBER OF MILLS CONTINUES TO DECREASE

The 200 mills that comprised California's forest industry in 1976 reflect a decrease of 16 percent since 1972--a decrease of 27 percent since 1968. The decline in the number of mills continues a trend set

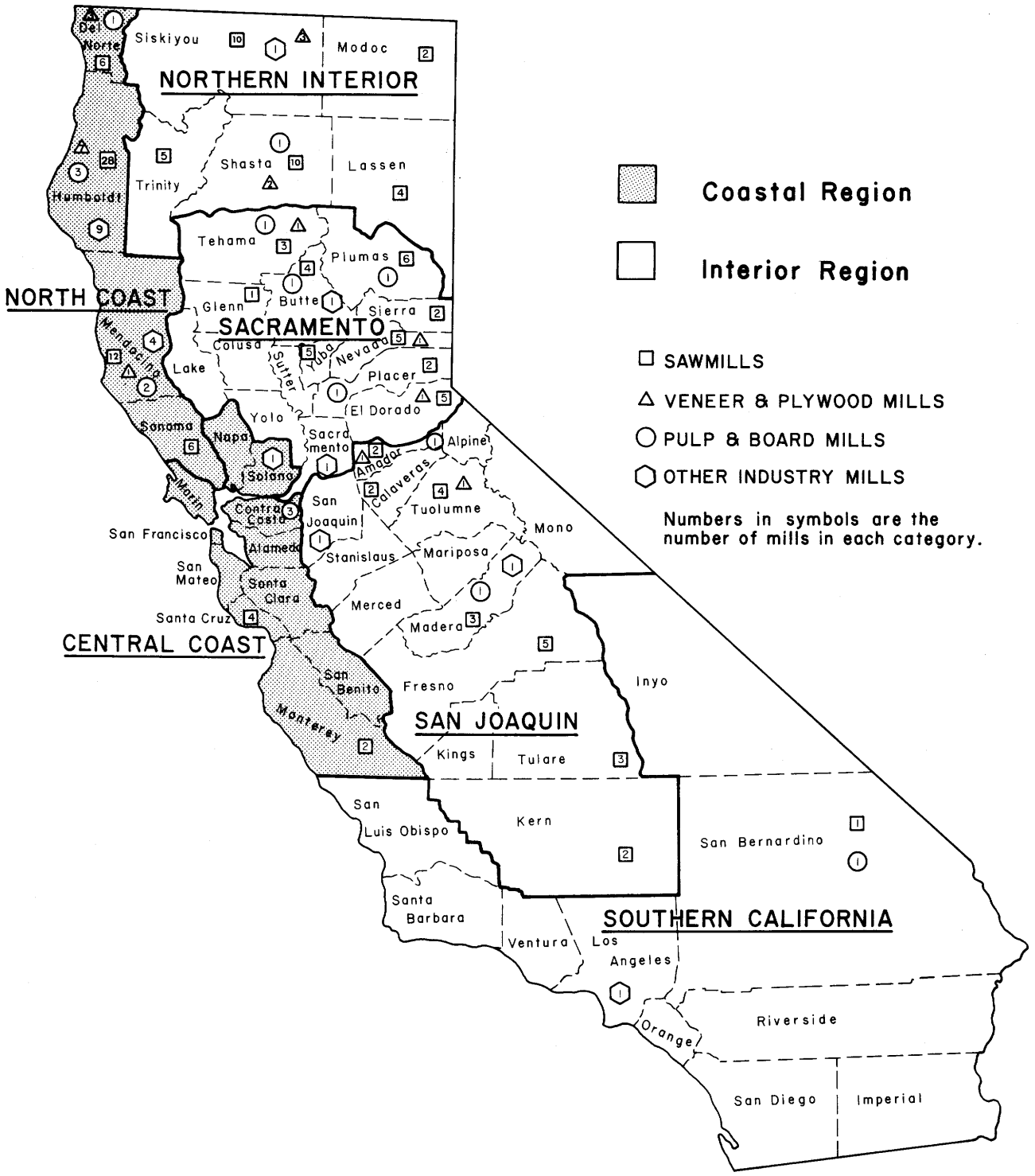


Figure 3.--Distribution of roundwood consumption by industry and area, 1976.

in the early 1950's, following a rapid post-war increase in the size of the industry. As in the past, the major segment of the industry is located in the three northernmost resources areas (north coast, northern interior, and Sacramento), which contain over 80 percent of the State's commercial forest area.[4/] These areas contain 80 percent of the mills identified in this survey. There has been a general decrease in the number of mills in all resource areas as shown on page 6. Since 1968,the greatest change has been in the coastal region (North Coast and Central Coast) with a 30-percent decrease in the number of mills. During the same period, the interior region had a 24-percent decrease. Since 1972 however, the interior area has experienced the greatest decline.

HUMBOLDT COUNTY STILL FIRST IN SIZE OF FOREST INDUSTRY

Among the six resource areas in the State, the north coast maintained its lead with 82 mills, 41 percent of the total, and 41 percent of the total roundwood consumption (1,925 million board feet) in 1976. As in the past, Humboldt County led all counties in roundwood consumption with 1,165 million board feet, 25 percent of the State's total. Over 23 percent of all operating mills are in the county. The seven veneer and plywood mills account for 36 percent of the State's capacity. Humboldt County also has one-quarter of the sawmill capacity, nearly half of the State's pulp capacity and about 15 percent of the board capacity. In addition, the major portion of the State's log exports go through the Port of Eureka in Humboldt County.

SAWMILLS CONTINUE AS LARGEST SEGMENT OF INDUSTRY

The operation of sawmills continues to be the major activity of the forest industry in California. Although the number of sawmills in the State has decreased since 1972, the lumber industry still accounted for 86 percent of the roundwood consumption in 1976. The 142 operating sawmills processed 4,035 million board feet of logs in 1976, producing nearly 5.2 billion board feet of lumber.

The plywood industry ranks second in terms of number of mills and also in roundwood consumption. The sawmill and plywood industries account for almost 98 percent of the roundwood consumption in the State.

TREND TOWARD FEWER BUT LARGER SAWMILLS CONTINUES

From a high of approximately 1,000 sawmills in 1948, the trend in the industry has been toward fewer but larger mills. This trend has been affected by increased competition for timber and efficiencies of scale within the industry. In the following tabulation, the number of mills in each of the consumption classes has declined; but the mills in the two upper classes have increased from 9 percent of the total in 1956 to 49 percent in 1976. Also, the average consumption per mill has increased from 8.7 million board feet in 1956 to 28.4 million board feet in 1976. Tabulations follow.

[4/] Daniel D. Oswald. California forest industries--prospects for the future. USDA Forest Service Resource Bulletin PNW-35, 55 p., illus. Pacific Northwest Forest and Range Experiment Station, Portland, Oregon, 1970.

Industry	Coastal region						Interior region											
	North coast			Central coast			Northern interior			Sacramento			San Joaquin			Southern California		
	1968	1972	1976	1968	1972	1976	1968	1972	1976	1968	1972	1976	1968	1972	1976	1968	1972	1976
Lumber	86	63	52	7	6	6	45	37	29	44	39	33	29	28	21	5	3	1
Veneer and plywood	17	15	11	0	0	0	5	5	5	3	3	3	1	2	2	0	0	0
Pulp and board	5	6	6	5	4	3	3	2	1	2	2	4	0	2	2	2	2	1
Other	8	12	13	4	0	1	0	1	1	3	2	2	1	3	2	0	1	1
Total	116	96	82	16	10	10	53	45	36	52	46	42	31	35	27	7	6	3

Annual consumption class (million board feet)	1956		1962		1968		1972		1976	
	Number	Volume consumed	Number	Volume consumed	Number	Volume consumed	Number	Volume consumed	Number	Volume consumed
		Million board feet		Million board feet		Million board feet		Million board feet		Million board feet
50.0+	12	800	10	864	18	1,364	28	2,044	22	1,534
25.0 - 49.9	49	1,711	49	1,791	55	2,061	52	1,748	47	1,617
5.0 - 24.9	231	2,721	133	1,725	91	1,244	59	863	53	862
0.001 - 4.9	382	609	83	119	52	63	37	40	20	22
All classes	674	5,841	275	4,499	216	4,732	176	4,695	142	4,035

Another indication of the trend toward larger mills is shown in the data below. Although the total number of mills has shown a steady decrease, the number of mills with an 8-hour capacity of greater than 120,000 board feet has shown a steady increase. At the same time the number of mills in all other classes has been decreasing.

Total 8-hour shift capacity by size class

Board-foot capacity per 8-hour shift	1968		1972		1976	
	Number of mills	8-hour shift capacity	Number of mills	8-hour shift capacity	Number of mills	8-hour shift capacity
		Thousand board feet		Thousand board feet		Thousand board feet
120,000+	31	5,255	52	8,893	63	10,872
80,000 - 119,000	67	6,077	54	5,098	39	3,685
40,000 - 79,999	69	4,092	34	2,066	23	1,402
less than 40,000	49	645	36	495	17	215
All classes	216	16,069	176	16,552	142	16,174

SIXTEEN-PERCENT DECREASE IN NUMBER OF VENEER AND PLYWOOD MILLS

Since 1972, there has been a net loss of four mills in the veneer and plywood industry. This was a 16-percent decrease in the number of mills. Since its beginning after World War II, California's plywood industry has been concentrated in the North Coast area near the Douglas-fir resource. Since 1968 there has been a 35-percent decrease in the number of plywood mills in this region. During the same period, the plywood industry in the interior region has remained very stable, at 10 mills, an increase of 1 mill since 1968. The 21 operating plywood mills consumed 539 million board feet of logs in 1976, nearly 12 percent of the State's roundwood consumption.

SINCE 1972, HARDBOARD CAPACITY IS UP PULP CAPACITY IS DOWN

Since 1972 the capacity of the hardboard industry has increased 41 percent. This was accounted for by the addition of a plant in the Sacramento unit. The number of particle board plants remained the same, but the capacity of these plants was increased by about one-quarter. The number of pulp operations declined by two, accompanied by a 13-percent decrease in the daily capacity. The majority of the pulp and board plants are located in the three northern resource areas, where most of the raw material supply--mill residues--is located.

TWENTY OPERATIONS IDENTIFIED
IN "OTHER INDUSTRY" SECTOR

The "other industry" sector, which includes export, shake and shingle, and post, pole, and piling industries has remained relatively stable since 1972. The 20 operations identified in this sector account for only 2.4 percent of the total roundwood consumption in the State. The total 1976 consumption of 111 million board feet was a 21-percent increase over the 1972 figure. The major factor in this increase was a 29-percent increase in the volume of log exports. The entire shake and shingle industry and most of the export industry are located in the north coast area. The post, pole, and piling industry is scattered throughout the State.

Wood Consumption

TOTAL ROUNDWOOD CONSUMPTION
FOR 1976 DOWN 14 PERCENT

In 1976, the forest industry in California consumed a total of 4.69 billion board feet of roundwood, a 14-percent decrease from the 5.45 billion-board foot consumption in 1972. As in the past, the lumber industry was the major user of roundwood, consuming 86 percent, followed by the veneer and plywood industry, with 11.5 percent. Log exports accounted for 2.1 percent of the roundwood consumed, and the pulp and board industry used only 2.7 million board feet of logs, less than one-tenth of 1 percent of the total (fig. 2). The north coast area accounted for 41 percent of the total consumption, followed by the northern interior and Sacramento areas, with 23.5 and 21 percent, respectively.

ROUNDWOOD CONSUMPTION OF "OTHER
INDUSTRY" SECTOR INCREASED 19 PERCENT

While roundwood consumption for the industry as a whole decreased since 1972, consumption by the "other industry" sector has increased by 19 percent. The major factor in this increase was the increase in log exports from California ports. In 1976, the export volume was 98 million board feet, an increase of 22 million board feet over the 1972 volume.

ROUNDWOOD CONSUMPTION DECREASED
IN ALL RESOURCE AREAS

Roundwood consumption decreased in all resource areas in 1976. The San Joaquin area had the smallest decline of any area between 1972 and 1976, going from 661 million board feet to 634 million board feet. During the preceding period, 1968 to 1972, San Joaquin was the only area to show a major increase in log consumption. The north coast had a decrease of 243 million board feet or 11 percent from 1972 to 1976. Log consumption declined by 18 percent in both the northern interior and the Sacramento areas, decreasing 245 and 211 million board feet respectively. The 1976 consumption in the central coast decreased to half of what it was in 1972. This was caused by a general decline in the consumption by all mills in the area.

HUMBOLDT, MENDOCINO, AND SHASTA COUNTIES
LEAD IN ROUNDWOOD CONSUMPTION

In 1976, the forest industry in Humboldt County was again the leader in log consumption, accounting for nearly one-quarter of the State's log consumption. Mendocino County was second, using 449

million board feet, followed by Shasta County, with 417 million board feet. The fourth leading county was Siskiyou, with 398 million board feet, dropping from second in consumption in 1972. The mills in these four counties account for over 50 percent of the total roundwood consumption in California.

Humboldt County also leads all counties as a producer of logs. 1,073 million board feet of logs originated in Humboldt County--over twice the volume of the next largest producer, Mendocino County. About 87 percent of the logs originating in Humboldt County were used in the county.

SIXTY-ONE PERCENT OF LOGS COME FROM PRIVATE LANDS

In 1976, the consumption of logs from private lands totaled 2.9 billion board feet, 61 percent of the total volume used by the forest industry. As shown in the data below, this is an increase in the proportion of timber from private lands. The only increase in consumption was from forest industry-owned lands.

	1968	1972	1976
		Percent	
National Forest	40	41	37
Other public	4	3	2
Forest industry:			
Own lands	27	31	34
Other lands	9	8	14
Farmer and miscellaneous private	20	17	13

In 1976, the forest industry used 1,725 million board feet of logs from National Forest land. The Shasta-Trinity National Forest led all California Forests with 316 million board feet, 18 percent of the total. The next three largest producers of logs were the Six Rivers, Sierra, and Tahoe National Forests. These four Forests accounted for 47 percent of the logs originating on National Forest lands. Sawmills used nearly 91 percent of the National Forest logs, while the plywood industry used about 9 percent.

DEPENDENCY FROM ONE OWNER CLASS FOR LOGS IS DECREASING

The exclusive dependency of mills for logs from a single ownership class has been decreasing since 1968. There is a general tendency for mills to obtain their log supply from a variety of sources. There has also been a general decrease in logs supplied by farmer and miscellaneous private lands.

LITTLE CHANGE IN SPECIES MIX

Although there was a general decrease in the consumption of all major species between 1972 and 1976, the percentage of the total consumption for each species changed very little. As shown below, the consumption of Douglas-fir logs, after decreasing from 40 percent of the total consumption in 1956 to 27 percent in 1972, continued to lead with 27 percent of the total volume consumed in 1976. The consumption of true firs and redwoods each accounted for about one-fifth of the total consumption in 1976, changing little from 1972. The consumption

of pine has accounted for about one-quarter of the consumption in the past as it did in 1976. Sugar pine accounted for about 4 percent and the rest was ponderosa pine.

Log Consumption (percent)

Year	Douglas-fir	True firs	Redwood	Pines	Other
1946	19	15	10	53	3
1956	40	12	18	24	6
1962	38	15	17	23	7
1968	32	22	18	24	4
1972	27	22	19	25	7
1976	27	20	20	25	8

USE OF YOUNG-GROWTH TIMBER CONTINUES TO INCREASE

The use of young-growth timber[5/] continues to increase in the State. In 1976, the forest industry used 1,423 million board feet of young-growth logs, 30 percent of the total roundwood consumption. The trend toward greater use of young-growth logs will continue throughout the State as the old-growth timber is removed.

The forest industry in the area from Monterey County north through Mendocino County uses young-growth logs as a major share of their supply. In 1976, the sawmills in this area consumed 350 million board feet of young-growth logs, 68 percent of the industry's total consumption. Also in Butte County, in the northern Sierra mining region, young-growth logs accounted for over 50 percent of the volume consumed.

Seventy percent of the logs consumed by the export industry were young-growth logs; over 90 percent of the logs consumed by the post, pole, and piling industry were young growth. The lumber and plywood industries rely on young-growth logs for 30 and 23 percent of their respective log consumption.

The shake and shingle industry is totally dependent on old-growth logs.

MILL RESIDUES CONSTITUTE 99 PERCENT OF INPUT TO PULP AND BOARD INDUSTRY

In 1976, the pulp and board industry consumed 2,344,280 tons of wood fiber, about the same as in 1972. Ninety-nine percent of the volume consumed was residues from primary manufacture of logs. Logs chipped by the mills themselves amounted to 10,800 tons, one-quarter of the amount in 1972, while wood fiber from other sources was only 7,236 tons, down from 152,000 tons in 1972. The low volume of logs used by the industry indicates that other sources of wood fiber are more readily available.

The use of sawdust and shavings has increased 61 percent since 1972, from 433,527 to 700,126 tons annually.[6/] The increase almost made up for the 15-percent decrease in chip consumption between 1972

[5/] Logs from trees less than 100 years old.

[6/] These figures contain an insignificant volume of bark.

and 1976. The decrease in chip consumption resulted from closure of two pulpmills, while the increase in sawdust and shaving consumption resulted from the installation of a new hardboard plant, and increased consumption by board plants in general.

Mill Residues

FOREST INDUSTRY RESIDUES
TOTAL 7.3 MILLION TONS

In 1976, the forest industry created 7,296,536 tons of mill residue during primary manufacture of logs. Wood residue amounted to 5.6 million tons and bark residue 1.6 million tons. Nearly 90 percent of the residue resulted from lumber production, while 10 percent was produced by the manufacture of plywood and veneer. A very small amount, 1,463 tons, was produced by the shake and shingle industry. The forest industry in the north coast area accounted for over 41 percent of the total residue in the State.

EIGHTY-NINE PERCENT OF WOOD
RESIDUE IS USED

Of the 5,647,440 tons of wood residue generated by the forest industry, 89 percent was used for various purposes. This represents a 4-percent increase over the amount of wood residue used in 1972. Almost 56 percent of the wood residue produced went to the pulp and board industry. This figure includes export chips and residues used by the pulp and board plants as boiler fuel as well as input into the manufacturing process. Also included is residue sent to Oregon pulp and board plants. Almost 26 percent of the wood residue was used for fuel by the producing mill or was sold for that purpose. An additional 7 percent was used for miscellaneous purposes.

OVER 65 PERCENT OF BARK RESIDUE IS USED

In 1976, the amount of bark residue produced during the primary processing of logs was 1,649,000 tons. Over 65 percent of this was used in some way, a 20-percent increase over the volume used in 1972. Of the total volume used, about 55 percent was for fuel, the other 45 percent was used for miscellaneous purposes such as mulch, animal bedding, and landscaping.

RESIDUE FROM PLYWOOD
INDUSTRY HAS GREATEST USE

The figures below show that the use of mill residues is greatest in the plywood industry.

	Wood residue		Bark residue	
Industry	Used	Unused	Used	Unused
	Percent			
Lumber	87	13	65	35
Plywood	97	3	66	34
Shake and shingle	56	44	1	99
All industries	89	11	65	35

The plywood industry produced 570,000 tons of wood residue in 1976. Nearly 359,000 tons, 63 percent, was sent to the pulp and board industry or was exported. This was 141,000 tons less than in 1972. About 21 percent, 121,000 tons, was used as fuel and 72,000 tons for miscellaneous purposes, including lumber manufacture from cores. The 97 percent total usage was a slight increase from the 95 percent used in 1972. Of the 176,000 tons of bark residue produced by the plywood industry, nearly 50 percent was used as fuel and 16 percent was used for other miscellaneous purposes.

The physical characteristics of the plywood industry might possibly explain this relatively high usage of mill residues. Three factors stand out: (1) the veneer and plywood mills are concentrated in the same areas as are pulpmills and board mills, major users of the mill residues; (2) many of the veneer and plywood mills tend to be larger operations than those of the other industries, thus having residue in more economic packages, and (3) many of the plants are part of a larger, diversified milling complex, thereby creating better access to residue markets. Whatever the reason, the current situation indicates little room for expansion in the use of plywood mill residues.

USE OF WOOD RESIDUES FROM LARGE SAWMILLS IS GREATER THAN FROM SMALL SAWMILLS

The figures below indicate a strong correlation between the size of a sawmill and the percent utilization of the residue it generates. In general, the larger the mill the greater the proportion of the residue used. The larger mills generate residue in larger amounts, which facilitates marketing or internal use. A mill creating only a low tonnage of residue annually cannot afford the investment necessary to use the residue for fuel and often does not have the volume to attract outside buyers.

Board-foot capacity per 8-hour shift	Percent of own residue used		
	1968	1972	1976
120,000+	82	86	84
80,000-119,999	62	77	81
40,000- 79,999	39	52	73
Less than 40,000	16	44	46
All mills	64	79	83

Another indication of the increased use of mill residues can be seen in the decrease in the number of sawmills operating burners. In 1968, there were 175 mills operating burners; in 1972, there were 119 burners; and in 1976, there were 64 burners in operation--a 63-percent decrease since 1968. Almost 50 percent of the burners in operation in 1976 were in the north coast area. Also, the relative number of sawmills operating chippers has increased. In 1968, about 52 percent of the mills operated chippers; although in 1976, over 82 percent were operating chippers. There were similar decreases in burner use and increases in the use of chippers in the veneer and plywood industry as well.

Appendix I

MEASUREMENT UNITS

Most of the mills using logs reported their roundwood consumption in Scribner scale. The major exception occurred in the north coast area where Humboldt and Spaulding scales were used by mills processing redwood. Other types of measurement units used are: cords, bolts, shake blocks, pieces, tons, cunits, and lineal feet.

All board-foot log volumes are reported in "local scale." No attempt was made to account for variations in scaling standards or to convert to a common scale.

The board foot is the unit of measure used in this report for all wood consumption with the exception of purchased or transferred veneer consumed by plywood mills (square feet, 3/8-inch basis) and mill residues consumed by pulpmills and board mills (tons, dry weight). Consumption by mills not reported in these units was converted using the following factors:

1 cord	= 500 board feet
1 ton	= 500 board feet
10.5 squares	= 1,000 board feet
1 lineal foot	= 3.8 board feet
1 cubic foot	= 6 board feet
200 cubic-foot units	= 1 bone-dry ton
1 bone-dry unit	= 1.2 bone-dry tons

Board-foot lumber tally is the unit of measure used for lumber production; square feet, 3/8-inch basis for veneer and plywood production; square (100 square feet) for shake and shingle production; and board-foot "local scale" for log export and post, pole, and piling shipments.

MILL RESIDUES

In this study no attempt was made to get individual mills to quantify the amount of residue produced. The reason for this was that although mills might be able to specify amounts of residue sold for high value uses, such as pulp chips, the lower value uses such as mulch or fuel are difficult to quantify. Therefore, the mills were asked to indicate only the percentage distribution of the disposal of their residues. These percentages were then applied to residue estimates derived through use of the following factors:

Softwood Sawmill Residue,
White Woods[1]

Average quantity of residues developed from producing 1,000 board feet of lumber.

Item	Dry weight (Tons)
Wood residue:	
Slabs, edgings, sawmill trim	0.508
Planer trim	.038
Sawdust	.279
Planer shavings	.203
Total wood residue	1.028
Bark	.285
All residue	1.313

Softwood Sawmill Residue,
Redwood and Incense-Cedar[2]

Average quantity of residues developed from producing 1,000 board feet of lumber.

Item	Dry weight (Tons)
Wood residue:	
Slabs, edgings, and trim	0.711
Sawdust	.225
Planer shavings	.154
Total wood residue	1.090
Bark	.300
All residue	1.390

[1] Based on data from Oregon mills compiled by Oregon State University School of Forestry 1967. Dry weights adjusted for different species mix utilized in California, primarily ponderosa pine and Douglas-fir.

[2] Based on data from California mills from mill-scale studies made by the U.S. Forest Service.

Softwood Plywood Residue[3]

Average quantity of residue developed in producing the equivalent of 1,000 square feet of 3/8-inch plywood (rough basis).

Item	Solid volume[4]	Dry weight
	(Cubic feet)	(Tons)
Wood residue:		
Log trim	3.4	0.046
Cores	3.7	.050
Veneer clippings, roundup, and spur trim	18.5	.250
Dry trim and layup loss	6.5	.088
Sander dust	1.6	.021
Total wood residue	33.7	.455
Bark	8.8	.132
All residue	42.5	.587

Shingle Mill Residues[5]

Average quantity of residue developed in utilizing 1,000 board feet of logs, Scribner scale, or in producing the equivalent volume of 10.5 squares.

Shake and shingle residue	Solid volume		Dry weight per MBM
	(Cubic feet)	(Percent)	(Tons)
Shingles:			
Coarse	23	13.7	0.22
Fine	78	46.8	.75
Bark	19	11.5	.28
Shakes:			
Coarse	23	13.7	.22
Fine	24	14.5	.23
Bark	19	11.5	.28
Shingle and shake:			
Coarse	23	13.7	.22
Fine	51	30.6	.49
Bark	19	11.5	.28

[3] Based on data compiled by Oregon State University School of Forestry from Oregon mills in 1967. Because of the similarity of species used and mills, no adjustment was made in applying these data to California.

[4] Based on equivalent green volume.

[5] From information provided by the Red Cedar Shingle Bureau.

Appendix II

Table 1--Number of mills by type of industry and resource area, California, 1976

Resource area	All industries	Industry					
		Lumber	Veneer and plywood	Pulp and board[1/]	Other		
					Shake and shingle	Export[2/]	Post, pole, and piling
North Coast	82	52	11	6	7	6	--
Central Coast	10	6	--	3	--	--	1
Northern Interior	36	29	5	1	--	--	1
Sacramento	42	33	3	4	--	1	1
San Joaquin	27	21	2	2	--	--	2
Southern California	3	1	--	1	--	--	1
All Areas	200	142	21	17	7	7	6

[1/] Each pulping process at a location is considered an individual mill.

[2/] Represents the number of identifiable operations involved in the export trade.

Table 2--Wood consumption by mills by type of material, resource area, and industry, California, 1976

Resource area and industry	Roundwood			Other[1/]	Residue[2/]
	All roundwood	Sound logs	Utility logs		
	Thousand board feet, local scale				Tons
North Coast					
Lumber	1,556,253	1,470,628	85,625	17,870	--
Veneer and plywood	293,919	260,653	33,266	--	--
Pulp and board	--	--	--	--	1,276,036
Shake and shingle	3,455	895	2,560	--	--
Total	1,853,627	1,732,176	121,451	17,870	1,276,036
Central Coast					
Lumber	23,822	23,822	--	--	--
Pulp and board	2,700	2,700	--	--	510,190
Total	26,522	26,522	--	--	510,190
Northern Interior					
Lumber	944,118	892,301	51,817	2,000	--
Veneer and plywood	149,861	139,326	10,535	--	--
Pulp and board[3/]	--	--	--	--	285,086
Total	1,093,979	1,031,627	62,352	2,000	285,086
Sacramento					
Lumber	925,509	911,229	14,280	5,810	--
Veneer and plywood[4/]	94,896	94,896	--	--	--
Pulp and board[3/]	--	--	--	--	--
Total	1,024,405	1,006,125	14,280	5,810	--
San Joaquin					
Lumber[5/]	585,764	581,564	4,200	--	--
Veneer and plywood[4/]	--	--	--	--	--
Pulp and board[5/]	--	--	--	--	262,168
Total	585,764	581,564	4,200	--	262,168
Southern California					
Lumber[5/]	--	--	--	--	--
All Areas					
Lumber	4,035,466	3,879,544	155,922	25,680	--
Veneer and plywood	538,676	494,875	43,801	--	--
Pulp and board	2,700	2,700	--	--	2,333,480
Shake and shingle	3,455	895	2,560	--	--
Export[6/]	97,695	97,695	--	--	--
Post, pole, and piling[6/]	9,821	9,321	500	--	--
Total	4,687,813	4,485,030	202,783	25,680	2,333,480

[1/] Includes peeler cores, cants used by sawmills, blocks, boards, bolts used by shake and shingle mills, and miscellaneous peeled products used by post, pole, and piling mills.

[2/] Includes residues from the sawmill, veneer and plywood, and shake and shingle industries, plus chips from roundwood chipping plants.

[3/] Northern Interior and Sacramento combined to avoid disclosure.

[4/] Sacramento and San Joaquin combined to avoid disclosure.

[5/] San Joaquin and Southern California combined to avoid disclosure.

[6/] All resource areas combined to avoid disclosure.

Table 3--Log flows to mills by State of origin, resource area, and industry, California, 1976

(Thousand board feet, local scale)

Resource area and industry	Origin				
	Total	California	Oregon	Idaho	Other
North Coast					
Lumber	1,556,253	1,550,783	5,470	--	--
Veneer and plywood	293,919	287,269	6,650	--	--
Shake and shingle	3,455	3,455	--	--	--
Total	1,853,627	1,841,507	12,120	--	--
Central Coast					
Lumber	23,822	23,822	--	--	--
Pulp and board	2,700	2,700	--	--	--
Total	26,522	26,522	--	--	--
Northern Interior					
Lumber	944,118	939,818	4,300	--	--
Veneer and plywood	149,861	149,861	--	--	--
Total	1,093,979	1,089,679	4,300	--	--
Sacramento					
Lumber	925,509	925,509	--	--	--
Veneer and plywood[1/]	94,896	94,896	--	--	--
Total	1,020,405	1,020,405	--	--	--
San Joaquin					
Lumber[2/]	585,764	585,764	--	--	--
Veneer and plywood[1/]	--	--	--	--	--
Total	585,764	585,764	--	--	--
Southern California					
Lumber[2/]	--	--	--	--	--
All Areas					
Lumber	4,035,466	4,025,696	9,770	--	--
Veneer and plywood	538,676	532,026	6,650	--	--
Pulp and board	2,700	2,700	--	--	--
Shake and shingle	3,455	3,455	--	--	--
Export[3/]	97,695	97,015	680	--	--
Post, pole, and piling[3/]	9,821	8,151	1,200	231	239
Total	4,687,813	4,669,043	18,300	231	239

[1/] Sacramento and San Joaquin combined to avoid disclosure.

[2/] San Joaquin and Southern California combined to avoid disclosure.

[3/] All resource areas combined to avoid disclosure.

Table 4—Log flows by county and out-of-State origin,

(Thousand board feet,

Resource area and county of use	Total	North Coast				Central Coast	
		Del Norte	Humboldt	Mendocino	Sonoma	Monterey	San Mateo
North Coast							
Del Norte	213,926	137,920	64,606	--	--	--	--
Humboldt	1,165,138	98,431	931,981	27,845	--	--	--
Mendocino	449,453	--	41,689	399,600	--	--	--
Sonoma	96,689	--	--	60,109	32,081	--	2,785
Total	1,925,206	236,351	1,038,276	487,554	32,081	--	2,785
Central Coast							
Contra Costa	2,700	--	--	675	--	--	--
Monterey, Santa Cruz, and Solano[1/]	24,622	--	--	--	--	150	9,874
Total	28,322	--	--	675	--	150	9,874
Northern Interior							
Lassen and Modoc[1/]	167,434	--	--	--	--	--	--
Shasta	417,292	--	25,459	--	--	--	--
Siskiyou	398,313	--	--	--	--	--	--
Trinity	111,320	--	9,600	--	--	--	--
Total	1,094,359	--	35,059	--	--	--	--
Sacramento							
Butte	90,507	--	--	--	--	--	--
El Dorado and Sacramento[1/]	151,357	--	--	--	--	--	--
Glenn and Tehama[1/]	232,417	--	--	--	--	--	--
Nevada and Placer[1/]	197,426	--	--	--	--	--	--
Plumas and Sierra[1/]	208,634	--	--	--	--	--	--
Yuba	104,960	--	--	--	--	--	--
Total	985,301	--	--	--	--	--	--
San Joaquin							
Amador, Calaveras, and San Joaquin[1/]	165,981	--	--	--	--	--	--
Fresno and Madera[1/]	181,337	--	--	--	--	--	--
Tulare and Kern[1/]	128,103	--	--	--	--	--	--
Tuolumne	158,885	--	--	--	--	--	--
Total	634,306	--	--	--	--	--	--
Southern California							
San Bernardino and Los Angeles[1/]	20,319	--	--	--	--	--	--
All Areas	4,687,813	236,351	1,073,335	488,229	32,081	150	12,659

See footnotes at end of table.

resource area, and county of use, California, 1966

local scale)

	Northern Interior					Sacramento		
Santa Cruz	Lassen	Modoc	Shasta	Siskiyou	Trinity	Butte	El Dorado	Glenn
--	--	--	--	--	--	--	--	--
--	--	--	600	4,035	100,846	--	--	--
--	--	--	--	--	7,694	--	--	--
--	--	--	--	--	--	261	--	261
--	--	--	600	4,035	108,540	261	--	261
--	--	--	--	--	--	270	--	--
13,798	--	--	--	306	306	306	--	--
13,798	--	--	--	306	306	576	--	--
--	41,592	54,644	14,587	300	--	--	--	--
--	53,134	12,516	260,822	18,982	28,036	1,600	--	3,653
--	8,462	990	57,919	310,091	15,437	1,000	--	--
--	--	--	3,082	2,350	96,288	--	--	--
--	103,188	68,150	336,410	331,723	139,761	2,600	--	3,653
--	390	--	--	514	--	55,462	205	--
--	--	--	--	--	--	--	138,212	--
--	3,992	--	16,961	--	22,309	28,425	--	50,000
--	--	--	--	--	--	--	20,990	--
--	10,188	--	4,650	--	6,975	--	--	--
--	--	--	--	--	--	19,650	--	--
--	14,570	--	21,611	514	29,284	103,537	159,407	50,000
--	--	--	--	--	--	--	43,683	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	43,683	--
--	--	--	688	494	687	--	--	--
13,798	117,758	68,150	359,309	337,072	278,578	106,974	203,090	53,914

Table 4—Log flows by county and out-of-State origin,

(Thousand board

Resource area and county of use	Sacramento (Continued)									
	Lake	Nevada	Placer	Plumas	Sierra	Tehama	Yuba	Alpine	Amador	Calaveras
North Coast										
Del Norte	--	--	--	--	--	--	--	--	--	--
Humboldt	--	--	--	--	--	--	--	--	--	--
Mendocino	470	--	--	--	--	--	--	--	--	--
Sonoma	931	--	--	--	--	--	261	--	--	--
Total	1,401	--	--	--	--	--	261	--	--	--
Central Coast										
Contra Costa	--	--	--	675	135	--	--	--	306	--
Monterey, Santa Cruz, and Solano[1/]	--	--	--	--	--	306	--	--	--	--
Total	--	--	--	675	135	306	--	--	306	--
Northern Interior										
Lassen and Modoc[1/]	--	--	--	49,093	--	7,218	--	--	--	--
Shasta	--	--	--	8,523	1,810	2,757	--	--	--	--
Siskiyou	--	--	--	--	--	76	--	--	--	--
Trinity	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	57,616	1,810	10,051	--	--	--	--
Sacramento										
Butte	--	6,722	3,186	20,542	3,186	--	300	--	--	--
El Dorado and Sacramento[1/]	--	--	5,223	--	--	--	--	59	7,863	--
Glenn and Tehama[1/]	--	--	--	7,988	--	102,742	--	--	--	--
Nevada and Placer[1/]	--	40,964	97,719	1,609	36,144	--	--	--	--	--
Plumas and Sierra[1/]	--	2,400	800	114,561	47,493	21,567	--	--	--	--
Yuba	--	15,358	16,639	18,527	7,349	--	27,437	--	--	--
Total	--	65,444	123,567	163,227	94,172	124,309	27,737	59	7,863	--
San Joaquin										
Amador, Calaveras, and San Joaquin[1/]	--	--	--	--	--	--	--	--	53,544	62,855
Fresno and Madera[1/]	--	--	--	--	--	--	--	--	--	42
Tulare and Kern[1/]	--	--	--	--	--	--	--	--	--	--
Tuolumne	--	--	--	--	--	--	--	--	--	3,568
Total	--	--	--	--	--	--	--	--	53,544	66,465
Southern California										
San Bernardino and Los Angeles[1/]	--	--	--	--	--	494	--	--	--	--
All Areas	1,401	65,444	123,567	221,518	96,117	135,160	27,998	59	61,713	66,465

[1/] Combined to avoid disclosure.

resource area, and county of use, California, 1966—Continued

feet, local scale)

San Joaquin							Southern California	Out-of-State
Fresno	Kern	Madera	Mariposa	San Joaquin	Tulare	Tuolumne	San Bernardino	
--	--	--	--	--	--	--	--	11,400
--	--	--	--	--	--	--	--	1,400
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	12,800
--	--	--	--	--	--	945	--	--
--	--	--	--	--	--	--	--	270
--	--	--	--	--	--	945	--	270
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	4,338
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	4,338
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	2,600	225	2,175	--	899
109,688	--	61,680	2,842	--	6,553	70	--	462
--	9,536	--	--	--	118,567	--	--	--
--	--	--	10,858	--	--	144,459	--	--
109,688	9,536	61,680	13,700	2,600	125,345	146,704	--	1,361
--	--	--	--	--	10,256	--	7,426	274
109,688	9,536	61,680	13,700	2,600	135,601	147,649	7,426	19,043

Table 5—Log flow to mills from National Forests,

(Thousand board

Resource area and county of use	All National Forests	El Dorado	Klamath	Lassen	Mendocino	Modoc
North Coast						
Del Norte	31,738	--	--	--	--	--
Humboldt	176,344	--	1,292	--	--	--
Mendocino	33,632	--	--	--	25,291	--
Sonoma	--	--	--	--	--	--
Total	241,714	--	1,292	--	25,291	--
Central Coast						
Monterey, Santa Cruz, and Solano[1/]	180	--	--	--	--	--
Northern Interior						
Lassen and Modoc[1/]	157,765	--	--	63,687	--	54,181
Shasta	131,378	--	--	35,796	2,045	9,642
Siskiyou	149,886	--	107,830	945	--	630
Trinity	112,282	--	2,115	--	--	--
Total	551,311	--	109,945	100,428	2,045	64,453
Sacramento						
Butte	21,126	--	--	7,392	123	--
El Dorado and Sacramento[1/]	38,265	38,265	--	--	--	--
Glenn and Tehama[1/]	101,629	--	--	7,260	60,343	--
Nevada and Placer[1/]	95,450	16,076	--	--	--	--
Plumas and Sierra[1/]	120,222	--	--	28,323	1,325	--
Yuba	56,626	--	--	--	--	--
Total	433,318	54,341	--	42,975	61,791	--
San Joaquin[2/]						
Amador, Calaveras, and San Joaquin[1/]	82,827	44,450	--	--	--	--
Fresno and Madera[1/]	166,606	--	--	--	--	--
Kern, Los Angeles, Tulare, and San Bernardino[1/]	138,481	--	198	--	--	--
Tuolumne	110,799	--	--	--	--	--
Total	498,713	44,450	198	--	--	--
All Areas	1,725,236	98,791	111,435	143,403	89,127	64,453

[1/] Combined to avoid disclosure.

[2/] San Joaquin and Southern California combined to avoid disclosure.

by resource area and county, California, 1976

feet, local scale)

Plumas	San Bernardino	Sierra	Sequoia	Shasta-Trinity	Six Rivers	Stanislaus	Tahoe	Out-of-State National Forests
--	--	--	--	--	31,738	--	--	--
--	--	--	--	59,563	115,489	--	--	--
--	--	--	--	--	8,341	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	59,563	155,568	--	--	--
--	--	--	--	180	--	--	--	--
39,597	--	--	--	--	--	--	--	300
--	--	--	--	78,342	--	--	--	5,553
--	--	--	--	40,481	--	--	--	--
--	--	--	--	103,822	6,345	--	--	--
39,597	--	--	--	222,645	6,345	--	--	5,853
13,611	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
7,976	--	--	--	26,050	--	--	--	--
373	--	--	--	--	--	1,000	78,001	--
43,642	--	--	--	7,700	--	--	39,232	--
19,710	--	--	--	--	--	--	36,916	--
85,312	--	--	--	33,750	--	1,000	154,149	--
--	--	--	--	--	--	38,377	--	--
--	--	161,308	5,298	--	--	--	--	--
--	7,603	--	130,482	198	--	--	--	--
--	--	--	--	--	--	110,799	--	--
--	7,603	161,308	135,780	198	--	149,176	--	--
124,909	7,603	161,308	135,780	316,336	161,913	150,176	154,149	5,853

Table 6—Log flow to mills from National Forests,

(Thousand board

Resource area and county of use	All National Forests	El Dorado	Klamath	Lassen	Mendocino	Modoc
North Coast						
Lumber	199,378	--	--	--	25,291	--
Veneer and plywood	37,096	--	--	--	--	--
Pulp and board	--	--	--	--	--	--
Shake and shingle	--	--	--	--	--	--
Total	236,474	--	--	--	25,291	--
Northern Interior						
Lumber	490,735	--	66,307	100,428	2,045	61,461
Veneer and plywood	60,519	--	43,609	--	--	2,992
Pulp and board	--	--	--	--	--	--
Total	551,254	--	109,916	100,428	2,045	64,453
Sacramento						
Lumber	417,771	51,040	--	42,975	58,068	--
Veneer and plywood[1/]	55,254	17,760	--	--	3,600	--
Pulp and board	--	--	--	--	--	--
Total	473,025	68,800	--	42,975	61,668	--
San Joaquin						
Lumber[2/]	458,364	29,991	--	--	--	--
Veneer and plywood[1/]	--	--	--	--	--	--
Pulp and board	--	--	--	--	--	--
Total	458,364	29,991	--	--	--	--
Southern California						
Lumber[2/]	--	--	--	--	--	--
Pulp and board	--	--	--	--	--	--
Total	--	--	--	--	--	--
All Areas						
Lumber	1,566,248	81,031	66,307	143,403	85,404	61,461
Veneer and plywood	152,869	17,760	43,609	--	3,600	2,992
Pulp and board	--	--	--	--	--	--
Shake and shingle	--	--	--	--	--	--
Export[2/]	5,240	--	1,292	--	--	--
Post, pole, and piling[3/]	879	--	227	--	123	--
Total	1,725,236	98,791	111,435	143,403	89,127	64,453

[1/] Sacramento and San Joaquin combined to avoid disclosure.

[2/] San Joaquin and Southern California combined to avoid disclosure.

[3/] All resource areas combined to avoid disclosure.

by industry and resource area, California, 1976

feet, local scale)

Plumas	San Bernardino	Sierra	Sequoia	Shasta-Trinity	Six Rivers	Stanislaus	Tahoe	Out-of-State National Forests
--	--	--	--	33,838	140,249	--	--	--
--	--	--	--	23,438	13,658	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	57,276	153,907	--	--	--
39,597	--	--	--	211,620	6,345	--	--	2,932
--	--	--	--	10,997	--	--	--	2,921
--	--	--	--	--	--	--	--	--
39,597	--	--	--	222,617	6,345	--	--	5,853
79,189	--	--	--	31,350	--	1,000	154,149	--
6,000	--	--	--	2,400	--	25,494	--	--
--	--	--	--	--	--	--	--	--
85,189	--	--	--	33,750	--	26,494	154,149	--
--	7,603	161,308	135,780	--	--	123,682	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	7,603	161,308	135,780	--	--	123,682	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	7,603	161,308	135,780	276,808	146,594	124,682	--	2,932
--	--	--	--	36,835	13,658	25,494	--	2,921
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	2,287	1,661	--	--	--
123	--	--	--	406	--	--	--	--
124,909	7,603	161,308	135,780	316,336	161,913	150,176	154,149	5,853

Table 7—Dependency of mills for logs, by ownership

Resource area and industry	National Forest				State				Bureau of Land Management				
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0
													Number
North Coast													
Lumber	34	9	4	5	46	5	1	--	51	1	--	--	50
Veneer and plywood	6	3	1	1	9	2	--	--	11	--	--	--	9
Pulp and board	6	--	--	--	6	--	--	--	6	--	--	--	6
Shake and shingle	7	--	--	--	5	--	1	1	7	--	--	--	7
Export	2	4	--	--	6	--	--	--	6	--	--	--	6
Total	55	16	5	6	72	7	2	1	81	1	--	--	78
Central Coast													
Lumber	6	--	--	--	6	--	--	--	6	--	--	--	6
Pulp and board	3	--	--	--	3	--	--	--	3	--	--	--	3
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--	1
Total	9	1	--	--	10	--	--	--	9	1	--	--	10
Northern Interior													
Lumber	4	7	4	14	27	2	--	--	27	2	--	--	29
Veneer and plywood	--	3	1	1	5	--	--	--	5	--	--	--	5
Pulp and board	1	--	--	--	1	--	--	--	1	--	--	--	1
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--	1
Total	5	11	5	15	34	2	--	--	33	3	--	--	36
Sacramento													
Lumber	4	6	15	8	32	1	--	--	33	--	--	--	33
Veneer and plywood	1	--	2	--	3	--	--	--	3	--	--	--	3
Pulp and board	4	--	--	--	4	--	--	--	4	--	--	--	4
Export	1	--	--	--	1	--	--	--	1	--	--	--	1
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--	1
Total	10	7	17	8	41	1	--	--	41	1	--	--	42
San Joaquin													
Lumber	1	2	1	17	20	1	--	--	20	1	--	--	21
Veneer and plywood	--	--	1	1	2	--	--	--	2	--	--	--	2
Pulp and board	2	--	--	--	2	--	--	--	2	--	--	--	2
Post, pole, and piling	2	--	--	--	2	--	--	--	2	--	--	--	2
Total	5	2	2	18	26	1	--	--	26	1	--	--	27
Southern California													
Lumber	--	--	--	1	1	--	--	--	1	--	--	--	1
Pulp and board	1	--	--	--	1	--	--	--	1	--	--	--	1
Post, pole, and piling	--	1	--	--	1	--	--	--	1	--	--	--	1
Total	1	1	--	1	3	--	--	--	3	--	--	--	3
All Areas													
Lumber	46	27	24	45	132	9	1	--	138	4	--	--	140
Veneer and plywood	7	6	5	3	19	2	--	--	21	--	--	--	19
Pulp and board	17	--	--	--	17	--	--	--	17	--	--	--	17
Shake and shingle	7	--	--	--	5	--	1	1	7	--	--	--	7
Export	3	4	--	--	7	--	--	--	7	--	--	--	7
Post, pole, and piling	2	4	--	--	6	--	--	--	3	3	--	--	6
Total	82	41	29	48	186	11	2	1	193	7	--	--	196

origin, resource area, and industry, California, 1976

Other public			Forest industry								Farmer and miscellaneous private			
			Own wood supply				Other wood supply							
Dependency (percent)														
1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
of mills														
1	--	1	20	9	8	15	27	11	6	8	26	11	9	6
1	--	1	4	1	1	5	9	--	1	1	5	5	--	1
--	--	--	6	--	--	--	6	--	--	--	6	--	--	--
--	--	--	7	--	--	--	3	1	1	2	5	1	--	1
--	--	--	6	--	--	--	1	--	3	2	2	3	--	1
2	--	2	43	10	9	20	46	12	11	13	44	20	9	9
--	--	--	6	--	--	--	5	1	--	--	--	--	--	6
--	--	--	2	--	1	--	2	--	1	--	3	--	--	--
--	--	--	1	--	--	--	--	--	1	--	--	1	--	--
--	--	--	9	--	1	--	7	1	2	--	3	1	--	6
--	--	--	20	3	4	2	15	10	4	--	13	12	2	2
--	--	--	3	1	1	--	2	1	2	--	2	1	2	--
--	--	--	1	--	--	--	1	--	--	--	1	--	--	--
--	--	--	--	--	1	--	--	1	--	--	1	--	--	--
--	--	--	24	4	6	2	18	12	6	--	17	13	4	2
--	--	--	16	7	8	2	22	10	--	1	10	13	4	6
--	--	--	--	--	2	1	3	--	--	--	2	1	--	--
--	--	--	4	--	--	--	4	--	--	--	4	--	--	--
--	--	--	1	--	--	--	--	--	1	--	--	1	--	--
--	--	--	1	--	--	--	1	--	--	--	--	--	--	1
--	--	--	22	7	10	3	30	10	1	1	16	15	4	7
--	--	--	14	6	1	--	19	1	1	--	9	9	1	2
--	--	--	--	1	1	--	2	--	--	--	1	1	--	--
--	--	--	2	--	--	--	2	--	--	--	2	--	--	--
--	--	--	1	--	1	--	1	--	1	--	--	--	2	--
--	--	--	17	7	3	--	24	1	2	--	12	10	3	2
--	--	--	1	--	--	--	1	--	--	--	1	--	--	--
--	--	--	1	--	--	--	1	--	--	--	1	--	--	--
--	--	--	--	--	1	--	--	1	--	--	1	--	--	--
--	--	--	2	--	1	--	2	1	--	--	3	--	--	--
1	--	1	77	25	21	19	89	33	11	9	59	45	16	22
1	--	1	7	3	5	6	16	1	3	1	10	8	2	1
--	--	--	16	--	1	--	16	--	1	--	17	--	--	--
--	--	--	7	--	--	--	3	1	1	2	5	1	--	1
--	--	--	7	--	--	--	1	--	4	2	2	4	--	1
--	--	--	3	--	3	--	2	2	2	--	2	1	2	1
2	--	2	117	28	30	25	127	37	22	14	95	59	20	26

Table 8—Log consumption of all mills, by ownership class, resource area, and industry, California, 1976

(Thousand board feet, local scale)

Resource area and industry	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
North Coast								
Lumber	1,556,253	37,501	199,378	400	18,782	802,515	240,306	257,371
Veneer and plywood	293,919	2,334	37,096	--	13,692	157,616	58,150	25,031
Shake and shingle	3,455	1,512	--	--	--	--	1,583	360
Total	1,853,627	41,347	236,474	400	32,474	960,131	300,039	282,762
Central Coast								
Lumber	23,822	--	--	--	--	--	3,623	20,199
Pulp and board	2,700	--	--	--	--	1,350	1,350	--
Total	26,522	--	--	--	--	1,350	4,973	20,199
Northern Interior								
Lumber	944,118	8,630	490,735	3,350	--	222,076	149,763	69,564
Veneer and plywood	149,861	--	60,519	--	--	19,203	51,931	18,208
Total	1,093,979	8,630	551,254	3,350	--	241,279	201,694	87,772
Sacramento								
Lumber	925,509	798	417,771	--	--	283,658	73,416	149,866
Veneer and plywood[1/]	94,896	--	55,254	--	--	35,253	--	4,389
Total	1,020,405	798	473,025	--	--	318,911	73,416	154,255
San Joaquin								
Lumber[2/]	585,764	831	458,364	2,100	--	54,242	17,600	52,627
Veneer and plywood[1/]	--	--	--	--	--	--	--	--
Total	585,764	831	458,364	2,100	--	54,242	17,600	52,627
Southern California								
Lumber[2/]	--	--	--	--	--	--	--	--
All Areas								
Lumber	4,035,466	47,760	1,566,248	5,850	18,782	1,362,491	484,708	549,627
Veneer and plywood	538,676	2,334	152,869	--	13,692	212,072	110,081	47,628
Pulp and board	2,700	--	--	--	--	1,350	1,350	--
Shake and shingle	3,455	1,512	--	--	--	--	1,583	360
Export[3/]	97,695	--	5,240	--	--	--	66,351	26,104
Post, pole, and piling[3/]	9,821	--	879	303	--	1,859	2,885	3,895
Total	4,687,813	51,606	1,725,236	6,153	32,474	1,577,772	666,958	627,614

[1/] Sacramento and San Joaquin combined to avoid disclosure.

[2/] San Joaquin and Southern California combined to avoid disclosure.

[3/] All resource areas combined to avoid disclosure.

Table 9—Log consumption by all mills by species, resource area, and industry, California, 1976

(Thousand board feet, local scale)

Resource area and industry	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
North Coast										
Lumber	1,556,253	548,099	13,922	44,261	862,447	55,124	3,668	4,505	22,624	1,603
Veneer and plywood	293,919	241,523	6,758	6,775	32,771	2,617	--	--	3,275	200
Shake and shingle	3,455	--	--	--	--	--	--	--	3,455	--
Total	1,853,627	789,622	20,680	51,036	895,218	57,741	3,668	4,505	29,354	1,803
Central Coast										
Lumber	23,822	3,757	--	--	19,965	--	--	--	50	50
Pulp and board	2,700	1,755	945	--	--	--	--	--	--	--
Total	26,522	5,512	945	--	19,965	--	--	--	50	50
Northern Interior										
Lumber	944,118	214,309	3,409	198,127	--	372,474	56,240	77,550	16,165	5,844
Veneer and plywood	149,861	56,679	--	56,991	--	26,700	--	--	9,491	--
Total	1,093,979	270,988	3,409	255,118	--	399,174	56,240	77,550	25,656	5,844
Sacramento										
Lumber	925,509	148,217	--	314,802	--	310,114	63,866	44,954	43,496	60
Veneer and plywood[1/]	94,896	7,734	--	78,872	--	8,290	--	--	--	--
Total	1,020,405	155,951	--	393,674	--	318,404	63,866	44,954	43,496	60
San Joaquin										
Lumber[2/]	585,764	9,280	--	226,366	--	223,952	54,288	66,230	5,596	52
Veneer and plywood[1/]	--	--	--	--	--	--	--	--	--	--
Total	585,764	9,280	--	226,366	--	223,952	54,288	66,230	5,596	52
Southern California										
Lumber[2/]	--	--	--	--	--	--	--	--	--	--
All Areas										
Lumber	4,035,466	923,662	17,331	783,556	882,412	961,664	178,062	193,239	87,931	7,609
Veneer and plywood	538,676	305,936	6,758	142,638	32,771	37,607	--	--	12,766	200
Pulp and board	2,700	1,755	945	--	--	--	--	--	--	--
Shake and shingle[3/]	3,455	--	--	--	--	--	--	--	3,455	--
Export[3/]	97,695	45,282	36,971	4,895	--	8,480	--	970	1,097	--
Post, pole, and piling[3/]	9,821	5,537	--	180	--	4,085	--	--	19	--
Total	4,687,813	1,282,172	62,005	931,269	915,183	1,011,836	178,062	194,209	105,268	7,809

[1/] Sacramento and San Joaquin combined to avoid disclosure.

[2/] San Joaquin and Southern California combined to avoid disclosure.

[3/] All resource areas combined to avoid disclosure.

Table 10—Production and disposition of wood and bark residues by mills by use,

(Tons,

Resource area and residue-producing industry	Wood residue					
	All wood	Used[1/]				Unused
		Total	Pulp and board	Fuel	Miscellaneous	
North Coast						
Lumber	2,014,341	1,730,526	1,183,541	366,651	180,334	283,815
Veneer and plywood	325,858	321,349	179,202	104,573	37,574	4,509
Shake and shingle	902	506	--	118	388	396
Total	2,341,101	2,052,381	1,362,743	471,342	218,296	288,720
Central Coast						
Lumber	28,818	28,818	--	158	28,660	--
Northern Interior						
Lumber	1,082,283	945,572	507,813	437,598	161	136,711
Veneer and plywood	138,343	135,268	99,337	11,528	24,403	3,075
Total	1,220,626	1,080,840	607,150	449,126	24,564	139,786
Sacramento						
Lumber	1,352,752	1,238,775	722,540	440,495	75,740	113,977
Veneer and plywood[2/]	105,667	94,526	80,332	4,627	9,567	11,141
Total	1,458,419	1,333,301	802,872	445,122	85,307	125,118
San Joaquin						
Lumber[3/]	598,476	512,000	377,572	75,945	58,483	86,476
Veneer and plywood[2/]	--	--	--	--	--	--
Total	598,476	512,000	377,572	75,945	58,483	86,476
Southern California						
Lumber[3/]	--	--	--	--	--	--
All Areas						
Lumber	5,076,670	4,455,691	2,791,466	1,320,847	343,378	620,979
Veneer and plywood	569,868	551,143	358,871	120,728	71,544	18,725
Shake and shingle	902	506	--	118	388	396
Total	5,647,440	5,007,340	3,150,337	1,441,693	415,310	640,100

[1/] Residues not necessarily used in the resource area in which produced.

[2/] Sacramento and San Joaquin combined to avoid disclosure.

[3/] San Joaquin and Southern California combined to avoid disclosure.

resource area, and residue-producing industry, California, 1976

dry weight)

Bark residue					
All bark	Used[1/]				Unused
	Total	Pulp and board	Fuel	Miscellaneous	
580,905	234,358	--	212,826	21,532	346,547
95,252	49,710	--	49,710	--	45,542
561	8	--	--	8	553
676,718	284,076	--	262,536	21,540	392,642
8,583	8,349	--	44	8,305	234
311,963	243,374	--	182,317	61,057	68,589
50,885	38,123	--	28,630	9,493	12,762
362,848	281,497	--	210,947	70,550	81,351
384,262	312,600	--	67,629	244,971	71,662
29,644	28,456	--	8,667	19,789	1,188
413,906	341,056	--	76,296	264,760	72,850
187,041	162,294	--	39,707	122,587	24,747
--	--	--	--	--	--
187,041	162,294	--	39,707	122,587	24,747
--	--	--	--	--	--
1,472,754	960,975	--	502,523	458,452	511,779
175,781	116,289	--	87,007	29,282	59,492
561	8	--	--	8	553
1,649,096	1,077,272	--	589,530	487,742	571,824

Table 11--Number of sawmills by mill-size class, resource area, and county, California, 1976

Resource area and county	All classes	Mill-size class[1/]			
		D	C	B	A
North Coast					
Del Norte	6	--	2	4	--
Humboldt	28	--	3	5	20
Mendocino	12	--	--	1	11
Sonoma	6	2	3	--	1
Total	52	2	8	10	32
Central Coast					
Monterey	2	2	--	--	--
Santa Cruz	4	1	2	1	--
Total	6	3	2	1	--
Northern Interior					
Lassen	4	--	1	2	1
Modoc	2	--	1	1	--
Shasta	10	2	1	2	5
Siskiyou	8	1	--	1	6
Trinity	5	--	--	2	3
Total	29	3	3	8	15
Sacramento					
Butte	4	2	--	1	1
El Dorado	5	2	1	--	2
Glenn	1	--	--	1	--
Nevada	5	1	--	3	1
Placer	2	--	--	1	1
Plumas	6	--	2	3	1
Sierra	2	--	1	1	--
Tehama	3	--	--	1	2
Yuba	5	1	2	2	--
Total	33	6	6	13	8
San Joaquin					
Amador	2	--	--	--	2
Calaveras	2	--	1	1	--
Fresno	5	2	1	1	1
Kern	2	1	--	1	--
Madera	3	--	--	2	1
Tulare	3	--	--	1	2
Tuolumne	4	--	1	1	2
Total	21	3	3	7	8
Southern California					
San Bernardino	1	--	1	--	--
All Areas	142	17	23	39	63

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 12--Installed 8-hour capacity of sawmills by mill-size class, resource area and county, California, 1976

(Thousand board feet, lumber tally)

Resource area and county	Total capacity	Mill-size class[1/]			
		D	C	B	A
North Coast					
Del Norte	495	--	115	380	--
Humboldt	4,015	--	190	490	3,335
Mendocino	1,775	--	--	100	1,675
Sonoma	384	39	160	--	185
Total	6,669	39	465	970	5,195
Central Coast					
Monterey	7	7	--	--	--
Santa Cruz	173	3	90	80	--
Total	180	10	90	80	--
Northern Interior					
Lassen	480	--	70	190	220
Modoc	160	--	60	100	--
Shasta	1,354	39	50	170	1,095
Siskiyou	1,212	30	--	100	1,082
Trinity	560	--	--	185	375
Total	3,766	69	180	745	2,772
Sacramento					
Butte	292	22	--	80	190
El Dorado	502	15	62	--	425
Glenn	100	--	--	100	--
Nevada	490	35	--	305	150
Placer	225	--	--	105	120
Plumas	580	--	110	270	200
Sierra	170	--	70	100	--
Tehama	530	--	--	95	435
Yuba	350	10	150	190	--
Total	3,239	82	392	1,245	1,520
San Joaquin					
Amador	405	--	--	--	405
Calaveras	155	--	55	100	--
Fresno	334	14	75	95	150
Kern	96	1	--	95	--
Madera	285	--	--	160	125
Tulare	430	--	--	105	325
Tuolumne	540	--	70	90	380
Total	2,245	15	200	645	1,385
Southern California					
San Bernardino	75	--	75	--	--
All Areas	16,174	215	1,402	3,685	10,872

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 13--Number of sawmills by mill-size class, resource area, and selected equipment, California, 1976

Resource area and selected equipment	All classes	Mill-size class[1/]			
		D	C	B	A
North Coast					
Barker	47	1	5	10	31
Chipper	50	1	7	10	32
Planer	42	2	6	9	25
Burner	33	--	6	6	21
Kiln	21	1	2	3	15
Central Coast					
Barker	2	--	2	--	--
Chipper	1	--	1	--	--
Planer	3	--	2	1	--
Burner	--	--	--	--	--
Kiln	--	--	--	--	--
Northern Interior					
Barker	23	2	--	7	14
Chipper	22	--	1	6	15
Planer	22	2	1	6	13
Burner	15	2	3	5	5
Kiln	17	--	--	5	12
Sacramento					
Barker	26	1	4	13	8
Chipper	26	--	5	13	8
Planer	26	4	3	11	8
Burner	11	1	3	5	2
Kiln	22	1	3	10	8
San Joaquin					
Barker	17	--	3	6	8
Chipper	17	--	3	6	8
Planer	12	1	1	3	7
Burner	5	--	--	3	2
Kiln	12	--	1	4	7
Southern California					
Barker	1	--	1	--	--
Chipper	1	--	1	--	--
Planer	1	--	1	--	--
Burner	--	--	--	--	--
Kiln	1	--	1	--	--
All Areas					
Barker	116	4	15	36	61
Chipper	117	1	18	35	63
Planer	106	9	14	30	53
Burner	64	3	12	19	30
Kiln	73	2	7	22	42

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 14--Number of sawmills by selected equipment, resource area, and county, California, 1976

Resource area and county	Barker	Chipper	Planer	Burner	Kiln
North Coast					
Del Norte	5	6	5	4	2
Humboldt	27	28	21	18	11
Mendocino	11	12	10	9	6
Sonoma	4	4	6	2	2
Total	47	50	42	33	21
Central Coast					
Monterey	--	--	--	--	--
Santa Cruz	2	1	3	--	--
Total	2	1	3	--	--
Northern Interior					
Lassen	3	2	3	2	3
Modoc	--	1	2	1	1
Shasta	8	7	8	4	6
Siskiyou	7	7	5	3	4
Trinity	5	5	4	5	3
Total	23	22	22	15	17
Sacramento					
Butte	2	2	4	--	1
El Dorado	3	3	4	1	3
Glenn	1	1	1	1	1
Nevada	5	4	4	2	4
Placer	2	2	2	2	2
Plumas	5	6	4	2	4
Sierra	2	2	1	--	1
Tehama	3	3	3	1	3
Yuba	3	3	3	2	3
Total	26	26	26	11	22
San Joaquin					
Amador	2	2	1	1	1
Calaveras	2	2	1	--	--
Fresno	2	2	1	1	2
Kern	1	1	2	--	1
Madera	3	3	2	2	2
Tulare	3	3	3	1	3
Tuolumne	4	4	2	--	3
Total	17	17	12	5	12
Southern California					
San Bernardino	1	1	1	--	1
All Areas	116	117	106	64	73

Table 15—Number of sawmills by type and size of headrig,[1] resource area, and mill-size class, California, 1976

Resource area and mill-size class[2]	Circular saw				Band saw				Gang saw			Chipping saw			Scragg double-cut saw		
	2 ft.	4 ft.	6 ft.	8+ ft.	4 ft.	6 ft.	8 ft.	10+ ft.	2 ft.	3 ft.	4 ft.	2 ft.	3 ft.	4 ft.	2 ft.	3 ft.	4 ft.
North Coast																	
D	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
C	--	2	2	--	--	1	3	--	--	--	--	--	--	--	--	--	--
B	--	--	--	--	1	4	4	1	--	--	--	--	--	--	--	--	--
A	1	--	1	--	3	16	7	4	--	--	1	--	--	--	--	--	--
Total	1	3	3	--	4	22	14	5	--	--	1	--	--	--	--	--	--
Central Coast																	
D	--	1	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
C	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
Total	--	1	4	--	--	1	--	--	--	--	--	--	--	--	--	--	--
Northern Interior																	
D	--	1	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
C	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--
B	--	--	--	--	--	7	1	--	--	--	--	--	--	--	--	--	--
A	--	--	1	--	1	8	4	1	1	--	--	--	--	--	1	--	--
Total	--	1	2	--	1	16	8	1	1	--	--	--	--	--	1	--	--
Sacramento																	
D	--	2	3	1	--	--	--	--	1	--	--	--	--	--	--	--	--
C	--	--	--	1	1	2	2	--	3	--	--	--	--	--	--	--	--
B	--	--	--	--	2	9	2	--	--	1	--	--	--	--	--	--	--
A	--	--	--	--	--	5	2	--	--	--	1	--	--	--	--	--	--
Total	--	2	3	2	3	16	6	--	4	1	1	--	--	--	--	--	--
San Joaquin																	
D	--	--	2	--	--	1	--	--	--	--	--	--	--	--	--	--	--
C	--	--	--	--	2	1	--	--	--	--	--	1	--	--	--	--	--
B	--	1	2	--	--	3	1	--	2	--	--	--	--	--	--	--	--
A	--	--	1	--	--	1	5	1	--	--	--	--	--	1	--	--	--
Total	--	1	5	--	2	6	6	1	2	--	--	1	--	1	--	--	--
Southern California																	
C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All Areas																	
D	--	5	8	1	--	3	--	--	1	--	--	--	--	--	--	--	--
C	--	2	4	1	3	5	8	--	3	--	--	1	--	--	--	--	--
B	--	1	2	--	3	24	8	1	2	1	--	--	--	--	--	--	--
A	1	--	3	--	4	30	18	6	1	--	2	--	--	1	1	--	--
Total	--	8	17	2	10	62	34	7	7	1	2	1	--	1	1	--	--

[1] Sizes of headrigs are upper limits; the 6-foot size class includes saws 49 through 72 inches.

[2] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 16--Number of sawmills by tenure of present ownership, years at present site, and mill-size class, California, 1976

Mill-size class[1/] and years at present site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
D						
0- 2	1	1	--	--	--	--
3- 5	5	--	4	--	--	1
6-10	2	--	--	1	--	1
11-20	6	--	--	1	5	--
21+	3	2	--	--	--	1
Total	17	3	4	2	5	3
C						
0- 2	1	1	--	--	--	--
3- 5	2	1	--	--	--	1
6-10	2	--	--	2	--	--
11-20	4	2	--	--	2	--
21+	14	2	2	--	3	7
Total	23	6	2	2	5	8
B						
0- 2	--	--	--	--	--	--
3- 5	2	--	2	--	--	--
6-10	3	--	--	3	--	--
11-20	9	3	1	2	2	1
21+	25	2	4	9	4	6
Total	39	5	7	14	6	7
A						
0- 2	1	--	--	1	--	--
3- 5	5	--	5	--	--	--
6-10	6	--	1	3	1	1
11-20	16	1	4	7	4	--
21+	35	3	9	3	6	14
Total	63	4	19	14	11	15
All Classes						
0- 2	3	2	--	1	--	--
3- 5	14	1	11	--	--	2
6-10	13	--	1	9	1	2
11-20	35	6	5	10	13	1
21+	77	9	15	12	13	28
Total	142	18	32	32	27	33

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 17--Average number of operating days of sawmills by resource area and mill-size class, California, 1976

Resource area	Average number of operating days per year				
	Mill-size class[1/]				Average all classes
	D	C	B	A	
North Coast	229	215	243	246	240
Central Coast	25	170	196	--	102
Northern Interior	167	157	216	238	217
Sacramento	112	134	221	243	191
San Joaquin	72	210	224	241	207
Southern California	--	230	--	--	230
All Areas	113	182	226	243	213

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 18--Wood consumption by sawmills by type of material consumed, resource area, and mill-size class, California, 1976

(Thousand board feet)

Resource area and mill-size class[1]	All wood	Roundwood			Other	
		All roundwood	Sound logs	Utility logs	Peeler cores	Cants
		Local log scale			Lumber tally	
North Coast						
D and C[2]	101,995	97,125	83,901	13,224	1,500	3,370
B	235,009	235,009	195,181	39,828	--	--
A	1,237,119	1,224,119	1,191,546	32,573	13,000	--
Total	1,574,123	1,556,253	1,470,628	85,625	14,500	3,370
Central Coast						
D, C, and B[2]	23,822	23,822	23,822	--	--	--
Northern Interior						
D	9,106	7,106	6,550	556	2,000	--
C	18,994	18,994	18,644	350	--	--
B	186,683	186,683	182,097	4,586	--	--
A	731,335	731,335	685,010	46,325	--	--
Total	946,118	944,118	892,301	51,817	2,000	--
Sacramento						
D	8,825	8,825	8,045	780	--	--
C	87,366	87,366	87,366	--	--	--
B	403,813	403,813	400,813	3,000	--	--
A	431,315	425,505	415,005	10,500	5,810	--
Total	931,319	925,509	911,229	14,280	5,810	--
San Joaquin						
D	430	430	280	150	--	--
C[3]	62,526	62,526	62,526	--	--	--
B	200,621	200,621	200,121	500	--	--
A	322,187	322,187	318,637	3,550	--	--
Total	585,764	585,764	581,564	4,200	--	--
Southern California						
C[3]	--	--	--	--	--	--
All Areas						
D	18,361	16,361	14,875	1,486	2,000	--
C	270,881	266,011	252,437	13,574	1,500	3,370
B	1,049,948	1,049,948	1,002,034	47,914	--	--
A	2,721,956	2,703,146	2,610,198	92,948	18,810	--
Total	4,061,146	4,035,466	3,879,544	155,922	22,310	3,370

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Combined to avoid disclosure.

[3] San Joaquin and Southern California combined to avoid disclosure.

Table 19--Log consumption by sawmills by timber age group, resource area, and mill-size class, California, 1976

(Thousand board feet, local scale)

Resource area and mill-size class[1/]	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
North Coast			
D and C[2/]	97,125	47,618	49,507
B	235,009	195,489	39,520
A	1,224,119	720,118	504,001
Total	1,556,253	963,225	593,028
Central Coast,			
D, C, and B[2/]	23,822	2,184	21,638
Northern Interior			
D	7,106	3,679	3,427
C	18,994	11,584	7,410
B	186,683	162,536	24,147
A	731,335	580,224	151,111
Total	944,118	758,023	186,095
Sacramento			
D	8,825	7,503	1,322
C	87,366	56,279	31,087
B	403,813	284,283	119,530
A	425,505	334,682	90,823
Total	925,509	682,747	242,762
San Joaquin			
D	430	321	109
C[3/]	62,526	20,457	42,069
B	200,621	137,349	63,272
A	322,187	250,801	71,386
Total	585,764	408,928	176,836
Southern California			
C[3/]	--	--	--
All Areas			
D	16,361	11,503	4,858
C	266,011	135,938	130,073
B	1,049,948	781,841	268,107
A	2,703,146	1,885,825	817,321
Total	4,035,466	2,815,107	1,220,359

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2/] Combined to avoid disclosure.

[3/] San Joaquin and Southern California combined to avoid disclosure.

Table 20--Log consumption by sawmills by timber age group, resource area, and county, California, 1976

(Thousand board feet, local scale)

Resource area and county	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
North Coast			
Del Norte	143,526	111,765	31,761
Humboldt	920,718	687,539	233,179
Mendocino	395,320	140,241	255,079
Sonoma	96,689	23,680	73,009
Total	1,556,253	963,225	593,028
Central Coast			
Monterey and Santa Cruz[1/]	23,822	2,184	21,638
Northern Interior			
Lassen and Modoc[1/]	167,434	156,087	11,347
Shasta	320,708	211,841	108,867
Siskiyou	312,656	259,455	53,201
Trinity	143,320	130,640	12,680
Total	944,118	758,023	186,095
Sacramento			
Butte	88,453	40,264	48,189
El Dorado	117,905	69,485	48,420
Glenn and Tehama[1/]	208,417	145,521	62,896
Placer and Nevada[1/]	197,140	160,857	36,283
Plumas and Sierra[1/]	208,634	184,581	24,053
Yuba	104,960	82,039	22,921
Total	925,509	682,747	242,762
San Joaquin			
Calaveras and Amador[1/]	130,354	63,142	67,212
Fresno and Madera[1/]	180,639	138,121	42,518
Tulare and Kern[2/]	145,781	133,839	11,942
Tuolumne	128,990	73,826	55,164
Total	585,764	408,928	176,836
Southern California			
San Bernardino[2/]	--	--	--
All Areas	4,035,466	2,815,107	1,220,359

[1/] Combined to avoid disclosure.

[2/] Tulare, Kern, and San Bernardino combined to avoid disclosure.

Table 21--Log inventory changes, log consumption, and apparent log receipts by sawmills by resource area, California, 1976

(Thousand board feet, local scale)

Resource area	Log inventory			1976 log consumption	Apparent 1976 log receipts
	January 1, 1976	December 31, 1976	Net change		
North Coast	426,574	477,194	50,620	1,556,253	1,606,873
Central Coast	3,183	3,489	306	23,822	24,128
Northern Interior	348,343	397,222	48,879	944,118	992,997
Sacramento	246,931	336,025	89,094	925,509	1,014,603
San Joaquin and Southern California[1/]	177,932	202,567	24,635	535,764	610,399
All Areas	1,202,963	1,416,497	213,534	4,035,466	4,249,000

[1/] San Joaquin and Southern California combined to avoid disclosure.

Table 22—Log consumption by sawmills by ownership class, resource area, and mill-size class, California, 1976

(Thousand board feet, local scale)

Resource area and mill-size class[1]	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
North Coast								
D and C[2]	97,125	--	18,525	400	--	37,584	15,908	24,708
B	235,009	--	22,206	--	--	94,913	111,120	6,770
A	1,224,119	37,501	158,647	--	18,782	670,018	113,278	225,893
Total	1,556,253	37,501	199,378	400	18,782	802,515	240,306	257,371
Central Coast[2]								
D, C, and B[2]	23,822	--	--	--	--	--	3,623	20,199
Northern Interior								
D	7,106	--	3,000	1,000	--	106	--	3,000
C	18,994	--	12,696	--	--	--	1,288	5,010
B	186,683	--	139,424	--	--	3,302	25,076	18,881
A	731,335	8,630	335,615	2,350	--	218,668	123,399	42,673
Total	944,118	8,630	490,735	3,350	--	222,076	149,763	69,564
Sacramento								
D	8,825	--	3,797	--	--	600	32	4,396
C	87,366	--	41,495	--	--	4,000	2,148	39,723
B	403,813	--	218,283	--	--	98,160	18,014	69,356
A	425,505	798	154,196	--	--	180,898	53,222	36,391
Total	925,509	798	417,771	--	--	283,658	73,416	149,866
San Joaquin								
D	430	--	357	--	--	--	--	73
C[3]	62,526	--	46,401	--	--	3,250	--	12,875
B	200,621	--	190,196	2,100	--	3,025	2,100	3,200
A	322,187	831	221,410	--	--	47,967	15,500	36,479
Total	585,764	831	458,364	2,100	--	54,242	17,600	52,627
Southern California								
C[3]	--	--	--	--	--	--	--	--
All Areas								
D	16,361	--	7,154	1,000	--	706	32	7,469
C	266,011	--	119,117	400	--	44,834	19,344	82,316
B	1,049,948	--	570,109	2,100	--	199,400	159,933	118,406
A	2,703,146	47,760	869,868	2,350	18,782	1,117,551	305,399	341,436
Total	4,035,466	47,760	1,566,248	5,850	18,782	1,362,491	484,708	549,627

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Combined to avoid disclosure.

[3] San Joaquin and Southern California combined to avoid disclosure.

Table 23—Log consumption by sawmills by ownership class, resource area, and county, California, 1976

(Thousand board feet, local scale)

Resource area and county	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
North Coast								
Del Norte	143,526	--	21,163	--	--	86,249	30,429	5,685
Humboldt	920,718	--	144,583	400	18,025	481,138	172,725	103,847
Mendocino	395,320	37,501	33,632	--	757	187,838	33,052	102,540
Sonoma	96,689	--	--	--	--	47,290	4,100	45,299
Total	1,556,253	37,501	199,378	400	18,782	802,515	240,306	257,371
Central Coast								
Monterey and Santa Cruz[1/]	23,822	--	--	--	--	--	3,623	20,199
Northern Interior								
Lassen and Modoc[1/]	167,434	--	157,765	--	--	--	3,900	5,769
Shasta	320,708	8,630	114,923	1,000	--	83,405	61,968	50,782
Siskiyou	312,656	--	105,765	--	--	135,589	66,589	4,713
Trinity	143,320	--	112,282	2,350	--	3,082	17,306	8,300
Total	944,118	8,630	490,735	3,350	--	222,076	149,763	69,564
Sacramento								
Butte	88,453	--	20,880	--	--	4,275	44,004	19,294
El Dorado	117,905	--	34,964	--	--	65,326	--	17,615
Glenn and Tehama[1/]	208,417	798	89,629	--	--	98,625	3,193	16,172
Placer and Nevada[1/]	197,140	--	95,450	--	--	64,011	17,266	20,413
Plumas and Sierra[1/]	208,634	--	120,222	--	--	51,421	8,953	28,038
Yuba	104,960	--	56,626	--	--	--	--	48,334
Total	925,509	798	417,771	--	--	283,658	73,416	149,866
San Joaquin								
Calaveras and Amador[1/]	130,354	--	63,802	2,100	--	31,352	17,600	15,500
Fresno and Madera[1/]	180,639	--	166,606	--	--	3,025	--	11,008
Tulare and Kern[2/]	145,781	831	138,085	--	--	1,217	--	5,648
Tuolumne	128,990	--	89,871	--	--	18,648	--	20,471
Total	585,764	831	458,364	2,100	--	54,242	17,600	52,627
Southern California								
San Bernardino[2/]	--	--	--	--	--	--	--	--
All Areas	4,035,466	47,760	1,566,248	5,850	18,782	1,362,491	484,708	549,627

[1/] Combined to avoid disclosure.

[2/] Tulare, Kern, and San Bernardino combined to avoid disclosure.

Table 24—Dependency of sawmills for logs by ownership

(Number

Resource area and mill-size class[1]	National Forest				State				Bureau of Land Management			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
North Coast												
D	2	--	--	--	2	--	--	--	2	--	--	--
C	6	--	1	1	8	--	--	--	7	1	--	--
B	7	2	1	--	10	--	--	--	10	--	--	--
A	19	7	2	4	26	5	1	--	32	--	--	--
Total	34	9	4	5	46	5	1	--	51	1	--	--
Central Coast												
D	3	--	--	--	3	--	--	--	3	--	--	--
C	2	--	--	--	2	--	--	--	2	--	--	--
B	1	--	--	--	1	--	--	--	1	--	--	--
Total	6	--	--	--	6	--	--	--	6	--	--	--
Northern Interior												
D	2	--	--	1	3	--	--	--	2	1	--	--
C	1	--	--	2	3	--	--	--	3	--	--	--
B	--	1	2	5	8	--	--	--	8	--	--	--
A	1	6	2	6	13	2	--	--	14	1	--	--
Total	4	7	4	14	27	2	--	--	27	2	--	--
Sacramento												
D	4	--	1	1	6	--	--	--	6	--	--	--
C	--	1	3	2	6	--	--	--	6	--	--	--
B	--	2	6	5	13	--	--	--	13	--	--	--
A	--	3	5	--	7	1	--	--	8	--	--	--
Total	4	6	15	8	32	1	--	--	33	--	--	--
San Joaquin												
D	--	1	--	2	3	--	--	--	3	--	--	--
C	--	1	--	2	3	--	--	--	3	--	--	--
B	--	--	--	7	7	--	--	--	6	1	--	--
A	1	--	1	6	7	1	--	--	8	--	--	--
Total	1	2	1	17	20	1	--	--	20	1	--	--
Southern California												
C	--	--	--	1	1	--	--	--	1	--	--	--
All Areas												
D	11	1	1	4	17	--	--	--	16	1	--	--
C	9	2	4	8	23	--	--	--	22	1	--	--
B	8	5	9	17	39	--	--	--	38	1	--	--
A	21	16	10	16	53	9	1	--	62	1	--	--
Total	49	24	24	45	132	9	1	--	138	4	--	--

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

origin, resource area, and mill-size class, California, 1976

of mills)

Other public				Forest industry								Farmer and miscellaneous private			
				Own wood supply				Other wood supply							
Dependency (percent)															
0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
2	--	--	--	1	--	1	--	1	--	1	--	1	--	--	1
8	--	--	--	5	1	2	--	4	1	1	2	1	4	--	3
10	--	--	--	5	1	1	3	2	1	3	4	7	2	1	--
30	1	--	1	9	7	4	12	20	9	1	2	17	5	8	2
50	1	--	1	20	9	8	15	27	11	6	8	26	11	9	6
3	--	--	--	3	--	--	--	3	--	--	--	--	--	--	3
2	--	--	--	2	--	--	--	2	--	--	--	--	--	--	2
1	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1
6	--	--	--	6	--	--	--	5	1	--	--	--	--	--	6
3	--	--	--	2	--	--	1	3	--	--	--	2	--	--	1
3	--	--	--	3	--	--	--	2	1	--	--	1	1	--	1
8	--	--	--	6	2	--	--	5	2	1	--	4	3	1	--
15	--	--	--	9	1	4	1	5	7	3	--	6	8	1	--
29	--	--	--	20	3	4	2	15	10	4	--	13	12	2	2
6	--	--	--	5	--	--	1	5	1	--	--	1	1	1	3
6	--	--	--	5	1	--	--	4	2	--	--	1	2	2	1
13	--	--	--	5	4	4	--	9	4	--	--	5	6	1	1
8	--	--	--	1	2	4	1	4	3	--	1	3	4	--	1
33	--	--	--	16	7	8	2	22	10	--	1	10	13	4	6
3	--	--	--	3	--	--	--	3	--	--	--	2	--	--	1
3	--	--	--	2	1	--	--	3	--	--	--	1	1	--	1
7	--	--	--	5	2	--	--	6	1	--	--	5	2	--	--
8	--	--	--	4	3	1	--	7	--	1	--	1	6	1	--
21	--	--	--	14	6	1	--	19	1	1	--	9	9	1	2
1	--	--	--	1	--	--	--	1	--	--	--	1	--	--	--
17	--	--	--	14	--	1	2	15	1	1	--	6	1	1	9
23	--	--	--	18	3	2	--	16	4	1	2	5	8	2	8
39	--	--	--	22	9	5	3	22	9	4	4	21	13	3	2
61	1	--	1	23	13	13	14	36	19	5	3	27	23	10	3
140	1	--	1	77	25	21	19	89	33	11	9	59	45	16	22

Table 25—Log consumption by sawmills by species, resource area, and mill-size class, California, 1976

(Thousand board feet, local scale)

Resource area and mill-size class[1]	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
North Coast										
D and C[2]	97,125	47,051	3,445	1,315	38,051	1,374	--	285	4,301	1,303
B	235,009	83,237	6,362	15,495	113,295	14,811	--	958	551	300
A	1,224,119	417,811	4,115	27,451	711,101	38,939	3,668	3,262	17,772	--
Total	1,556,253	548,099	13,922	44,261	862,447	55,124	3,668	4,505	22,624	1,603
Central Coast[2]										
D, C, and B[2]	23,822	3,757	--	--	19,965	--	--	--	50	50
Northern Interior										
D	7,106	2,850	--	149	--	91	--	16	--	4,000
C	18,994	1,030	--	1,937	--	13,544	515	1,556	--	412
B	186,683	28,645	--	20,426	--	95,190	5,921	36,348	153	--
A	731,335	181,784	3,409	175,615	--	263,649	49,804	39,630	16,012	1,432
Total	944,118	214,309	3,409	198,127	--	372,474	56,240	77,550	16,165	5,844
Sacramento										
D	8,825	2,167	--	208	--	332	--	5,977	81	60
C	87,366	22,560	--	31,273	--	25,610	325	5,668	1,930	--
B	403,813	63,600	--	130,189	--	159,242	12,222	27,188	11,372	--
A	425,505	59,890	--	153,132	--	124,930	51,319	6,121	30,113	--
Total	925,509	148,217	--	314,802	--	310,114	63,866	44,954	43,496	60
San Joaquin										
D	430	--	--	105	--	3	--	268	2	52
C[3]	62,526	390	--	26,924	--	27,467	1,084	5,751	910	--
B	200,621	3,100	--	94,510	--	69,508	16,238	13,262	4,003	--
A	322,187	5,790	--	104,827	--	126,974	36,966	46,949	681	--
Total	585,764	9,280	--	226,366	--	223,952	54,288	66,230	5,596	52
Southern California										
C[3]	--	--	--	--	--	--	--	--	--	--
All Areas										
D	16,361	5,017	--	462	--	426	--	6,261	83	4,112
C	266,011	71,031	3,445	61,449	38,051	67,995	1,924	13,260	7,141	1,715
B	1,049,948	182,339	6,362	260,620	133,260	338,751	34,381	77,756	16,129	350
A	2,703,146	665,275	7,524	461,025	711,101	554,492	141,757	95,962	64,578	1,432
Total	4,035,466	923,662	17,331	783,556	882,412	961,664	178,062	193,239	87,931	7,609

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Combined to avoid disclosure.

[3] San Joaquin and Southern California combined to avoid disclosure.

Table 26—Log consumption by sawmills by species, resource area, and type of material, California, 1976

(Thousand board feet, local scale)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
North Coast										
Sound	1,470,627	509,277	13,372	37,350	824,059	54,815	3,608	4,505	22,038	1,603
Utility	85,626	38,822	550	6,911	38,388	309	60	--	586	--
Total	1,556,253	548,099	13,922	44,261	862,447	55,124	3,668	4,505	22,624	1,603
Central Coast										
Sound	23,822	3,757	--	--	19,965	--	--	--	50	50
Utility	--	--	--	--	--	--	--	--	--	--
Total	23,822	3,757	--	--	19,965	--	--	--	50	50
Northern Interior										
Sound	892,301	187,729	3,409	188,424	--	363,872	55,486	72,319	15,230	5,832
Utility	51,817	26,580	--	9,703	--	8,602	754	5,231	935	12
Total	944,118	214,309	3,409	198,127	--	372,474	56,240	77,550	16,165	5,844
Sacramento										
Sound	911,228	144,422	--	313,069	--	306,206	60,866	43,784	42,821	60
Utility	14,281	3,795	--	1,733	--	3,908	3,000	1,170	675	--
Total	925,509	148,217	--	314,802	--	310,114	63,866	44,954	43,496	60
San Joaquin										
Sound[1/]	581,563	9,241	--	223,163	--	223,516	54,118	65,877	5,596	52
Utility	4,201	39	--	3,203	--	436	170	353	--	--
Total	585,764	9,280	--	226,366	--	223,952	54,288	66,230	5,596	52
Southern California										
Sound[1/]	--	--	--	--	--	--	--	--	--	--
All Areas										
Sound	3,879,541	854,426	16,781	762,006	844,024	948,409	174,078	186,485	85,735	7,597
Utility	155,925	69,236	550	21,550	38,388	13,255	3,984	6,754	2,196	12
Total	4,035,466	923,662	17,331	783,556	882,412	961,664	178,062	193,239	87,931	7,609

[1/] San Joaquin and Southern California combined to avoid disclosure.

Table 27—Log consumption by sawmills by species, resource area, and county, California, 1976

(Thousand board feet, local scale)

Resource area and county	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
North Coast										
Del Norte	143,526	49,139	3,786	12,205	76,021	--	--	--	2,375	--
Humboldt	920,718	358,773	6,741	20,449	511,136	15,772	780	3,055	3,712	300
Mendocino	395,320	98,266	3,395	9,203	225,674	38,192	2,888	1,165	16,537	--
Sonoma	96,689	41,921	--	2,404	49,616	1,160	--	285	--	1,303
Total	1,556,253	548,099	13,922	44,261	862,447	55,124	3,668	4,505	22,624	1,603
Central Coast										
Monterey and Santa Cruz[1/]	23,822	3,757	--	--	19,965	--	--	--	50	50
Northern Interior										
Lassen and Modoc[1/]	167,434	1,805	--	37,511	--	122,192	4,679	1,247	--	--
Shasta	320,708	50,714	3,409	77,146	--	104,737	23,481	44,571	11,155	5,495
Siskiyou	312,656	85,583	--	68,439	--	108,533	15,998	28,897	4,857	349
Trinity	143,320	76,207	--	15,031	--	37,012	12,082	2,835	153	--
Total	944,118	214,309	3,409	198,127	--	372,474	56,240	77,550	16,165	5,844
Sacramento										
Butte	88,453	9,432	--	52,265	--	15,293	--	9,063	2,400	--
El Dorado	117,905	7,217	--	37,035	--	50,037	19,800	3,735	81	--
Glenn and Tehama[1/]	208,417	46,027	--	35,287	--	87,025	10,483	1,920	27,675	--
Placer and Nevada[1/]	197,140	25,655	--	74,327	--	67,376	14,681	12,663	2,438	--
Plumas and Sierra[1/]	208,634	32,592	--	94,915	--	56,599	18,577	5,791	160	--
Yuba	104,960	27,294	--	20,973	--	33,784	325	11,782	10,742	60
Total	925,509	148,217	--	314,802	--	310,114	63,866	44,954	43,496	60
San Joaquin										
Calaveras and Amador[1/]	130,354	6,411	--	22,349	--	50,742	16,992	32,950	910	--
Fresno and Madera[1/]	180,639	454	--	83,686	--	52,530	28,115	11,118	4,684	52
Tulare and Kern[2/]	145,781	--	--	98,020	--	29,696	8,097	9,966	2	--
Tuolumne	128,990	2,415	--	22,311	--	90,984	1,084	12,196	--	--
Total	585,764	9,280	--	226,366	--	223,952	54,288	66,230	5,596	52
Southern California										
San Bernardino[2/]	--	--	--	--	--	--	--	--	--	--
All Areas	4,035,466	923,662	17,331	783,556	882,412	961,664	178,062	193,239	87,931	7,609

[1/] Combined to avoid disclosure.

[2/] Tulare, Kern, and San Bernardino combined to avoid disclosure.

Table 28—Production and disposition of wood and bark residues by sawmills by resource area and mill-size class, California, 1976

(Tons, dry weight)

Resource area and mill-size class[1]	All residues			Wood residue			Bark residue		
	Total	Used[2]	Unused	Total	Used[2]	Unused	Total	Used[2]	Unused
North Coast									
D and C[3]	139,466	103,241	36,225	106,655	96,029	10,626	32,811	7,212	25,599
B	351,577	252,124	99,453	271,226	224,063	47,163	80,351	28,061	52,290
A	2,104,203	1,609,519	494,684	1,636,460	1,410,434	226,026	467,743	199,085	268,658
Total	2,595,246	1,964,884	630,362	2,014,341	1,730,526	283,815	580,905	234,358	346,547
Central Coast									
D, C, and B[3]	37,401	37,167	234	28,818	28,818	--	8,583	8,349	234
Northern Interior									
D	12,709	2,544	10,165	9,579	2,525	7,054	3,130	19	3,111
C	23,318	2,693	20,625	17,507	2,693	14,814	5,811	--	5,811
B	270,668	208,887	61,781	210,018	170,823	39,195	60,650	38,064	22,586
A	1,087,551	974,822	112,729	845,179	769,531	75,648	242,372	205,291	37,081
Total	1,394,246	1,188,946	205,300	1,082,283	945,572	136,711	311,963	243,374	68,589
Sacramento									
D	11,940	8,555	3,385	9,251	6,044	3,207	2,689	2,511	178
C	130,123	88,433	41,690	101,845	83,076	18,769	28,278	5,357	22,921
B	581,087	502,552	78,535	448,847	391,953	56,894	132,240	110,599	21,641
A	1,013,864	951,835	62,029	792,809	757,702	35,107	221,055	194,133	26,922
Total	1,737,014	1,551,375	185,639	1,352,752	1,238,775	113,977	384,262	312,600	71,662
San Joaquin									
D	384	360	24	287	278	9	97	82	15
C[4]	74,837	74,837	--	56,780	56,780	--	18,057	18,057	--
B	250,506	206,787	43,719	188,392	162,230	26,162	62,114	44,557	17,557
A	459,790	392,310	67,480	353,017	292,712	60,305	106,773	99,598	7,175
Total	785,517	674,294	111,223	598,476	512,000	86,476	187,041	162,294	24,747
Southern California									
C[4]	--	--	--	--	--	--	--	--	--
All Areas									
D	25,033	11,459	13,574	19,117	8,847	10,270	5,916	2,612	3,304
C	367,744	269,204	98,540	282,787	238,578	44,209	84,957	30,626	54,331
B	1,491,239	1,207,517	283,722	1,147,301	977,887	169,414	343,938	229,630	114,308
A	4,665,408	3,928,486	736,922	3,627,465	3,230,379	397,086	1,037,943	698,107	339,836
Total	6,549,424	5,416,666	1,132,758	5,076,670	4,455,691	620,979	1,472,754	960,975	511,779

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Residues are not necessarily consumed in the economic area in which they were produced.

[3] Combined to avoid disclosure.

[4] San Joaquin and Southern California combined to avoid disclosure.

Table 29—Production and disposition of wood residues by sawmills

(Tons, dry

Resource area and mill-size class[1]	All types						
	Total	Total used[2]	Pulp	Board	Fuel	Other	Unused
North Coast							
D and C[4]	106,655	96,029	64,012	6,266	12,185	13,566	10,626
B	271,226	224,063	145,350	13,318	61,558	3,837	47,163
A	1,636,460	1,410,434	683,510	271,085	292,908	162,931	226,026
Total	2,014,341	1,730,526	892,872	290,669	366,651	180,334	283,815
Central Coast[4]							
D, C, and B	28,818	28,818	--	--	158	28,660	--
Northern Interior							
D	9,579	2,525	--	2,459	66	--	7,054
C	17,507	2,693	1,364	1,329	--	--	14,814
B	210,018	170,823	73,925	18,349	78,388	161	39,195
A	845,179	769,531	398,293	12,094	359,144	--	75,648
Total	1,082,283	945,572	473,582	34,231	437,598	161	136,711
Sacramento							
D	9,251	6,044	5,274	--	73	697	3,207
C	101,845	83,076	41,461	4,241	24,585	12,789	18,769
B	448,847	391,953	172,429	5,622	177,673	36,229	56,894
A	792,809	757,702	355,873	137,640	238,164	26,025	35,107
Total	1,352,752	1,238,775	575,037	147,503	440,495	75,740	113,977
San Joaquin							
D	287	278	--	--	197	81	9
C[5]	56,780	56,780	18,635	20,961	3,739	13,445	--
B	188,392	162,230	86,314	35,864	23,807	16,245	26,162
A	353,017	292,712	154,988	60,810	48,202	28,712	60,305
Total	598,476	512,000	259,937	117,635	75,945	58,483	86,476
Southern California							
C[5]	--	--	--	--	--	--	--
All Areas							
D	19,117	8,847	5,274	2,459	336	778	10,270
C	282,787	238,578	125,472	32,797	40,509	39,800	44,209
B	1,147,301	977,887	478,018	73,153	341,584	85,132	169,414
A	3,627,465	3,230,379	1,592,664	481,629	938,418	217,668	397,086
Total	5,076,670	4,455,691	2,201,428	590,038	1,320,847	343,378	620,979

See footnotes at end of table.

by type of residue, resource area, and mill-size class, California, 1976

weight)

Coarse[3]						
Total	Total used[2]	Pulp	Board	Fuel	Other	Unused
67,397	64,370	49,692	4,393	6,266	4,019	3,027
171,729	158,672	145,350	--	13,322	--	13,057
1,029,150	955,054	668,623	125,425	49,987	111,019	74,096
1,268,276	1,178,096	863,665	129,818	69,575	115,038	90,180
19,684	19,684	--	--	121	19,563	--
5,726	2,339	--	2,304	35	--	3,387
10,819	1,364	1,364	--	--	--	9,455
121,230	109,844	73,372	--	36,472	--	11,386
467,645	434,618	390,617	--	44,001	--	33,027
605,420	548,165	465,353	2,304	80,508	--	57,255
5,915	5,864	5,274	--	72	518	51
54,339	50,136	41,461	--	--	8,675	4,203
254,399	242,736	172,429	--	51,180	19,127	11,663
427,174	427,174	355,873	40,722	8,825	21,754	--
741,827	725,910	575,037	40,722	60,077	50,074	15,917
204	197	--	--	197	--	7
33,556	33,556	18,635	9,361	--	5,560	--
114,886	99,282	86,314	12,968	--	--	15,604
208,791	190,255	154,988	22,184	12,475	608	18,536
357,437	323,290	259,937	44,513	12,672	6,168	34,147
--	--	--	--	--	--	--
11,845	8,400	5,274	2,304	304	518	3,445
166,111	149,426	111,152	13,754	6,266	18,254	16,685
681,928	630,218	477,465	12,968	101,095	38,690	51,710
2,132,760	2,007,101	1,570,101	188,331	115,288	133,381	125,659
2,992,644	2,795,145	2,163,992	217,357	222,953	190,843	197,499

Table 29—Production and disposition of wood residues by sawmills

(Tons, dry

Resource area and mill-size class[1]	Shavings						
	Total	Total used[2]	Pulp	Board	Fuel	Other	Unused
North Coast							
D and C[4]	10,005	8,828	2,102	515	2,231	3,980	1,177
B	30,342	26,350	--	13,318	11,085	1,947	3,992
A	202,076	184,083	--	105,861	59,300	18,922	17,993
Total	242,423	219,261	2,102	119,694	72,616	24,849	23,162
Central Coast							
D, C, and B[4]	2,408	2,408	--	--	--	2,408	--
Northern Interior							
D	789	168	--	155	13	--	621
C	1,110	1,110	--	1,110	--	--	--
B	32,294	26,457	553	18,349	7,555	--	5,837
A	143,076	140,234	7,676	12,094	120,464	--	2,842
Total	177,269	167,969	8,229	31,708	128,032	--	9,300
Sacramento							
D	1,111	31	--	--	1	30	1,080
C	20,179	19,959	--	4,241	12,795	2,923	220
B	65,947	64,906	--	5,622	44,209	15,075	1,041
A	150,584	147,694	--	96,918	46,505	4,271	2,890
Total	237,821	232,590	--	106,781	103,510	22,299	5,231
San Joaquin							
D	1	1	--	--	--	1	--
C[5]	5,689	5,689	--	3,679	--	2,010	--
B	18,383	18,383	--	9,643	6,374	2,366	--
A	43,813	42,884	--	24,676	--	18,208	929
Total	67,886	66,957	--	37,998	6,374	22,585	929
Southern California							
C[5]	--	--	--	--	--	--	--
All Areas							
D	1,901	200	--	155	14	31	1,701
C	36,983	35,586	2,102	9,545	15,026	8,913	1,397
B	149,374	138,504	553	46,932	69,223	21,796	10,870
A	539,549	514,895	7,676	239,549	226,269	41,401	24,654
Total	727,807	689,185	10,331	296,181	310,532	72,141	38,622

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Not necessarily used in the economic area in which produced.

[3] Slabs, edgings, trim, and spur ends.

[4] Combined to avoid disclosure.

[5] San Joaquin and Southern California combined to avoid disclosure.

by type of residue, resource area, and mill-size class, California, 1976 --Continued

weight)

Sawdust						
Total	Total used[2/]	Pulp	Board	Fuel	Other	Unused
29,253	22,831	12,218	1,358	3,688	5,567	6,422
69,155	39,041	--	--	37,151	1,890	30,114
405,234	271,297	14,887	39,779	183,621	32,990	133,937
503,642	333,169	27,105	41,157	224,460	40,447	170,473
6,726	6,726	--	--	37	6,689	--
3,064	18	--	--	18	--	3,046
5,578	219	--	219	--	--	5,359
56,494	34,522	--	--	34,351	161	21,972
234,458	194,679	--	--	194,679	--	39,779
299,594	229,438	--	219	229,058	161	70,156
2,225	149	--	--	--	149	2,076
27,327	12,981	--	--	11,790	1,191	14,346
128,501	84,311	--	--	82,284	2,027	44,190
215,051	182,834	--	--	182,834	--	32,217
373,104	280,275	--	--	276,908	3,367	92,829
82	80	--	--	--	80	2
17,535	17,535	--	7,921	3,739	5,875	--
55,123	44,565	--	13,253	17,433	13,879	10,558
100,413	59,573	--	13,950	35,727	9,896	40,840
173,153	121,753	--	35,124	56,899	29,730	51,400
--	--	--	--	--	--	--
5,371	247	--	--	18	229	5,124
79,693	53,566	12,218	9,498	19,217	12,633	26,127
315,999	209,165	--	13,253	171,266	24,646	106,834
955,156	708,383	14,887	53,749	596,861	42,886	246,773
1,356,219	971,361	27,105	76,500	787,362	80,394	384,858

Table 30—Production and disposition of bark residues by sawmills by use, resource area, and mill-size class, California, 1976

(Tons, dry weight)

Resource area and mill-size class[1]	All bark	Used[2]					Unused
		Total	Pulp	Board	Fuel	Miscellaneous	
North Coast							
D and C[3]	32,811	7,212	--	--	2,306	4,906	25,599
B	80,351	28,061	--	--	24,590	3,471	52,290
A	467,743	199,085	--	--	185,930	13,155	268,658
Total	580,905	234,358	--	--	212,826	21,532	346,547
Central Coast							
D, C, and B[3]	8,583	8,349	--	--	44	8,305	234
Northern Interior							
D	3,130	19	--	--	19	--	3,111
C	5,811	--	--	--	--	--	5,811
B	60,650	38,064	--	--	37,898	166	22,586
A	242,372	205,291	--	--	144,400	60,891	37,081
Total	311,963	243,374	--	--	182,317	61,057	68,589
Sacramento							
D	2,689	2,511	--	--	--	2,511	178
C	28,278	5,357	--	--	1,368	3,989	22,921
B	132,240	110,599	--	--	33,045	77,554	21,641
A	221,055	194,133	--	--	33,216	160,917	26,922
Total	384,262	312,600	--	--	67,629	244,971	71,662
San Joaquin							
D	97	82	--	--	82	--	15
C[4]	18,057	18,057	--	--	6,070	11,987	--
B	62,114	44,557	--	--	--	44,557	17,557
A	106,773	99,598	--	--	33,555	66,043	7,175
Total	187,041	162,294	--	--	39,707	122,587	24,747
Southern California							
C[4]	--	--	--	--	--	--	--
All Areas							
D	5,916	2,612	--	--	101	2,511	3,304
C	84,957	30,626	--	--	9,744	20,882	54,331
B	343,938	229,630	--	--	95,577	134,053	114,308
A	103,943	698,107	--	--	397,101	301,006	339,836
Total	1,472,754	960,975	--	--	502,523	458,452	511,779

[1] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2] Not necessarily used in the resource area in which produced.

[3] Combined to avoid disclosure.

[4] San Joaquin and Southern California combined to avoid disclosure.

56 %

Table 31—Production and disposition of wood and bark residues by sawmills by resource area and county, California, 1976

(Tons, dry weight)

Resource area and county	All residues			Wood residue			Bark residue		
	Total	Used[1]	Unused	Total	Used[1]	Unused	Total	Used[1]	Unused
North Coast									
Del Norte	197,643	141,712	55,931	151,277	133,905	17,372	46,366	7,807	38,559
Humboldt	1,511,918	1,188,659	323,259	1,167,669	1,015,648	152,021	344,249	173,011	171,238
Mendocino	705,124	484,264	220,860	554,777	447,900	106,877	150,347	36,364	113,983
Sonoma	180,561	150,249	30,312	140,618	133,073	7,545	39,943	17,176	22,767
Total	2,595,246	1,964,884	630,362	2,014,341	1,730,526	283,815	580,905	234,358	346,547
Central Coast									
Monterey and Santa Cruz[2]	37,401	37,167	234	28,818	28,818	--	8,583	8,349	234
Northern Interior									
Lassen and Modoc[1]	245,099	204,115	40,984	191,377	160,416	30,961	53,722	43,699	10,023
Shasta	478,662	382,484	96,178	371,893	299,320	72,573	106,769	83,164	23,605
Siskiyou	440,783	432,329	8,454	341,490	335,601	5,889	99,293	96,728	2,565
Trinity	229,702	170,018	59,684	177,523	150,235	27,288	52,179	19,783	32,396
Total	1,394,246	1,188,946	205,300	1,082,283	945,572	136,711	311,963	243,374	68,589
Sacramento									
Butte	155,595	129,777	25,818	120,686	94,868	25,818	34,909	34,909	--
El Dorado	560,643	549,935	10,708	440,258	440,112	146	120,385	109,823	10,562
Glenn and Tehama[2]	287,546	270,482	17,064	224,373	216,561	7,812	63,173	53,921	9,252
Placer and Nevada[2]	265,665	220,829	44,836	204,778	169,199	35,579	60,887	51,630	9,257
Plumas and Sierra[2]	305,946	265,203	40,743	236,784	214,464	22,320	69,162	50,739	18,423
Yuba	161,619	115,149	46,470	125,873	103,571	22,302	35,746	11,578	24,168
Total	1,737,014	1,551,375	185,639	1,352,752	1,238,775	113,977	384,262	312,600	71,662
San Joaquin									
Calaveras and Amador[2]	173,862	135,995	37,867	133,093	101,076	32,017	40,769	34,919	5,850
Fresno and Madera[2]	216,925	173,206	43,719	161,735	135,573	26,162	55,190	37,633	17,557
Tulare and Kern[3]	223,144	193,507	29,637	174,039	145,742	28,297	49,105	47,765	1,340
Tuolumne	171,586	171,586	--	129,609	129,609	--	41,977	41,977	--
Total	785,517	674,294	111,223	598,476	512,000	86,476	187,041	162,294	24,747
Southern California									
San Bernardino[3]	--	--	--	--	--	--	--	--	--
All Areas	6,549,424	5,416,666	1,132,758	5,076,670	4,455,691	620,979	1,472,754	960,975	511,779

[1] Not necessarily used in the economic area in which produced.

[2] Combined to avoid disclosure.

[3] Tulare, Kern, and San Bernardino combined to avoid disclosure.

Table 32—Production and disposition of wood residues by sawmills

(Tons, dry

Resource area and county	All types						
	Total	Total used[1/]	Pulp	Board	Fuel	Other	Unused
North Coast							
Del Norte	151,277	133,905	106,595	8,103	17,317	1,890	17,372
Humboldt	1,167,669	1,015,648	618,211	83,278	266,340	47,819	152,021
Mendocino	554,777	447,900	161,926	117,513	78,194	90,267	106,877
Sonoma	140,618	133,073	6,140	81,775	4,800	40,358	7,545
Total	2,014,341	1,730,526	892,872	290,669	366,651	180,334	283,815
Central Coast							
Monterey and Santa Cruz[3/]	28,818	28,818	--	--	158	28,660	--
Northern Interior							
Lassen and Modoc[3/]	191,377	160,416	70,040	13,779	76,597	--	30,961
Shasta	371,893	299,320	124,965	15,926	158,429	--	72,573
Siskiyou	341,490	335,601	182,655	4,526	148,259	161	5,889
Trinity	177,523	150,235	95,922	--	54,313	--	27,288
Total	1,082,283	945,572	473,582	34,231	437,598	161	136,711
Sacramento							
Butte	120,686	94,868	65,610	--	28,922	336	25,818
El Dorado	440,258	440,112	222,331	84,126	121,803	11,852	146
Glenn and Tehama[3/]	224,373	216,561	116,356	12,792	87,413	--	7,812
Placer and Nevada[3/]	204,778	169,199	76,606	--	44,186	48,407	35,579
Plumas and Sierra[3/]	236,784	214,464	29,425	50,585	120,607	13,847	22,320
Yuba	125,873	103,571	64,709	--	37,564	1,298	22,302
Total	1,352,752	1,238,775	575,037	147,503	440,495	75,740	113,977
San Joaquin							
Calaveras and Amador[3/]	133,093	101,076	64,379	22,614	8,127	5,956	32,017
Fresno and Madera[3/]	161,735	135,573	67,294	43,393	8,805	16,081	26,162
Tulare and Kern[4/]	174,039	145,742	61,448	43,408	15,199	25,687	28,297
Tuolumne	129,609	129,609	66,816	8,220	43,814	10,759	--
Total	598,476	512,000	259,937	117,635	75,945	58,483	86,476
Southern California							
San Bernardino[4/]	--	--	--	--	--	--	--
All Areas	5,076,670	4,455,691	2,201,428	590,038	1,320,847	343,378	620,979

See footnotes at end of table.

by type of residue, use, resource area, and county, California, 1976

weight)

Shavings						
Total	Total used[2/]	Pulp	Board	Fuel	Other	Unused
11,664	11,664	558	6,745	4,361	--	--
135,663	121,082	1,544	68,894	47,151	3,493	14,581
74,598	67,532	--	37,638	21,104	8,790	7,066
20,498	18,983	--	6,417	--	12,566	1,515
242,423	219,261	2,102	119,694	72,616	24,849	23,162
2,408	2,408	--	--	--	2,408	--
36,073	32,236	--	13,560	18,676	--	3,837
59,790	59,169	--	13,622	45,547	--	621
53,474	53,474	7,518	4,526	41,430	--	--
27,932	23,090	711	--	22,379	--	4,842
177,269	167,969	8,229	31,708	128,032	--	9,300
19,632	19,632	--	--	19,602	30	--
89,467	89,467	--	84,126	2,418	2,923	--
40,370	40,370	--	12,792	27,578	--	--
27,571	23,601	--	--	18,102	5,499	3,970
38,362	38,362	--	9,863	14,652	13,847	--
22,419	21,158	--	--	21,158	--	1,261
237,821	232,590	--	106,781	103,510	22,299	5,231
13,605	13,605	--	13,605	--	--	--
11,943	11,943	--	5,075	--	6,868	--
32,064	31,135	--	11,098	6,374	13,663	929
10,274	10,274	--	8,220	--	2,054	--
67,886	66,957	--	37,998	6,374	22,585	929
--	--	--	--	--	--	--
727,807	689,185	10,331	296,181	310,532	72,141	38,622

Table 32—Production and disposition of wood residues by sawmills

(Tons, dry

Resource area and county	Sawdust						
	Total	Total used[2/]	Pulp	Board	Fuel	Other	Unused
North Coast							
Del Norte	38,875	24,530	9,792	1,358	11,490	1,890	14,345
Humboldt	295,215	195,241	17,313	4,967	172,961	--	99,974
Mendocino	135,391	82,603	--	27,810	40,009	14,784	52,788
Sonoma	34,161	30,795	--	7,022	--	23,773	3,366
Total	503,642	333,169	27,105	41,157	224,460	40,447	170,473
Central Coast							
Monterey and Santa Cruz[3/]	6,726	6,726	--	--	37	6,689	--
Northern Interior							
Lassen and Modoc[3/]	52,506	42,998	--	219	42,779	--	9,508
Shasta	101,632	65,932	--	--	65,932	--	35,700
Siskiyou	94,597	92,095	--	--	91,934	161	2,502
Trinity	50,859	28,413	--	--	28,413	--	22,446
Total	299,594	229,438	--	219	229,058	161	70,156
Sacramento							
Butte	33,454	7,636	--	--	7,543	93	25,818
El Dorado	116,500	116,354	--	--	116,354	--	146
Glenn and Tehama[3/]	61,843	54,031	--	--	54,031	--	7,812
Placer and Nevada[3/]	59,720	28,111	--	--	26,084	2,027	31,609
Plumas and Sierra[3/]	67,539	61,085	--	--	61,085	--	6,454
Yuba	34,048	13,058	--	--	11,811	1,247	20,990
Total	373,104	280,275	--	--	276,908	3,367	92,829
San Joaquin							
Calaveras and Amador[3/]	37,091	14,083	--	--	8,127	5,956	23,008
Fresno and Madera[3/]	48,252	37,694	--	19,809	8,672	9,213	10,558
Tulare and Kern[4/]	47,766	29,932	--	15,315	8,761	5,856	17,834
Tuolumne	40,044	40,044	--	--	31,339	8,705	--
Total	173,153	121,753	--	35,124	56,899	29,730	51,400
Southern California							
San Bernardino[4/]	--	--	--	--	--	--	--
All Areas	1,356,219	971,361	27,105	76,500	787,362	80,394	384,858

[1/] Not necessarily used in the resource area in which produced.

[2/] Slabs, edging, trim, and spur ends.

[3/] Combined to avoid disclosure.

[4/] Tulare, Kern, and San Bernardino combined to avoid disclosure.

by type of residue, use, resource area, and county, California, 1976 –Continued

weight)

Coarse[2]/						
Total	Total used[1]/	Pulp	Board	Fuel	Other	Unused
100,738	97,711	96,245	--	1,466	--	3,027
736,791	699,325	599,354	9,417	46,228	44,326	37,466
344,788	297,765	161,926	52,065	17,081	66,693	47,023
85,959	83,295	6,140	68,336	4,800	4,019	2,664
1,268,276	1,178,096	863,665	129,818	69,575	115,038	90,180
19,684	19,684	--	--	121	19,563	--
102,798	85,182	70,040	--	15,142	--	17,616
210,471	174,219	124,965	2,304	46,950	--	36,252
193,419	190,032	175,137	--	14,895	--	3,387
98,732	98,732	95,211	--	3,521	--	--
605,420	548,165	465,353	2,304	80,508	--	57,255
67,600	67,600	65,610	--	1,777	213	--
234,291	234,291	222,331	--	3,031	8,929	--
122,160	122,160	116,356	--	5,804	--	--
117,487	117,487	76,606	--	--	40,881	--
130,883	115,017	29,425	40,722	44,870	--	15,866
69,406	69,355	64,709	--	4,595	51	51
741,827	725,910	575,037	40,722	60,077	50,074	15,917
82,397	73,388	64,379	9,009	--	--	9,009
101,540	85,936	67,294	18,509	133	--	15,604
94,209	84,675	61,448	16,995	64	6,168	9,534
79,291	79,291	66,816	--	12,475	--	--
357,437	323,290	259,937	44,513	12,672	6,168	34,147
--	--	--	--	--	--	--
2,992,644	2,795,145	2,163,992	217,357	222,953	190,843	197,499

Table 33—Production and disposition of bark residues by sawmills by use, resource area, and county, California, 1976

(Tons, dry weight)

Resource area and county	All bark	Used[1]					Unused
		Total	Pulp	Board	Fuel	Miscellaneous	
North Coast							
Del Norte	46,366	7,807	--	--	7,807	--	38,559
Humboldt	344,249	173,011	--	--	173,011	--	171,238
Mendocino	150,347	36,364	--	--	32,008	4,356	113,983
Sonoma	39,943	17,176	--	--	--	17,176	22,767
Total	580,905	234,358	--	--	212,826	21,532	346,547
Central Coast							
Monterey and Santa Cruz[2]	8,583	8,349	--	--	44	8,305	234
Northern Interior							
Lassen and Modoc[2]	53,722	43,699	--	--	17,479	26,220	10,023
Shasta	106,769	83,164	--	--	73,862	9,302	23,605
Siskiyou	99,293	96,728	--	--	90,976	5,752	2,565
Trinity	52,179	19,783	--	--	--	19,783	32,396
Total	311,963	243,374	--	--	182,317	61,057	68,589
Sacramento							
Butte	34,909	34,909	--	--	8,417	26,492	--
El Dorado	120,385	109,823	--	--	5,394	104,429	10,562
Glenn and Tehama[2]	63,173	53,921	--	--	5,871	48,050	9,252
Placer and Nevada[2]	60,887	51,630	--	--	14,841	36,789	9,257
Plumas and Sierra[2]	69,162	50,739	--	--	21,556	29,183	18,423
Yuba	35,746	11,578	--	--	11,550	28	24,168
Total	384,262	312,600	--	--	67,629	244,971	71,662
San Joaquin							
Calaveras and Amador[2]	40,769	34,919	--	--	9,814	25,105	5,850
Fresno and Madera[2]	55,190	37,633	--	--	67	37,566	17,557
Tulare and Kern[3]	49,105	47,765	--	--	2,121	45,644	1,340
Tuolumne	41,977	41,977	--	--	27,705	14,272	--
Total	187,041	162,294	--	--	39,707	122,587	24,747
Southern California							
San Bernardino[3]	--	--	--	--	--	--	--
All Areas	1,472,754	960,975	--	--	502,523	458,452	511,779

[1] Not necessarily used in the resource area in which produced.

[2] Combined to avoid disclosure.

[3] Tulare, Kern, and San Bernardino combined to avoid disclosure.

Table 34—Lumber production by sawmills by degree of manufacture, resource area, and mill-size class, California, 1976

(Thousand board feet, lumber tally)

Resource area and mill-size class[1/]	Green	Kiln-dried	Air-dried	Total	Rough	Surfaced
North Coast						
D and C[2/]	88,204	11,415	13,260	112,879	64,090	48,789
B	227,874	30,894	16,146	274,914	111,434	163,480
A	1,326,431	266,341	36,713	1,629,485	502,489	1,126,996
Total	1,642,509	308,650	66,119	2,017,278	678,013	1,339,265
Central Coast[2/]						
D, C, and B[2/]	27,951	--	879	28,830	13,920	14,910
Northern Interior						
D	10,918	--	65	10,983	7,096	3,887
C	13,700	--	6,602	20,302	14,631	5,671
B	71,961	128,393	10,241	210,595	48,951	161,644
A	210,985	580,967	57,638	849,590	140,435	709,155
Total	307,564	709,360	74,546	1,091,470	211,113	880,357
Sacramento						
D	2,525	6,400	195	9,120	2,530	6,590
C	23,571	73,756	1,621	98,948	17,165	81,783
B	167,540	276,331	24,150	468,021	137,290	330,731
A	58,055	410,463	7,738	476,256	77,236	399,020
Total	251,691	766,950	33,704	1,052,345	234,221	818,124
San Joaquin						
D[3/]	230	--	100	330	320	10
C[3/]	17,293	35,605	10,350	63,248	35,140	28,108
B	132,133	80,654	4,943	217,730	127,174	90,556
A	103,166	237,739	30,585	371,490	153,278	218,212
Total	252,822	353,998	45,978	652,798	315,912	336,886
Southern California						
C[3/]	--	--	--	--	--	--
All Areas						
D	13,673	6,400	360	20,433	9,946	10,487
C	142,768	120,776	31,833	295,377	131,026	164,351
B	627,459	516,272	56,359	1,200,090	438,769	761,321
A	1,698,637	1,495,510	132,674	3,326,821	873,438	2,453,383
Total	2,482,537	2,138,958	221,226	4,842,721	1,453,179	3,389,542

[1/] Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

[2/] Combined to avoid disclosure.

[3/] San Joaquin and Southern California combined to avoid disclosure.

Table 35--Number of veneer and plywood mills by type of mill, resource area, and county, California, 1976

Resource area and county	All types	Veneer only	Layup only	Veneer and layup
North Coast				
Del Norte	3	3	--	--
Humboldt	7	3	--	4
Mendocino	1	--	--	1
Total	11	6	--	5
Northern Interior				
Shasta	2	1	--	1
Siskiyou	3	3	--	--
Total	5	4	--	1
Sacramento				
El Dorado	1	1	--	--
Nevada	1	1	--	--
Tehama	1	--	--	1
Total	3	2	--	1
San Joaquin				
Amador	1	--	--	1
Tuolumne	1	--	--	1
Total	2	--	--	2
All Areas	21	12	--	9

Table 36--Installed 8-hour capacity of veneer and plywood mills by type of mill, resource area, and county, California, 1976

(Thousand square feet, 3/8-inch basis)

Resource area and county	Veneer only	Veneer and layup	
		Veneer	Layup
North Coast			
Del Norte	825	--	--
Humboldt	415	935	715
Mendocino	--	120	142
Total	1,240	1,055	857
Northern Interior			
Shasta	170	150	80
Siskiyou	550	--	--
Total	720	150	80
Sacramento			
El Dorado	50	--	--
Nevada	30	--	--
Tehama	--	130	130
Total	80	130	130
San Joaquin			
Amador	--	200	150
Tuolumne	--	150	100
Total	--	350	250
All Areas	2,040	1,685	1,317

Table 37--Number of veneer and plywood mills by diameter limit of lathe and resource area, California, 1976

Resource area	Lathe log diameter limit							
	Layup only	20-29	30-39	40-49	50-59	60-69	70-79	80+
North Coast	--	--	--	--	--	3	2	6
Northern Interior	--	--	--	1	1	1	1	1
Sacramento	--	1	--	1	--	1	--	--
San Joaquin	--	--	--	--	--	1	--	1
All Areas	--	1	--	2	1	6	3	8

Table 38--Number of veneer and plywood mills by size of core produced and resource area, California, 1976

Resource area	Diameter of cores (inches)							
	3	4	5	6	7	8	9	10+
North Coast	--	1	1	1	3	--	2	3
Northern Interior	--	--	1	1	1	0	1	1
Sacramento	--	1	--	2	--	--	--	--
San Joaquin	--	--	--	1	1	--	--	--
All Areas	--	2	2	5	5	--	3	4

Table 39--Number of veneer and plywood mills having selected equipment, by resource area and county, California, 1976

Resource area and county	4-foot lathe	8-foot lathe	Slicer	Veneer chipper	Core chipper	Cold press	Hot press	Burner
North Coast								
Del Norte	1	3	--	2	2	--	--	2
Humboldt	1	7	2	7	4	1	4	3
Mendocino	--	1	--	1	--	--	1	--
Total	2	11	2	10	6	1	5	5
Northern Interior								
Shasta	1	2	--	2	1	--	1	--
Siskiyou	1	3	--	3	2	--	--	1
Total	2	5	--	5	3	--	1	1
Sacramento								
El Dorado	1	--	--	--	--	--	--	--
Nevada	1	--	1	--	1	--	--	--
Tehama	--	1	--	1	1	--	1	--
Total	2	1	1	1	2	--	1	--
San Joaquin								
Amador	--	1	--	1	1	--	1	1
Tuolumne	--	1	--	--	1	--	1	--
Total	--	2	--	1	2	--	2	1
All Areas	6	19	3	17	13	1	9	7

Table 40--Number of veneer and plywood mills by years of tenure of present mill ownership, resource area, and years at site, California, 1976

Resource area and years at site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
North Coast						
6-10	3	--	1	2	--	--
11-20	3	--	2	--	1	--
21+	5	2	1	1	1	--
Total	11	2	4	3	2	--
Northern Interior						
6-10	1	--	--	1	--	--
11-20	1	--	--	1	--	--
21+	3	--	1	--	--	2
Total	5	--	1	2	--	2
Sacramento						
6-10	1	1	--	--	--	--
11-20	1	--	--	--	1	--
21+	1	--	--	--	1	--
Total	3	1	--	--	2	--
San Joaquin						
11-20	2	--	--	1	1	--
All Areas						
6-10	5	1	1	3	--	--
11-20	7	--	2	2	3	--
21+	9	2	2	1	2	2
Total	21	3	5	6	5	2

Table 41--Average number of operating days of veneer and plywood mills by type of of mill and resource area, California, 1976

Resource area	Veneer only	Veneer and layup
North Coast	197	264
Northern Interior	246	240
Sacramento	105	260
San Joaquin	--	229
All Areas	198	253

Table 42--Log consumption by veneer and plywood mills by type of material and resource area, California, 1976

(Thousand board feet, local scale)

Resource area	Total roundwood	Sound logs	Utility logs
North Coast	293,919	260,653	33,266
Northern Interior	149,861	139,326	10,535
Sacramento and San Joaquin[1/]	94,896	94,896	--
All Areas	538,676	494,875	43,801

[1/] Combined to avoid disclosure.

Table 43--Log consumption by veneer and plywood mills by timber age group and resource area, California, 1976

(Thousand board feet, local scale)

Resource area	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
North Coast	293,919	243,015	50,904
Northern Interior	149,861	112,315	37,546
Sacramento and San Joaquin[1/]	94,896	58,841	36,055
All Areas	538,676	414,171	124,505

[1/] Combined to avoid disclosure.

Table 44--Log inventory changes, log consumption, and apparent log receipts by veneer and plywood mills by resource area, California, 1976

(Thousand board feet, local scale)

Resource area	Log inventory			1976 log consumption	Apparent 1976 log receipts
	January 1, 1976	December 31, 1976	Net change		
North Coast	40,900	44,383	3,483	293,919	297,402
Northern Interior	28,636	41,166	12,530	149,861	162,391
Sacramento and San Joaquin[1/]	42,970	64,641	21,671	94,896	116,567
All Areas	112,506	150,190	37,684	538,676	576,360

[1/] Combined to avoid disclosure.

Table 45—Log consumption by veneer and plywood mills by ownership class and resource area, California, 1976

(Thousand board feet, local scale)

Resource area	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
North Coast	293,919	2,334	37,096	--	13,692	157,616	58,150	25,031
Northern Interior	149,861	--	60,519	--	--	19,203	51,931	18,031
Sacramento and San Joaquin[1/]	94,896	--	55,254	--	--	35,253	--	4,389
All Areas	538,676	2,334	152,869	--	13,692	212,072	101,081	47,628

[1/] Combined to avoid disclosure.

Table 46—Dependency of veneer and plywood mills for logs

(Number

Resource area	National Forest				State				Bureau of Land Management			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
North Coast	6	3	1	1	9	2	--	--	11	--	--	--
Northern Interior	--	3	1	1	5	--	--	--	5	--	--	--
Sacramento	1	--	2	--	3	--	--	--	3	--	--	--
San Joaquin	--	--	1	1	2	--	--	--	2	--	--	--
All Areas	7	6	5	3	19	2	--	--	21	--	--	--

by ownership origin and resource area, California, 1976

of mills)

Other public				Forest industry								Farmer and miscellaneous private			
				Own wood supply				Other wood supply							
Dependency (percent)															
0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
9	1	--	1	4	1	1	5	9	--	1	1	5	5	--	1
5	--	--	--	3	1	1	--	2	1	2	--	2	1	2	--
3	--	--	--	--	--	2	1	3	--	--	--	2	1	--	--
2	--	--	--	--	1	1	--	2	--	--	--	1	1	--	--
19	1	--	1	7	3	5	6	16	1	3	1	10	8	2	1

Table 47—Log consumption by veneer and plywood mills by species, resource area, and type of material, California, 1976

(Thousand board feet, local scale)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
North Coast										
Sound	260,653	209,201	6,354	6,775	32,281	2,617	--	--	3,225	200
Utility	33,266	32,322	404	--	490	--	--	--	50	--
Total	293,919	241,523	6,758	6,775	32,771	2,617	--	--	3,275	200
Northern Interior										
Sound	139,326	51,761	--	55,417	--	24,493	4,500	--	3,155	--
Utility	10,535	4,918	--	1,574	--	2,207	875	--	961	--
Total	149,861	56,679	--	56,991	--	26,700	5,375	--	4,116	--
Sacramento and San Joaquin[1/]										
Sound	94,896	7,734	--	78,872	--	8,290	--	--	--	--
Utility	--	--	--	--	--	--	--	--	--	--
Total	94,896	7,734	--	78,872	--	8,290	--	--	--	--
All Areas										
Sound	494,875	268,696	6,354	141,064	32,281	35,400	4,500	--	6,380	200
Utility	43,801	37,240	404	1,574	490	2,207	875	--	1,011	--
Total	538,676	305,936	6,758	142,638	32,771	37,607	5,375	--	7,391	200

[1/] Combined to avoid disclosure.

Table 48—Production and disposition of wood and bark residues by veneer and plywood mills, by resource area, California, 1976

(Tons, dry weight)

Resource area	All residues			Wood residue			Bark residue		
	Total	Used[1/]	Unused	Total	Used[1/]	Unused	Total	Used[1/]	Unused
North Coast	421,110	371,059	50,051	325,858	321,349	4,509	95,252	49,710	45,542
Northern Interior	189,228	173,391	15,837	138,343	135,268	3,075	50,885	38,123	12,762
Sacramento and San Joaquin[2/]	135,311	122,982	12,329	105,667	94,526	11,141	29,644	28,456	1,188
All Areas	745,649	667,432	78,217	569,868	551,143	18,725	175,781	116,289	59,492

[1/] Not necessarily used in the resource area in which produced.

[2/] Combined to avoid disclosure.

Table 49—Production and disposition of wood residue by veneer and plywood mills by type of residue, use, and resource area, California, 1976

(Tons, dry weight)

Resource area	All types						Fine[3]		
	Total	Total used[1]	Pulp and board	Fuel	Miscellaneous	Unused	Total	Total used[1]	Pulp and board
North Coast	325,858	321,349	179,202	104,573	37,574	4,509	9,339	8,689	--
Northern Interior	138,343	135,268	99,337	11,528	24,403	3,075	1,174	1,174	--
Sacramento and San Joaquin[4]	105,667	94,526	80,332	4,627	9,567	11,141	4,400	4,400	1,473
All Areas	569,868	551,143	358,871	120,728	71,544	18,725	14,913	14,263	1,473

Resource area	Fine[3]			Coarse and medium[2]					
	Fuel	Miscellaneous	Unused	Total	Total used[1]	Pulp and board	Fuel	Miscellaneous	Unused
North Coast	8,689	--	650	316,519	312,660	179,202	95,884	37,574	3,859
Northern Interior	--	1,174	--	137,169	134,094	99,337	11,528	23,229	3,075
Sacramento and San Joaquin[4]	2,927	--	--	101,267	90,126	78,859	1,700	9,567	11,141
All Areas	11,616	1,174	650	554,955	536,880	357,398	109,112	70,370	18,075

[1] Not necessarily used in the resource area in which produced.

[2] Includes log trim, cores, veneer clippings, rejected veneer, roundup, and spur trim.

[3] Includes sawdust and sander dust.

[4] Combined to avoid disclosure.

Table 50--Production and disposition of bark residues by veneer and plywood mills by use and resource area, California, 1976

(Tons, dry weight)

Resource area	All bark	Used[1/]				Unused
		Total	Pulp and board	Fuel	Other	
North Coast	95,252	49,710	--	49,710	--	45,542
Northern Interior	50,885	38,123	--	28,630	9,493	12,762
Sacramento and San Joaquin[2/]	29,644	28,456	--	8,667	19,789	1,188
All Areas	175,781	116,289	--	87,007	29,282	59,492

[1/] Not necessarily used in the resource area in which produced.

[2/] Combined to avoid disclosure.

Table 51--Number of pulpmills and board mills by type of operation, resource area, and county, California, 1976

Resource area and county	All mills	Type of pulpmill				Type of board mill	
		Sulfite	Sulfate	Groundwood[1/]	Semichemical	Hardboard	Particleboard
North Coast							
Del Norte	1	--	--	--	--	--	1
Humboldt	3	--	2	--	--	--	1
Mendocino	2	--	--	--	--	1	1
Total	6	--	2	--	--	1	3
Central Coast							
Contra Costa	3	--	1	2	--	--	--
Northern Interior							
Shasta	1	--	1	--	--	--	--
Sacramento							
Butte	1	--	--	--	--	1	--
Placer	1	--	--	--	--	--	1
Plumas	1	--	--	--	--	--	1
Tehama	1	--	--	1	--	--	--
Total	4	--	--	1	--	1	2
San Joaquin							
Amador	1	--	--	--	--	--	1
Madera	1	--	--	--	--	--	1
Total	2	--	--	--	--	--	2
Southern California							
San Bernardino	1	--	--	--	--	--	1
All Areas	17	--	4	3	--	2	8

[1/] Includes one roofing-felt mill.

Table 52--Installed capacity of pulpmills and board mills by type of mill, resource area, and county, California, 1976

Resource area and county	Type of pulpmill			Type of board mill	
	Sulfate	Groundwood[1/]	Semichemical	Hardboard	Particleboard
	24 hr., Tons, dry weight			Annual, million square feet	
				(1/8-inch basis)	(3/4-inch basis)
North Coast					
Del Norte	--	--	--	--	26
Humboldt	1,140	--	--	--	172
Mendocino	--	--	--	355	215
Total	1,140	--	--	355	413
Central Coast					
Contra Costa	850	122	--	--	--
Northern Interior					
Shasta	170	--	--	--	--
Sacramento					
Butte	--	--	--	126	--
Placer	--	--	--	--	60
Plumas	--	--	--	--	28
Tehama	--	80	--	--	--
Total	--	80	--	126	88
San Joaquin					
Amador	--	--	--	--	95
Tulare	--	--	--	--	32
Total	--	--	--	--	127
Southern California					
San Bernardino	--	--	--	--	58
All Areas	2,160	202	--	481	686

[1/] Includes one roofing-felt mill.

Table 53--Number of pulpmills and board mills by years of tenure of present ownership, type of mill, and years at site, California, 1976

Mill type and years at site	All mills	Tenure of present ownership (years)			
		0-2	3-5	11-20	21+
Sulfate					
11-20	3	--	2	1	--
21+	1	--	--	--	1
Total	4	--	2	1	1
Groundwood[1/]					
11-20	1	--	--	1	--
21+	2	--	--	--	2
Total	3	--	--	1	2
Hardboard					
0- 2	1	1	--	--	--
21+	1	--	--	--	1
Total	2	1	--	--	1
Particleboard					
0- 2	1	1	--	--	--
3- 5	3	--	3	--	--
11-20	4	1	--	3	--
Total	8	2	3	3	--
All mills					
0- 2	2	2	--	--	--
3- 5	3	--	3	--	--
11-20	8	1	2	5	--
21+	4	--	--	--	4
Total	17	3	5	5	4

[1/] Includes one roofing-felt mill.

Table 54--Average number of operating days of pulpmills and board mills by resource area, California, 1976

Resource area	Pulp	Board
North Coast	300	307
Central Coast	340	--
Northern Interior	350	--
Sacramento	270	234
San Joaquin	--	282
Southern California	--	132
All Areas	320	275

Table 55--Wood consumption by pulpmills and board mills by type of material consumed and resource area, California, 1976

Resource area	Roundwood			Other				
	Total	Sound logs	Utility logs	Total	Chips		Sawdust	Shavings
					From mill residue	From other sources		
	Thousand board feet, local scale			Tons, dry weight				
North Coast	--	--	--	1,276,036	873,426	7,236	126,214	269,160
Central Coast	2,700	2,700	--	510,190	510,190	--	--	--
Northern Interior and Sacramento[1/]	--	--	--	285,086	185,900	--	22,786	76,400
San Joaquin and Southern California[1/]	--	--	--	262,168	56,602	--	8,200	197,366
All Areas	2,700	2,700	--	2,333,480	1,626,118	7,236	157,200	542,926

[1/] Combined to avoid disclosure.

Table 56--Log consumption by pulpmills and board mills by timber age and resource area, California, 1976

(Thousand board feet, local scale)

Resource area	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Central Coast	2,700	2,700	--
All Areas	2,700	2,700	--

Table 57--Log consumption by pulpmills and board mills by ownership class and resource area, California, 1976

(Thousand board feet, local scale)

Resource area	All owners	State	National Forest	Forest industry		Farmer and miscellaneous private
				Own wood supply	Other wood supply	
Central Coast	2,700	--	--	1,350	1,350	--
All Areas	2,700	--	--	1,350	1,350	--

Table 58--Log consumption by pulpmills and board mills by species, resource area, and type of material, California, 1976

(Thousand board feet, local scale)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Redwood
Central Coast					
Sound	2,700	1,755	--	945	--
Utility	--	--	--	--	--
Total	2,700	1,755	--	945	--
All Areas					
Sound	2,700	1,755	--	945	--
Utility	--	--	--	--	--
Total	2,700	1,755	--	945	--

Resource area and type of material	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
Central Coast					
Sound	--	--	--	--	--
Utility	--	--	--	--	--
Total	--	--	--	--	--
All Areas					
Sound	--	--	--	--	--
Utility	--	--	--	--	--
Total	--	--	--	--	--

Table 59--Pulpmill and board mill consumption of mill residues and chips from other sources, by State of origin, resource area, and type of material, California, 1976

(Tons, dry weight)

Resource area and type of material	Total volume	California	Oregon
North Coast			
Chip residue	873,426	873,426	--
Chips, other sources	7,236	7,236	--
Sawdust and shavings	395,374	394,450	924
Total	1,276,036	1,275,112	924
Central Coast			
Chip residue	510,190	510,108	82
Chips, other sources	--	--	--
Sawdust and shavings	--	--	--
Total	510,190	510,108	82
Northern Interior and Sacramento[1/]			
Chip residue	185,900	185,900	--
Chips, other sources	--	--	--
Sawdust and shavings	99,186	99,186	--
Total	285,086	285,086	--
San Joaquin and Southern California[1/]			
Chip residue	56,602	56,602	--
Chips, other sources	--	--	--
Sawdust and shavings	205,566	205,566	--
Total	262,168	262,168	--
All Areas			
Chip residue	1,626,118	1,626,036	82
Chips, other sources	7,236	7,236	--
Sawdust and shavings	700,126	699,202	924
Total	2,333,480	2,332,474	1,006

[1/] Combined to avoid disclosure.

Table 60--Number of "other industry" mills by type of industry, resource area, and county, California, 1976

Resource area and county	All types	Shake and shingle	Export	Pole, post, and piling
North Coast				
Humboldt	9	3	6	--
Mendocino	4	4	--	--
Total	13	7	6	--
Central Coast				
Solano	1	--	--	1
Northern Interior				
Siskiyou	1	--	--	1
Sacramento				
Butte	1	--	--	1
Sacramento	1	--	1	--
Total	2	--	1	1
San Joaquin				
Madera	1	--	--	1
San Joaquin	1	--	--	1
Total	2	--	--	2
Southern California				
Los Angeles	1	--	--	1
All Areas	20	7	7	6

Table 61--Installed capacity of "other industry" mills by resource area and county, California, 1976

Resource area and county	Shake and shingle (8-hour shift)	Post, pole, and piling (yearly)
	Squares	Thousand board feet, local scale
North Coast		
Humboldt	80	--
Mendocino	58	--
Total	138	--
Central Coast		
Solano	--	3,800
Northern Interior		
Siskiyou	--	380
Sacramento		
Butte	--	11,475
San Joaquin		
Madera	--	4,500
San Joaquin	--	1,688
Total	--	6,188
Southern California		
Los Angeles	--	18,720
All Areas	138	40,563

Table 62--Number of "other industry" mills with selected equipment, by resource area and county, California, 1976

Resource area and county	Chipper	Barker	Burner
North Coast			
Humboldt	--	--	1
Mendocino	--	--	--
Total	--	--	1
Central Coast			
Solano	--	--	--
Northern Interior			
Siskiyou	--	--	--
Sacramento			
Butte	--	1	1
San Joaquin			
Madera	--	1	--
San Joaquin	--	1	--
Total	--	2	--
Southern California			
Los Angeles	--	--	--
All Areas	--	3	2

Table 63--Number of "other industry" mills by years of tenure of present ownership, type of mill, and years at site, California, 1976

Type of mill and years at site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
Shake and shingle						
0- 2	3	3	--	--	--	--
3- 5	1	1	--	--	--	--
6-10	1	--	--	1	--	--
11-20	2	--	--	--	2	--
Total	7	4	--	1	2	--
Post, pole, and piling						
3- 5	1	--	1	--	--	--
11-20	1	--	--	--	1	--
21+	4	--	--	--	1	3
Total	6	--	1	--	2	3
All Mills						
0- 2	3	3	--	--	--	--
3- 5	2	1	1	--	--	--
6-10	1	--	--	1	--	--
11-20	3	--	--	--	3	--
21+	4	--	--	--	1	3
Total	13	4	1	1	4	3

Table 64--Average number of operating days per year of "other industry" mills by type of mill and resource area, California, 1976

Resource area	Shake and shingle	Post, pole, and piling
North Coast	167	--
Central Coast	--	325
Northern Interior	--	300
Sacramento	--	250
San Joaquin	--	204
Southern California	--	300
All Areas	167	264

Table 65--Log consumption by "other industry" mills by type of material and type of mill, California, 1976

(Thousand board feet, local scale)

Type of mill	All types	Sound logs	Utility logs	Other[1/]
Shake and shingle	3,455	895	2,560	--
Export	97,695	97,695	--	--
Post, pole, and piling	9,821	9,321	500	--
Total	110,971	107,911	3,060	--

[1/] Lumber, cross ties, and miscellaneous other products.

Table 66--Log consumption by "other industry" mills by timber age group and type of mill, California, 1976

(Thousand board feet, local scale)

Type of mill	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Shake and shingle	3,455	3,455	--
Export	97,695	28,956	68,739
Post, pole, and piling	9,821	716	9,105
Total	110,971	33,127	77,844

Table 67--Log consumption by "other industry" mills by ownership class and type of mill, California, 1976

(Thousand board feet, local scale)

Type of mill	All owners	National Forest	State	Bureau of Land Management	Forest industry		Farmer and miscellaneous private
					Own wood supply	Other wood supply	
Shake and shingle	3,455	--	1,512	--	--	1,583	360
Export	97,695	5,240	--	--	--	66,351	26,104
Post, pole, and piling	9,821	879	--	303	1,859	2,885	3,895
Total	110,971	6,119	1,512	303	1,859	70,819	30,359

Table 68—Dependency of "other industry" mills for logs by

(Number

Resource area and type of mill	National Forest				State				Bureau of Land Management			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
North Coast												
Shake and shingle	7	--	--	--	5	--	1	1	7	--	--	--
Export	2	4	--	--	6	--	--	--	6	--	--	--
Total	9	4	--	--	11	--	1	1	13	--	--	--
Central Coast												
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--
Northern Interior												
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--
Sacramento												
Export	1	--	--	--	1	--	--	--	1	--	--	--
Post, pole, and piling	--	1	--	--	1	--	--	--	--	1	--	--
Total	1	1	--	--	2	--	--	--	1	1	--	--
San Joaquin												
Post, pole, and piling	2	--	--	--	2	--	--	--	2	--	--	--
Southern California												
Post, pole, and piling	--	1	--	--	1	--	--	--	1	--	--	--
All Areas												
Shake and shingle	7	--	--	--	5	--	1	1	7	--	--	--
Export	3	4	--	--	7	--	--	--	7	--	--	--
Post, pole, and piling	2	4	--	--	6	--	--	--	3	3	--	--
Total	12	8	--	--	18	--	1	1	17	3	--	--

ownership origin, resource area, and type of mill, California, 1976

of mills)

Other public				Forest industry								Farmer and miscellaneous private			
				Own wood supply				Other wood supply							
Dependency (percent)															
0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
7	--	--	--	7	--	--	--	3	1	1	2	5	1	--	1
6	--	--	--	6	--	--	--	1	--	3	2	2	3	--	1
13	--	--	--	13	--	--	--	4	1	4	4	7	4	--	2
1	--	--	--	1	--	--	--	--	--	1	--	--	1	--	--
1	--	--	--	--	--	1	--	--	1	--	--	1	--	--	--
1	--	--	--	1	--	--	--	--	--	1	--	--	1	--	--
1	--	--	--	1	--	--	--	1	--	--	--	--	--	--	1
2	--	--	--	2	--	--	--	1	--	1	--	--	1	--	1
2	--	--	--	1	--	1	--	1	--	1	--	--	--	2	--
1	--	--	--	--	--	1	--	--	1	--	--	1	--	--	--
7	--	--	--	7	--	--	--	3	1	1	2	5	1	--	1
7	--	--	--	7	--	--	--	1	--	4	2	2	4	--	1
6	--	--	--	3	--	3	--	2	2	2	--	2	1	2	1
20	--	--	--	17	--	3	--	6	3	7	4	9	6	2	3

Table 69—Log consumption by "other industry" mills by species, type of mill, and type of material, California, 1976

(Thousand board feet, local scale)

Type of mill and material	All species	Douglas-fir	Hemlock	True firs	Redwood	Ponderosa pine	Sugar pine	Incense-cedar	Other softwoods	Hardwoods
Shake and shingle										
Sound	895	--	--	--	--	--	--	--	895	--
Utility	2,560	--	--	--	--	--	--	--	2,560	--
Total	3,455	--	--	--	--	--	--	--	3,455	--
Export										
Sound	97,695	45,282	36,971	4,895	--	8,480	--	970	1,097	--
Utility	--	--	--	--	--	--	--	--	--	--
Total	97,695	45,282	36,971	4,895	--	8,480	--	970	1,097	--
Post, pole, and piling										
Sound	9,321	5,137	--	130	--	4,035	--	--	19	--
Utility	500	400	--	50	--	50	--	--	--	--
Total	9,821	5,537	--	180	--	4,085	--	--	19	--
All Mills										
Sound	107,911	50,419	36,971	5,025	--	12,515	--	970	2,011	--
Utility	3,060	400	--	50	--	50	--	--	2,560	--
Total	110,971	50,819	36,971	5,075	--	12,565	--	970	4,571	--

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Table 70--Production and disposition of wood and bark residues by shake and shingle mills, California, 1976

(Tons, dry weight)

Type of residue	Total	Used				Unused
		Total	Pulp and board	Fuel	Other	
Wood	902	506	--	118	388	396
Bark	561	8	--	--	8	553
All residue	1,463	514	--	118	396	949

Table 71--Product output by "other industries" by type of mill, California, 1976

Production	Shake and shingle	Shipments		
		Export	Post, pole, and piling	
			Treated	Untreated
	Squares	- - - Thousand board feet, local scale - - -		
State total	21,070	97,695	13,949	--

Hiserote, Bruce A., and James O. Howard.
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KEYWORDS: Forest products industries, wood utilization, wood waste utilization, mill operation/products, California.

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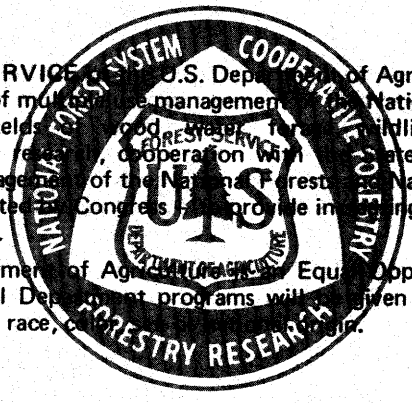

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