Working Paper

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Overview: Washington State Forest Products Industry and International Trade

1985

D. W. Bagger and T. R. Waggener



CENTER FOR INTERNATIONAL TRADE IN FOREST PRODUCTS UNIVERSITY OF WASHINGTON COLLEGE OF FOREST RESOURCES AR-IO SEATTLE, WASHINGTON 98195

Overview

WASHINGTON STATE

FOREST PRODUCTS INDUSTRY

AND

INTERNATIONAL TRADE

September 1985

Daniel W. Bagger Thomas R. Waggener

CINTRAFOR College of Forest Resources University of Washington

in cooperation with

Washington State Department of Natural Resources Washington State Department of Trade & Economic Development

Overview

Washington State Forest Products Industry

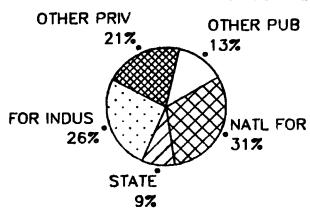
and International Trade

Forest Products is one of the major industries in the Washington State economy. In 1984 the timber industry employed 56.4 thousand people, and generated gross revenues in excess of 3 billion dollars (U.S.). During the last several years, this industry has been experiencing a transition as both domestic and foreign markets have changed dramatically. Continued competition in both product and factor markets has increased the State's involvement in overseas markets, especially those in the Pacific Rim countries. Many of the technological changes and industry renovations taking place within the forest products industry are focusing on these international markets. Legislative and government organizations at both the State and Federal levels are seeking to encourage and implement free trade policies in forest products as a means of expanding the natural economic benefits of trade. This brief overview of the forest products industry in the State of Washington seeks to identify the major features of this industry and the current levels of international trade in forest products. This overview has been prepared by the Center for International Trade in Forest Products (CINTRAFOR) at the University of Washington in cooperation with the Washington State Department of Trade and Economic Development and the Washington State Department of Natural Resources.

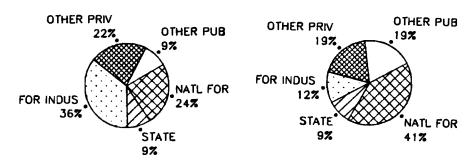
Forest Land Ownership

There are 17.4 million acres of commercial forest land in the state of Washington. This constitutes 41% of the total land area of the state; and 4% of the U.S. commercial forest land base. Because of favorable climate and soil productivity, the growth potential of this forest base is among the highest in the world.

FOREST LAND OWNERSHIP



TOTAL WASH. ST. (17,350,000 ACRES)



WESTERN WASH. (10,206,000 ACRES)

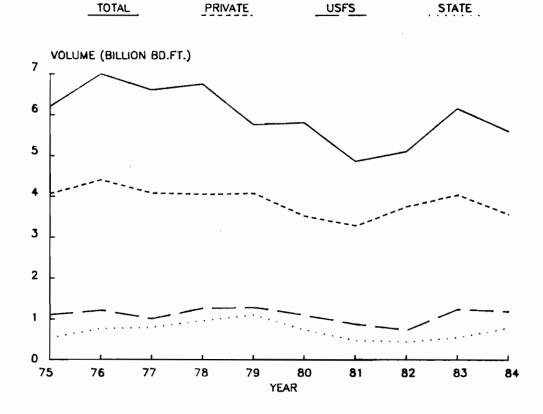
EASTERN WASH.

These commercial timberlands hold an inventory of 57 billion cubic feet of conifer (softwoods) and 6 billion cubic feet of hardwood. The Douglas fir located in the state's coastal region is among the finest quality timber found anywhere in the world.

Timber Harvest

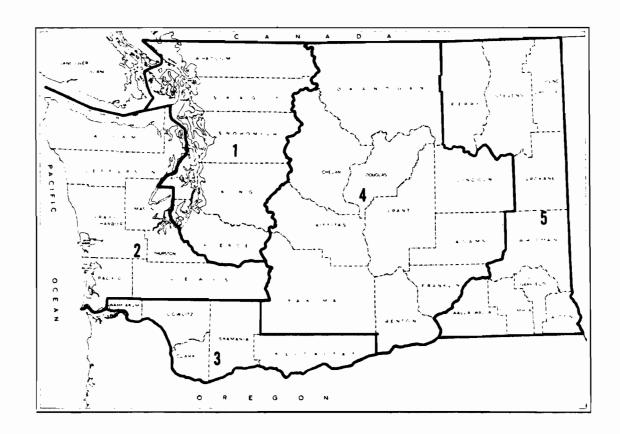
State timber harvest volume has averaged 6 billion board feet during the last decade. In 1984, 5.6 billion board feet of timber was harvested from state commercial timberlands. Of the total volume harvested in 1984, 64% came from private land, 21% from U.S. Forest Service land, and 15% from state land.

TIMBER HARVEST VOLUME STATE OF WASHINGTON



Production of Forest Products

To categorize the forest products facilities in Washington, the state may be divided as shown below:



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

Summary 1982

| Economic Area | All industries | Lumber | Veneer & Plywood | Pulp & Board | Shake & Shingle | Export | Pole Post & Piling |
|----------------|-------------------|--------|---------------------|-----------------|--------------------|--------|-----------------------|
| Puget Sound | 179 | 55 | 7 | 6 | 47 | 59 | 5 |
| Olympic Penins | ula 239 | 53 | 12 | 5 | 128 | 39 | 2 |
| Lower Columbia | 79 | 23 | 5 | 7 | 15 | 26 | 3 |
| Central Wash. | 17 | 14 | 2 | | 1 | _ | - |
| Inland Empire | 35 | 24 | 1 | 3 | 4 | - | 3 |
| Total State | 549 | 169 | 27 | 21 | 195 | 124 | 13 |

Lumber

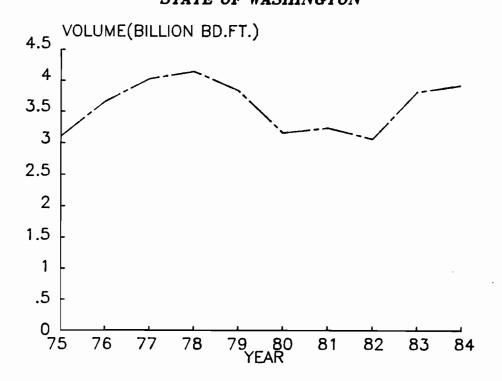
There are currently 150 sawmills operating in the State of Washington.

These mills are classified according to maximum production per eight hour shift, and fall into the following categories:

| No. | Mill size | Capacity (MBF) per single 8-hour shift |
|-----|-----------|--|
| 45 | A | 120+ |
| 18 | В | 80-119 |
| 23 | С | 40-79 |
| 64 | D | less than 40 |

Softwood lumber production has averaged 3.6 billion board feet annually during the past ten years, with a production level of 3.9 billion board feet recorded in 1984, when Washington State produced 12.7% of total United States softwood lumber production. In 1982 class A mills worked at 63% capacity.

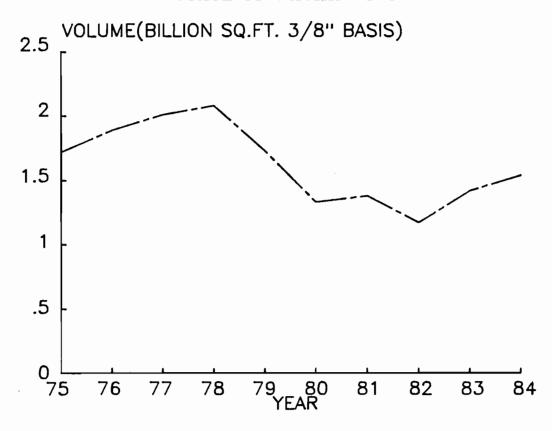
SOFTWOOD LUMBER PRODUCTION STATE OF WASHINGTON



Veneer and Plywood

There are 27 veneer & plywood mills operating in Washington. During 1984 plywood production from these facilities totaled 1.54 billion square feet (3/8" basis), or 7% of the United States total output. Intense competition for raw materials and production cost differentials are contributing to a restructuring of the Washington State plywood industry. Although high quality Douglas-fir plywood is still produced, alternative fiber materials and panel technologies are being implemented. Much of the upgrading undertaken by the plywood industry has specifically focused on foreign market demand for size, grade and structural specifications.

PLYWOOD PRODUCTION STATE OF WASHINGTON

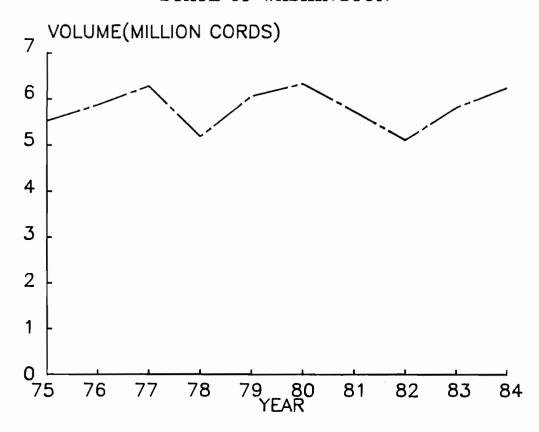


Pulp and Paper

There are 21 pulp mills located in the State of Washington. In 1982 the combined daily pulp production capacity from these mills was 12,348 tons. Pulpwood consumption in 1984 was 6.24 million cords, or 7.1% of U.S. total. Total production (dry tons) in 1982 was 3.1 million tons.

Approximately 715 thousand tons of market pulp was produced. In addition, 570 thousand tons of bleached paper, 935 thousand tons of unbleached paper, and 230 thousand tons of other papers were produced.

PULPWOOD CONSUMPTION STATE OF WASHINGTON



Shake & Shingle

There are 131 shake and shingle mills operating in Washington State.

In 1982 this industry produced 1,553,394 squares, of which 71% were shakes.

This sector utilized approximately 120 million bd.ft. of wood,

predominately western red cedar.

Pole, Post, and Piling

This is the smallest segment within the forest products industry of Washington State, totaling 11 operations. In 1982 wood consumption within this industry totaled 17.0 million board feet.

Employment

WASHINGTON STATE
EMPLOYMENT IN SELECTED FOREST PRODUCTS INDUSTRIES

1984

| INDUSTRY | BUSINESSES | EMPLOYMENT |
|---|------------|------------|
| Logging (SIC 2411) | 1,049 | 11,540 |
| Sawmills & planing mills (SIC 2421) | 217 | 14,849 |
| Hardwood dimension & flooring (SIC 2426) | 26 | 635 |
| Special product sawmills (SIC 2429) | 213 | 2,020 |
| Millwork (SIC 2431) | 100 | 3,330 |
| Wood kitchen cabinets (SIC 2434) | 90 | 1,461 |
| Hardwood veneer & plywood (SIC 2435) | 6 | 843 |
| Softwood veneer & plywood (SIC 2436) | 38 | 4.191 |
| Structural wood members (SIC 2439) | 27 | 560 |
| Wood pallets & skids (SIC 2448) | 30 | 511 |
| Mobile homes (SIC 2451) | 8 | 490 |
| Wood preserving (SIC 2491) | 20 | 620 |
| Wood products, miscellaneous (SIC 2499) | 88 | 853 |
| Wood household furniture (SIC 2511) | 61 | 912 |
| Wood office furniture (SIC 2521) | 12 | 304 |
| Wood partitions & fixtures (SIC 2541) | 34 | 438 |
| Pulp mills (SIC 2611) | 11 | 2,054 |
| Paper mills, except building paper (SIC 262 | 1) 20 | 9,106 |
| Bags, except textile bags (SIC 2643) | 10 | 9,106 |
| Corrugated and solid fiber boxes (SIC 2653) | 18 | 1,069 |

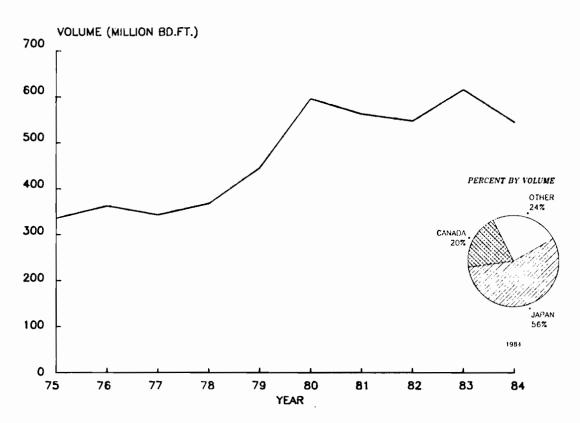
International Trade

Export markets have historically played an important role for the forest products industry of Washington State. These markets are briefly noted below by major sector of the industry.

Lumber

The 1984 level of softwood lumber exports from Washington ports was among the highest in recent history, exceeding 540 million board feet. As it has been for the past decade, Japan was the largest buyer in this market, consuming 56% of softwood lumber exports.

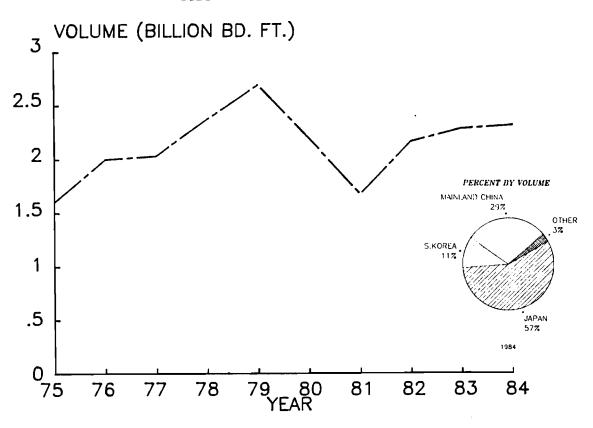
SOFTWOOD LUMBER EXPORT STATE OF WASHINGTON

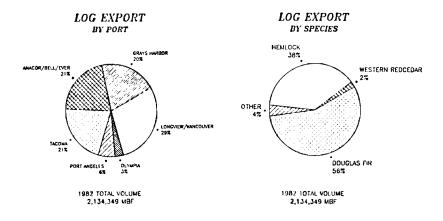


Logs

The log export industry has been a key sector in Washington State's forest products economy during the past decade. In 1984 there were 110 export operations in the State of Washington, with these facilities exporting 2.3 billion board feet, or 74% of United States total log exports.

LOG EXPORT STATE OF WASHINGTON

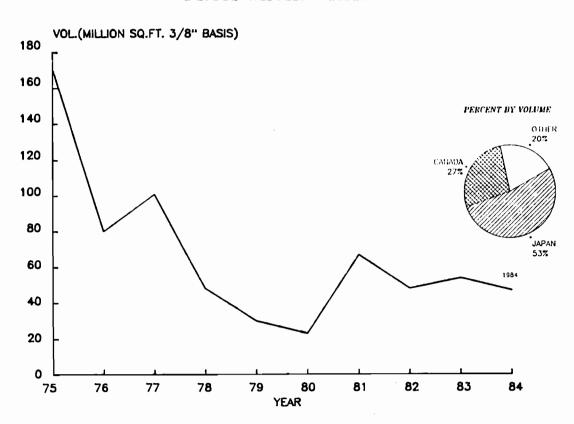




P1ywood

Exports of softwood plywood from Washington State Districts declined after 1975, but have increased over the 1977-1983 period to a level of approximately 50 million square feet (3/8" basis) in 1984. Exports to Japan totalled nearly 25 million square feet.

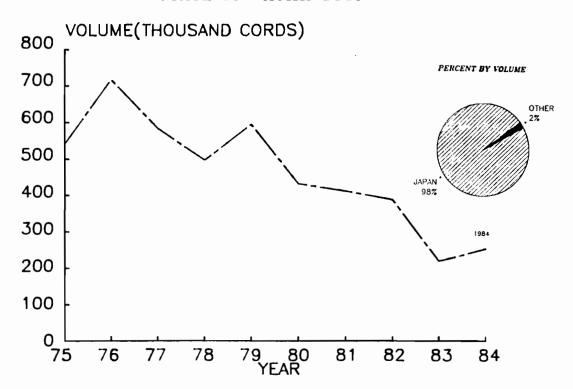
SOFTWOOD PLYWOOD EXPORT FROM WASH. STATE



Wood Chips

In recent years, the export of wood chips from Washington ports has constituted a major commodity in international trade. However, chip exports have declined significantly since 1976, totalling approximately 250 thousand cords (roundwood equivalent) in 1984.

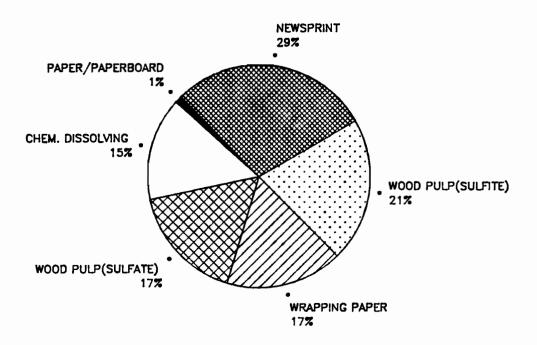
CHIP EXPORT STATE OF WASHINGTON



Pulp and Paper

Export of pulp and paper products through Washington custom districts totalled \$456,780,000 in 1984. The largest share (\$130,175,000 -- 28%) was newsprint, with almost 70% going to Japan. Overall, Japan markets accounted for \$190,225,000 in pulp and paper exports, or 42%.

PULP AND PAPER PRODUCTS BY PERCENT OF EXPORT VALUE



TOTAL VALUE: \$456,780,000 FROM WASH. CUSTOM DIST.

Metric Conversion Factors

Land: Acres x .405 = Hectares

Logs: Million bd. ft. (MMBF) x 4.53 = Thousand Cubic Meters (MCM)

Lumber: $MMBF \times 2.36 = MCM$

Chips: thousand cords (MCDs) x 2.9 = MCM

Plywood: million sq. ft., 3/8" basis (MMBF, 3/8) x .885 = MCM

Shingles: Squares x .108 = square meters of covered area

Pulp: Tons x 909.1 = kilograms

1 ton = 2.41 cubic meters

Export Statistics

EXPORTS OF FOREST PRODUCTS SHIPPED THROUGH WASHINGTON STATE PORTS* (Value of Products in Thousands of Current U.S. Dollars)

| | <u>1</u> 98 | 83 | 1984 | | |
|-----------------------------|-------------|----------|----------------|----------|--|
| Product | To World | To Japan | To World | To Japan | |
| Softwood Sawlogs (E 2471) | 780,128 | 494,708 | 759,071 | 443,777 | |
| Standard Newsprint (E 7411) | 139,977 | 91,050 | 130,175 | 90,247 | |
| Wood Pulp Sulphite (E 2518) | 87,560 | 21,792 | 97,360 | 13,771 | |
| Wrapping Paper (E 6413) | 85,499 | 40,331 | 82,505 | 40,529 | |
| Wood Pulp Sulphate (E 2517) | 58,226 | 8,688 | 75,678 | 12,694 | |
| Chemical Dissolving | 62,691 | 25,976 | 66,05 6 | 30,869 | |
| Grades (E 2516) | | | | | |
| Pulpwood (E 2460) | 19,738 | 19,541 | 27,913 | 24,972 | |
| Hardwood Sawlogs (E 2472) | 3,106 | 968 | 9,738 | 1,736 | |
| Plywood (E 6345) | 6,331 | 1,157 | 5,440 | 495 | |
| Prefab Wood Buildings (E 63 | 53) 4,204 | 3,039 | 4,594 | 3,851 | |
| Paper & Paperboard (E 6428) | 2,385 | 524 | 3,008 | 1,068 | |
| Paper & Paperboard (E 6424) | 98 1 | 534 | 1,999 | 1,047 | |

^{*}Exports by vessel only.

Source: United States Bureau of the Census.

APPENDIX

International Trade Directory
Washington State Forest Products Industry

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LUMBER & WOOD PRODUCTS

Boxes SIC: 2441

Oroville Bin & Pallet Reloading boxes.

Seattle Tacoma Box Co. Mfg. wood products, wood boxes, cardboard cartons.

Buildings, Prefabricated SIC: 2452

Blackstock, H.W., Co. Supplier of Building Packages.

Cedar Homes, Inc.
Buildings: prefabricated wood.

CedarMark Home Corp.
Pre-cut cedar buildings for both
residential home and commercial
use.

Custom Component Structures
Buildings: prefabricated wood.

Fitzgibbon Industries, Inc. Buildings: prefabricated wood.

Haida Hide, Inc.
Manufacturing of houses constructed of wood.

International Food Storage & Struc.

Agri-business marketing & technology.

International Homes of Cedar, Inc.

Pre-cut homes.

Justus Cedar Homes
Prefabricated cedar buildings.

Lindal Cedar Homes, Inc. Prefabricated cedar buildings.

Pacific Component Homes, Inc.

Pre-fal-buildings

Pan Abode, Inc.
Manufacture Pre-Cut Cedar Homes.

Pre Built Structures, Inc. Modular wood buildings.

Rols Int'l, Inc.
Export Management: saunas, automotive accessories, office components.

Rustic Log Structures, Inc. Log homes.

Shakertown Corp.

Decorative cedar shingles, cedar shingle siding, interior folding doors.

Sylvan Products, Inc. Log homes.

Timberland Homes, Inc. Buildings: prefabricated wood.

US Forest Products
Buildings: prefabricated wood.

West Coast Mills, Inc.
Buildings: prefabricated wood.

Containers SIC: 2449

Industrial Crating & Packaging Inc.

Wood containers.

Forestry Services SIC: 0851

Foresters & Managers, Inc.

Hardwood Dimension & Flooring SIC: 2426

All-Wood Components, Inc. Lumber: hardwood dimension & flooring.

American Lumber Mfg., Inc. Export: Lumber. Import: Lauan lumber.

Balcom Woodcarving Co.
Lumber: hardwood dimension & flooring.

Elliott Bay Mill Corp. Lauan lumber.

Kelly-Goodwin Hardwood Lumber: hardwood dimension & flooring.

Maher Forest Products Ltd .
Manufactured wood components for doors, furniture, cabintery, etc.

Northwest Hardwoods
Lumber: hardwood dimension &
flooring.

Northwest Hardwoods
Lumber: hardwood dimension &
flooring.

Paxport Mills, Inc.
Hardwood Lumber, Western red
cedar lumber.

Ross-Simmons Hardwood Lumber Co. Alder hardwood lumber.

West Coast Orient Lumber Lumber & logs.

Hardwood Veneer & Plywood SIC: 2435

Everett Plywood Hardwood plywood.

General Forest Products, Inc. Pallets, crating materials.

Heidner & Co., Inc. Hardwood veneer & plywood.

Hoquiam Plywood Co., Inc. Plywood manufacture.

Interior Wood Sales Co. Hardwood veneer.

Medeira Corp.
Hardwood veneer & plywood.

Northwest Door Wood doors.

Weyerhaeuser Co. Forest products.

Kitchen Cabinets SIC: 2434

Dewils Industries, Inc. Wood kitchen cabinets.

Major Line Products Co., Inc. Kitchen & bath cabinetry.

Logging Camps & Contractors SIC: 2411

Allen Logging Co.

B&R Logging Co., Inc. Logging camps & contractors.

Bahnmiller Logging Co. Logging camps & contractors.

Barbee Mill Company, Inc.

Bell Don Logging, Inc. Logging camps & contractors.

Boulton Logging Co. Logging camps & contractors.

Cascade West Forest Products

Centralia Plywood & Veneer Logging camps & contractors.

China Products Northwest,

Deal in a wide range of products with People's Rep. of China.

Columbia River Lumber Corp. Lumber.

Columbia Vista Corp.
Logging camps & contractors.

Colville Tribal Forestry
Logging camps & contractors.

Crown Zellerbach Corp.
-Cathlamet Timber Div.
Logging camps & contractors.

Crown Zellerbach Corp., NW Wash. Managed Forest Logging camps & contractors.

Elven, Charles S. Logging, Inc. Logging camps & contractors.

Export Pacific, Inc. Cedar lumber.

Fujii Wood International Logging camps & contractors.

General Log and Timber Co. Logging camps & contractors.

Great Western Lumber Co. Lumber.

Hanwa American Corp. Logs.

High Cascade Lumber Co.

Hoh River Cedar Products, Inc.

Logs, Western Red Cedar shakes & shingles.

Humphrey Lumber Co. Lumber.

Hunter Tree Farm Logging camps & contractors.

Itoh, C., & Co. (America) Inc. Forest products. Seafood products.

Karlen Davis Co., Inc. Wholesale lumber.

KCL Int'l Export forest products.

Kennedy-Johnsen Lumber, Inc. Lumber.

Knudsen Pole Co. Poles, piling, lumber.

M.B. Logging Co., Inc. Logging camps & contractors.

Manke Lumber, Inc. Lumber mill.

Marukyo Seattle, Inc. Logs.

Mayr Brothers Lumber.

Merrill & Ring, Inc. Log & lumber exporting co.

Miller Lumber Sales Lumber brokers.

Mitsubishi Int'l Corp.
Forestry, Foods, Machinery, steel.

Mitsui Co. U.S.A., Inc. Steel. Food. Lumber. Machinery.

Murray Pacific Corp. Wholesale lumber.

Nichimen Co.

Log & lumber exporters.

Nielsen Log, Inc. Log contracting.

Nissho-lwai American Corp. Lumber exporter.

Oeser Co., The Poles, pilings.

Pacific Lumber & Shipping Co. Exporter and Mfgr. of sawn lumber and logs.

Pederson Milling & Logging Co.

Logging and Milling.

Potlatch Corp. Wholesale Lumber.

Puget Sound Int'l, Inc. Logs.

Robbins, R.G., & Co., Inc. Wholesale lumber.

Scott Paper Co. Logs. Wood chips.

SDS Lumber Co.
Lumber & plywood.

Simpson Timber Co. Lumber.

Snell Logging Co.
Logging camps & contractors.

Sumitomo Corporation of America

Logs. Steel cable.

Summit Timber Co. Logs.

Trans United Corp. Coal, cement, timber.

Tyee Lumber Co. Wholesale lumber.

Van De Grift, W.S., Inc. Logging camps & contractors.

Walcker Forest Products
Logging camps & contractors.

Wasser & Winters
Logging camps & contractors.

Weyerhaeuser Co. Forest products.

White Swan Lumber Logging camps & contractors.

Lumber & Wood Products SIC: 2400

Burlington Northern Int'l Services, Inv. Sale of logs, lumber and other forest products in export market.

Nordell Enterprises, Ltd. Export management company: building materials, pre-cut cedar homes,, food gift items.

West Coast Forest Products, Inc.

Lumber & wood products.

Millwork SIC: 2431

American Prefinish Corp. Millwork.

Apex Wood Products Corp. Millwork.

Buffelen Woodworking Co. Millwork.

Canadian Cedar, Inc. Millwork.

Cardinal Doors, Inc. Millwork.

Dellen Wood Products, Inc. 4/4 Cut Stock: Component Wood Parts; Compressed Firelog Production.

Kinnear of Washington Wood garage door components.

Lianga Pacific, Inc. Import Lauan, Meranti & Seraya Iumber.

Lundgren Dealers Supply, Inc. Building materials.

Nord, E.A., Co, Inc.

Northwest Aluminum Products Windows.

Northwest Millwork, Inc. Millwork.

Nu-Dor, Inc. Millwork.

Pasquier Panel Products Millwork.

Quality Millwork, Inc. Millwork & cabinets.

Redmond Wood Products, Inc.

Savage Wholesale Bldg. Materials, Inc. Millwork.

Seattle Door Co., Inc. Doors.

Stanley Garage Door Co. Garage doors.

Vancouver Door Co., Inc. Doors.

Weathervane Window Co. Wood windows.

West Coast Door, Inc. Millwork.

Wholesale Door Millwork.

Wood Specialty Products, Div. of Shakertown Corp.
Folding wooden doors.

Millwork, Plywood & Structural Members SIC: 2430

Goodrich Forest Products, Inc. Plywood, millwork & structural members. Yakima Pine Products
Plywood, millwork & structural
members.

Pallets & Skids SIC: 2448

Girard Wood Products, Inc. Wood pallets.

Precision Wood Products, Inc. Wood pallets.

Particleboard SIC: 2492

Marine Floats, Inc. Floats, docks, marinas.

Weyerhaeuser Co. Forest products.

Saw & Planing Mills SIC: 2421

American Lumber Mfg., Inc. Export: Lumber. Import: Lauan Iumber.

Belco

Saw and planing mills.

Boise Cascade Corp., Central: Western Wn. Reg. Ofc.
Saw and planing mills.

Brazier Lumber Co. Saw and planing mills.

Brooks, Frank, Mfg. Saw and planing mills.

Buse Timber & Sales, Inc. Saw & planing mills.

California Redwood Products
Saw & planing mills.

Canyon Lumber Co., Inc. Saw and planing mills.

Cascade Hardwood Saw & planing mills.

Chehalis Valley Lumber Co. Export rough green cuttings to the Far East, Middle East & Europe (hem-fir).

Coast Prefinishing Corp. Saw and planing mills.

Cowlitz Stud Co. Saw and planing mills.

D&R Cedar, Inc. Saw and planing mills.

Daishowa America Co. Saw & planing mills.

Delson Lumber Co., Inc. Saw and planing mills.

Down River Forest Products Saw & planing mills.

Enterprise Lumber Co. Saw and planing mills.

Evergreen Forest Products Saw and planing mills.

Flow Marketing Group Fish products. Lumber.

Frei Mill Co.

Saw and planing mills.

Garka Mill Co., Inc. Saw and planing mills.

General Forest Products, Inc. Pallets, crating materials.

Goodyear Nelson Hardwood Lumber Co.

Saw and planing mills.

Green River Sawmill, Inc. Saw and planing mills.

Hillsdale Lumber and Mfg. Co., Inc. Cedar siding.

Hoquiam Cedar Products Cedar shakes & shingles.

International Forest Products
Wholesale lumber.

Jerstedt Lumber Co., Inc. Manufacturing & planing mill.

Lewis, Palmer G., Co., Inc. Wholesale building materials.

Loth Lumber Saw & planing mill.

Northwest Builder's Supply Saw & planing mill.

Oji Paper Co Wood chips,

Pacific Lumber & Shipping Co. Exporter and Mfgr. of sawn lumber and logs.

Pacific Wood Treating Corp. (PWT)

Wood pressure preservative treating, wood remanufacturing & fabrication.

Scott Paper Co. Logs. Wood chips.

Seattle Snohomish Mill Co., Inc.

Saw and planing mills.

Snohomish Enterprises, Inc. Building materials.

Springdale Lumber Co., Inc. Saw and planing mills.

St. Regis Paper Co., Lumber & Plywood
Saw and planing mills.

Tebb, Fred, & Sons, Inc. Saw & planing mills.

Vaagen Brothers Lumber Inc. Lumber mill.

Van Daal Inc. Building materials.

Welco Lumber Co. Saw and planing mills.

Weyerhaeuser Co. Forest products.

Winthrop Lumber Co. Saw and planing mills.

WSI, Inc.

Lumber remanufacturing plant.

Softwood Veneer & Plywood SIC: 2436

Champion Building Products .
Softwood veneer & plywood.

CPI Veneers Veneer.

Evans Products Co.
Softwood veneer & plywood.

Ft. Vancouver Plywood Sanded Fir Plywood.

Hardel Mutual Plywood Corp. Plywood.

Lacey Plywood Co. Sanded plywood.

Mt. Adams Veneer Co. Softwood veneer.

Mt. Baker Plywood, Inc. Softwood veneer.

Puget Sound Plywood, Inc. Softwood veneer & plywood.

Vanport Industries, Inc.
Sottwood veneer & plywood.

Weyerhaeuser Co. Forest products.

Special Product Sawmills SIC: 2429

American Excelsior Co. (AMXCO)

Sawmill specialized products. Apex Hip & Ridge, Inc.

Sawmill specialized products. Butters, G.M., Shingle &

Shake Co., Inc.
Sawmill specialized products.

Cowlitz Shingle Co., Inc. Sawmill specialized products.

Erickson, A.E., Enterprises, Inc.

Sawmill specialized products.

G&L Shake Co., Inc.
Sawmill specialized products.

Hoh River Cedar Products, Inc.

Logs, Western Red Cedar shakes & shingles.

North Hoquiam Cedar Products, Inc. Shakes & shingles.

Pacific Highland Cedar Products, Inc. Cedar shakes, shingles.

Saginaw Shingle Co. Cedar shakes & shingles.

Sol Duc Shake Co., Inc. Sawmill specialized products.

Structural Wood Members SIC: 2439

Colonial Cedar Co., Inc. Wood structural members.

Persco, Inc.

Wood structural members.

St. Regis Paper Co., Distribution Yards Wood structural members.

Misc. Wood Products SIC: 2490

Burlington Northern Int'l Services, Inv.

Sale of logs, lumber and other forest products in export market.

Howatt Co., Inc. Wood products.

Ligna Technology, Inc. U.S. representation of foreign machinery for the forest products industry.

Nelsen Wood Products, Inc. Wood products.

Mobile Homes SIC: 2451

Westwood Industries, Inc.
Commercial & residential modular
structures.

Timber Tracts SIC: 0811

Emerald Christmas Tree Co. Fresh cut Christmas trees for export. Douglas fir, noble fir.

Wood Preserving SIC: 2491

Allweather Wood Treaters
Lumber treating.

American Crossarm & Conduit Co.

Wood preserving.

Baxter J.H. & Co. Wood preserving.

Carney, B.J. & Co. Wood preserving.

Cascade Pole Co. Wood preserving.

Exterior Wood Corp. Wood preserving.

McFarland Cascade Wood preserving.

Pacific Rim Resources, Inc. Technical assistance to timber & agricultural product export firms.

Pacific Wood Treating Corp. (PWT)

Wood pressure preservative treating, wood remanufacturing & fabrication.

Robbins, R.G., & Co., Inc.

United Lumber Co. Inc.
Building materials & lumber broker.

Western Wood Preserving Co. Wood preserving.

Westwood Lumber, Inc. Softwood lumber exports. Williams Lumber Co. Wholesale lumber.

Wyckoff Co. Creosote. Treated wood.

Wood Products SIC: 2499

Allsop, Inc. Wood products.

Alternatives In Wood, Inc. Wood products.

American Arabian Agents
Import: Oil. Export: Construction
materials.

Beerbower Spool Mfg. Co. Wood products.

Cap Wood Wood products.

Caribou Pacific Corp. Forest products.

Dependable Ladder & Woodworking Co.
Wood products.

Howard Manufacturing Co. Wood products.

Juhl-Pacific Corp.
Picture frames.

Kaymar Wood Products, Inc. Wood products.

Kobayashi America, Inc. Forest products.

Posey Manufacturing Co. Wood products.

Read Products, Inc. Wood products.

Shakertown Corp.

Decorative cedar shingles, cedar shingle siding, interior folding doors.

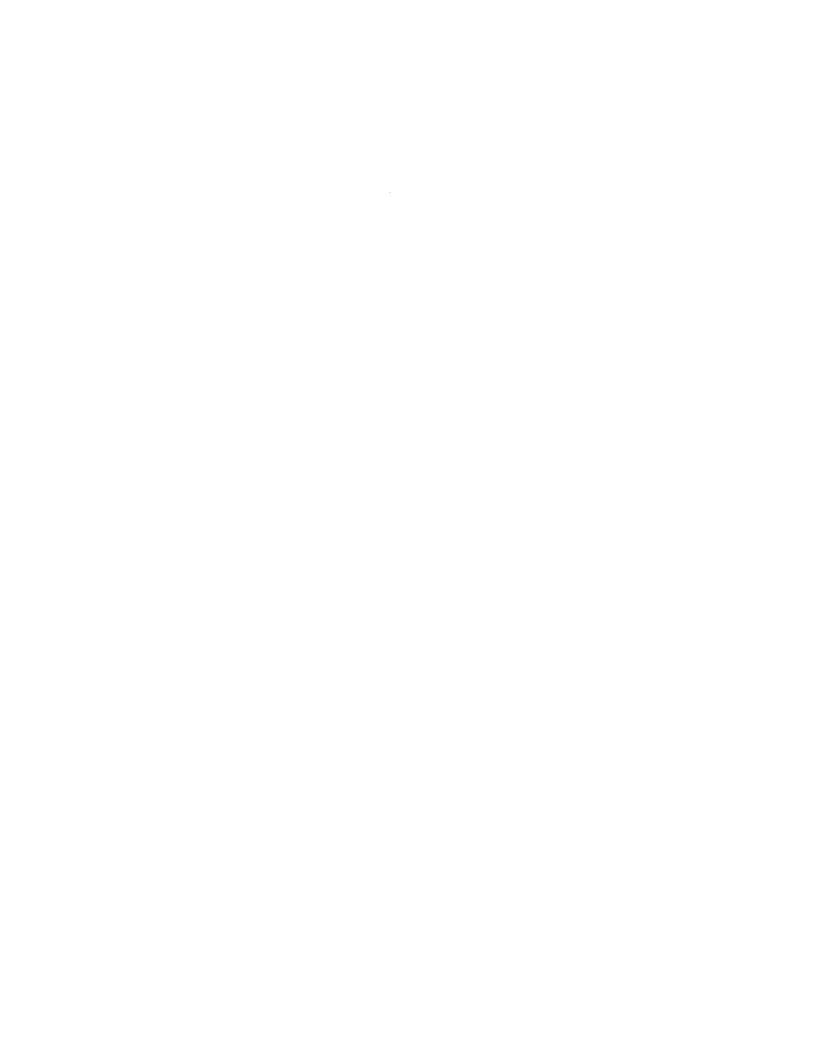
Spar Tech Co. Aluminum boat masts.

Strauser Bee Supply, Inc. Bee supply manufacturer.

Textured Forest Products, Inc. Wood products.

Weyerhaeuser Co. Forest products.

Wood Fabricators, Inc. Wood products.



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