

Business Plan
**Central Oregon Kiln-Dried Lumber
Inventory Project**

Organized By
Members of the Western Juniper Commercialization Steering Committee

Technical Assistance Provided By
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INTRODUCTION

A. Purpose of Business

The purpose of the *Central Oregon KD Juniper Lumber Inventory Project* (Project) is to establish a reliable supply of consistent-quality, graded kiln-dried (KD). The ultimate goal of the project is to increase lumber sales of all grades sufficient to create a self-sustaining private business opportunity, and encourage other manufacturers to use juniper in current and future product lines for domestic and international markets. The Project is designed to last three years before closing-out.

The project is also intended to: 1) Build demand for lower grade material and manufacturing falldown, using contacts and networks established by Bill Breedlove, Western Juniper Industry Facilitator; and 2) Improve primary manufacturer and dry kiln operator quality and consistency, using best available information from field trials funded by previous Oregon Regional Strategies Program and U.S. Forest Service.

The initial commitments necessary to make the Project economically viable come from a flexible manufacturing and wholesaling network composed of Connolly Wood Products (Bend), Line Shack Log Cabin Kits (Prineville), Pacific Rim (Jasper), and Juniper Products of Oregon, Inc. (Bend).

B. Industry Overview

There are approximately 35 manufacturers who consistently produce value-added juniper products using lumber as a raw material. It is estimated these manufacturers used at least 300,000 board feet (300 MBF) during the last 12 months (June, '98 - May, '99). Participants in the initial flex net for this Project represent about 80% of known current lumber consumption. It is estimated approximately 500 MBF will be needed for Year 1 of this project (June, '99 - May, '00), based on data provided by Mr. Breedlove. This represents a projected increase in lumber sales of 40% within 12 months.

Despite the growth curve, there is insufficient order volume and consistency for a private company to make a substantial investment in inventory. It is estimated that annual sales of at least 850 MBF are needed to create a viable private business opportunity.

C. What Commercial Need Does This Project Fill?

An informal survey of a sample of juniper manufacturers was recently conducted by the Bill Breedlove at the request of the ad hoc Western Juniper

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Commercialization Steering Committee. Questions focused on what was holding back development of a value-added juniper industry and what could be done about it.

Major players in the value-added segment of the nascent western juniper industry consider "lack of reliable and consistent-quality KD lumber inventory" the key factor holding back development of a value-added juniper industry. None of the businesses with the interest and experience to accumulate and sell quality juniper lumber have the capital and credit necessary to build and maintain sufficient inventory to meet current and projected demand (an estimated \$250,000 Line of Credit appears necessary to develop an economically viable operation).

Quality control is also an important issue. It is only recently that sufficient information has become available to institute meaningful quality control standards at each step in the manufacturing process, from log selection to dry kiln schedules. Basically, juniper lumber has to be treated and sold at price breaks similar to higher-value, higher-grade hardwoods instead of commodity, low-grade softwoods.

Lack of reliable and consistent-quality inventory affect both the ability of current manufacturers to increase sales and reduces the prospects of recruiting new manufacturers. Mike Connolly, Connolly Wood Products, estimates they could have increased gross sales of juniper products at least 50% given more reliable juniper lumber supply and quality. Mr. Breedlove reports that at least three manufacturers are known to have dropped plans to add juniper product lines due to uncertain supply and inconsistent quality. Total lost sales are estimated in excess of 600 MBF/year. This is equivalent to about 10 full-time equivalent (FTE) jobs. About half of these jobs would have paid "family-wage".

D. Financial Summary

The Financial Plan for the *Central Oregon KD Juniper Lumber Inventory Project* (see Part 6 of this Business Plan) calls for a \$250,000, low-interest (3%) Line of Credit for three years. Based on projected sales, this will be sufficient to cover all costs of building and managing inventory. At the end of three years, liquidation of remaining inventory will contribute a substantial sum to help cover costs of the proposed extension of Western Juniper Industry Facilitator activities (\$169,000). The financial goal of the project is to generate sufficient sales (850 MBF) and establish a track record so that a viable private business opportunity is created.

Part 1: Industry Description

A. History, Trends, and Expected Growth

Although the majority of western juniper harvested over the years has been used for fence posts and firewood, there are reports going back at least 50 years of mills which tried to commercially process the species. The most successful commercial western juniper operation of any size was a mill owned and operated by Gary Gumpert in Prineville in the

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mid to late 1970s (five to 10 employees). Primary product emphasis was interior paneling, but other products were made in the course of refining the panel product (such as furniture and mantel pieces). At the time the mill was sold, about one-third of the production was juniper and the remainder incense cedar.

The next serious attempt to commercialize western juniper began in 1992. The effort was stimulated by loss of jobs in the wood products industry due to reductions in Federal timber supply, and led by a public/private partnership organized by the U.S. Forest Service. At the time, the juniper industry consisted of a few artisans, and an unknown number of seasonal firewood and post cutters.

There are now at least 35 companies selling juniper products into at least 11 main markets or distribution channels, ranging from animal bedding shavings to doors and flooring. None of the companies have gross sales of juniper products exceeding \$250,000. Of these 35 or so companies, between five and 10 "cottage industry" size (fewer than two employees) and one medium-size manufacturer (about 10 employees) consistently use juniper for value-added products, and the rest do so for custom orders.

Juniper lumber production is small by normal industry standards, but the growth curve is good. There are currently five to 10 portable mills and one medium-size mill which cut juniper on a special order or custom basis. Total aggregated lumber production (1998-99) is estimated to average 25 MBF per month, which represents an increase of 50% over the last three years.

Although total combined capacity and interest far exceed current orders, truckload quantities of kiln-dried lumber are usually available only during the summer and require 30 to 60 days for turnaround.¹

Since 1992, over 35 full-time equivalent (FTE) jobs related to western juniper harvest and processing have been created in more than 14 Eastern Oregon communities. Due to increased awareness and publicity, it is estimated at least another 35 FTE jobs were created as an indirect result of juniper commercialization projects. Private industry believes that the number of jobs related to juniper processing are expected to double within the next two years. The ad hoc Steering Committee believes that the juniper industry will eventually generate gross sales of over \$20 million per year, which translates to more than 250 direct and indirect jobs in rural Eastern Oregon communities.

B. Key Success Factors

Participation of Key Private Industry - The initial manufacturing flex network which forms the economic foundation of the *Central Oregon KD Juniper Lumber Inventory Project*, consists of some of the strongest, long-term players in the juniper industry: Connolly Wood Products (Bend), Line Shack Log Cabin Kits (Prineville), Pacific Rim

¹There is theoretically at least 400 MBF/month capacity, assuming maximum daily output for most of the portable mills is around 2 MBF and they operate 50% of a normal work week over the course of a year, and maximum daily output of the one medium-size sawmill is around 20-25 MBF and it operates 75% of a normal work week during the course of a year.

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(Jasper), and Juniper Products of Oregon, Inc. (Bend). In addition, Bill Breedlove, Western Juniper Industry Facilitator for the last three years, has agreed to head-up the publicly-administered portion of the project. Mr. Breedlove has more contacts in the nascent juniper industry than anyone else, and been critical in managing the flex networks which account for probably 75% of the job production and sales attributed to juniper over the last three years.

Support of Key Private Industry and Local Economic Development Service Providers - The *Central Oregon KD Juniper Lumber Inventory Project* was conceived by the ad hoc Western Juniper Commercialization Steering Committee in response to industry input about what could best help development of the value-added segment of the juniper industry. It incorporates key industry concerns about lack of kiln-dried, consistent-quality lumber, and lack of markets for low-grade and fall down. It also incorporates the type of assistance seen as needed by cottage industry and local economic development service providers (letters available upon request).

The Project is structured so activities will not compete with private industry. In truth, there are no private companies at this point (spring, 1999) which have the interest, financial resources, or expertise to assemble the inventory necessary to take the nascent value-added western juniper industry segment to the next level of development.

Product Differentiation - This will be the first time that graded KD juniper lumber, manufactured and dried using strict quality control guidelines, will be available on short-notice in truckload quantities throughout the year. Also important is that this is not just a one-year program, but builds incrementally over three years to become self-sustaining.

Environmental Stewardship and Product "Branding" - Western juniper lumber inventory accumulated for this project will be obtained as much as possible from operations designed by scientists to result in watershed restoration rather than simply juniper logs. Lumber will be kiln-dried (to reduce the potential for wood borers) and marked with a special stamp. Buyers will receive literature describing the origin, processor, treatment, and benefits of using western juniper lumber handled in the manner described. Juniper Products of Oregon plans to prominently display and use the "Made in Oregon" brand concept.

Sales Contacts - Participants in the initial manufacturing flex net possess sufficient sales contacts and leads to consume almost 100% of the first 12 months inventory. Inventory will be ramped-up to correlate with projected sales increases over the following two years.

Mr. Breedlove, as Western Juniper Industry Facilitator over the last three years, has compiled more than 250 actual or potential sales contacts. This represents the largest data base of juniper sales contacts known to exist. These contacts will be used perform market research and expand lumber sales, especially for lower-grade material and manufacturing fall-down. Juniper Products of Oregon, Inc., the lumber wholesaler, will actively pursue new markets with its manufacturer contacts and current accounts, both domestic and international.

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Training - It is expected lumber sales will increase sufficiently by Year 3 that other suppliers may be asked to participate. A training program will be instituted with new suppliers to maintain strict quality control standards (e.g. use of latest information regarding log selection and storage, primary breakdown, and lumber handling and storage), and how to consistently grade juniper lumber using grading rules developed during previous Regional Strategy juniper projects.

Industry-Wide Research and Development Program - The current project is backed-up by the results of over 50 projects completed during the last seven years related to harvesting and processing western juniper. Scott Leavengood, OSU Wood Products Extension Agent, will be used as a source for technical information and problem-solving, and training.

C. Market Niche

The purpose of the Project is not to create a new market niche - it is intended to support an existing manufacturing flex network which is having difficulty supplying existing and projected demand. New manufacturers and suppliers will be added as supply and demand increase. The Project fills the need for reliable supply of truck-load quantities of consistent-quality, KD graded lumber. It is expected the project will help develop a viable private business niche by the end of three years by "priming the pump" and establishing the kind of business track record necessary to obtain private financing.

Part 2: Product, Services, and Process

A. Product Description

General - Inventory will be built incrementally the first year (1999) to about 200 MBF of 4/4 graded, KD lumber prior to winter. Minimum inventory levels are expected to be around 25 MBF. Maximum inventory level the third year is expected to be about 260 MBF, with a minimum of about 55 MBF. About 15% of the inventory will consist of *Premium* ("tight knot or better, both faces"), 60% *No. 1* ("tight knot or better, one face"), and 25% *Cutstock* ("multiple cuttings of No. 1 or better").

Although no inventory is initially projected for the *Rustic* grade ("certain amount and distribution of bark-encased knots and voids permitted"), it is expected sufficient demand will be generated by Industry Facilitator activities to require some in stock by the end of Year 3.

Important Attributes - This is the first time a reliable supply of truckload quantities of consistent-quality KD juniper will be available. Specific lumber attributes will include:

KD - Inventory will be kiln-dried to reduce potential for wood borers and increase use by value-added manufacturers;

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Strict Quality Control Standards - Lumber will meet strict quality control standards for size and grade (highly variable in the past due to inconsistent orders, poor log selection and storage practices, poor size quality controls, poor lumber handling practices, and inability to strictly control kiln schedules due to small quantities involved);

Reliable Supply - Lumber will be available year-round in truckload quantities (12 to 15 MBF/load);

Brand Oregon - Lumber will be individually stamped or otherwise identified as a "Made in Oregon" product. Sales literature will be used with buyers to build and maintain the "Brand Oregon" concept. Promotional literature will be provided for appropriate retail sites.

Anticipated Uses - There are at least 12 proven or potential markets for the four different juniper proprietary grade (see Appendix A, *Proven and Potential Markets for Sawn Western Juniper*). Participants in the initial manufacturing flex net currently produce:

- Millwork (e.g. architectural doors, raised cabinet doors, flooring, paneling, fireplace mantles, and bar tops);
- Indoor Furniture (e.g. drawer lining, church furnishings, and various furniture items, such as blanket chests, benches, magazine racks, end tables, stools, cabinets, tables, dressers, bed head and foot boards, armoires, and gun cabinets);
- Store Displays (e.g. boxes, crates, chests, belt rack displays, blanket racks, neck blocks, display stands, and poster frames);
- Gifts and Awards (e.g. plaques, frames, stock for turning, and other mementos);
- Log Cabin Timbers;

Technological Advances - Juniper will be sawn and kiln-dried using results from studies and comparisons performed over the last 12 months (e.g. more conservative log choice and cutting patterns, and slower dry kiln schedules). Also important will be consistent utilization of results and standards developed within the last three years concerning log storage and lumber handling. Recovery increases on the order of 10% to 20% are expected.

Products and Services - Graded KD juniper lumber will be produced in standard and custom sizes. Services will include shipping and grading (if needed), inventory management, claims processing, and sales. Services are expected to include quality control and grading training by the end of Year 3.

Regulatory and Other Approval Requirements - None known for the inventory facility.

Legal and Technical Considerations - Supply of raw logs is not considered a problem for western juniper. Quality control issues, such as log quality, log storage, primary log breakdown guidelines, lumber handling, and kiln dry schedules, are being addressed through use of experienced personnel and tighter specifications.

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- B. Services Description (services will be provided for the most part by Bill Breedlove, current Western Juniper Industry Facilitator)

Inventory Management - Mr. Breedlove will arrange for and manage juniper KD lumber inventory.

Sales - Mr. Breedlove will be the primary contact for inventory lumber sales, claims review, and developing new markets for low-grade material and manufacturing falldown.

Quality Control and Grading Training - Scott Leavengood (OSU Wood Products Extension) and Mr. Breedlove will provide training to primary processors concerning saw log selection, log storage methods, primary breakdown guidelines and consistency, and lumber handling.

Dry Kiln - Mr. Breedlove, again with assistance from Scott Leavengood, will monitor dry kiln results.

- C. Process Description

Lumber Production - Logs will be obtained by Line Shack Log Cabin Kits (Prineville), primarily from company-owned land. Line Shack Cabin Kits will then produce high-quality cants from logs sorted for sawlog characteristics (e.g. lack of bark seams, minimum taper, and relatively fewer large knots). Cants will be shipped to Pacific Rim (Jasper) for resaw, drying, surfacing, grading, and packaging. KD lumber will be shipped to the inventory facility in Prineville. Juniper Products of Oregon, Inc., will purchase lumber for wholesale distribution.

Maximum inventory at the Prineville facility is estimated to be about 260 MBF at one time. This will require a facility of about 3,000 sq. ft. (assuming 16 ft. of functional storage height).

Tracking Information - Tracking information will be maintained concerning log origin, processor, specifications and grade results, and kiln schedule, as well as whether or not logs came from an operation reviewed and approved by a qualified, third-party rangeland restoration specialist.

Special Equipment Needed - No special equipment is needed. A forklift is on-site and will be rented on an "as needed" basis.

Part 3: Marketing Plan

- A. Market Size and Trends

Market Size - There are approximately 35 manufacturers who consistently produce value-added juniper products using KD lumber as a raw material. These manufacturers used approximately 300 MBF during the last 12 months (June, '98 - May, '99). All current

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known users of KD juniper lumber are in the Pacific Northwest. The majority of KD juniper lumber is used in the Bend-Redmond-Prineville area (estimated at 90%).

Anticipated Market Share - The *Central Oregon KD Juniper Lumber Inventory Project* is expected to service about 80% of the total KD juniper lumber market within the first 18 months. Market share is expected to decrease even as sales volume increases, due to the small size of the current market and expected market expansion. This is in line with the purpose of the project, which is to "increase the size of the pie".

Industry Growth Rates - Based on data provided by Bill Breedlove, Western Juniper Industry Facilitator, it is estimated that approximately 500 MBF of KD juniper lumber (*Premium, No. 1* and *Cutstock* grades) will be needed during the first year of operation (June, '99 - May, '00). This represents a sales increase of about 40% over the previous year. Approximately 720 MBF is expected to be sold during the second year of operation (28% increase in sales) and 835 MBF the third year (14% increase in sales). Growth rates will moderate as market size increases.

Market Trends - Current manufacturers will increase gross sales and use more juniper if they can obtain reliable supply and quality. Connolly Wood Products, for example, estimates they would have increased gross sales at least 50% last year given more reliable supply and quality. Reliable supply and quality will also encourage more manufacturers to introduce products made from juniper to prospective customers. The Industry Facilitator reports that at least three manufacturers are known to have dropped plans to add juniper product lines due to uncertain supply and inconsistent quality (estimated lost sales of over 600 MBF/year).

National and International Markets - Western juniper KD lumber is currently seen as a Pacific Northwest regional product, with some exposure to the international market because of Canadian manufacturer's interest in using juniper as a specialty wood product and a substitute for eastern redcedar (*Juniperus virginiana*, a close cousin of western juniper, *Juniperus occidentalis*). More effort will be devoted to the international market as inventory flow becomes more stable. Eastern redcedar will continue to occupy the commodity "fragrant" cedar market for most of the U.S. due to availability and economics.

"Green" Markets - There may be a small portion of the current eastern redcedar specialty wood products segment for which western juniper can compete if western juniper is positioned as a "green" product.

Influence of Outside Trends on Raw Material Costs -

- Watershed Restoration and Economic Development Subsidies - The bulk of western juniper processed into KD lumber for this project will come from pine and mixed-conifer thinnings, and watershed restoration projects. These types of projects are expected to increase in number and acreage over the next couple of years due to increasing legal, social, and political attention on watershed restoration. Government efforts to spur economic development in rural areas are

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also expected to continue. It is expected that these outside influences may result in a slight decrease in the cost of raw material (10%) due to government subsidies.

- Regulation of Juniper Harvest - The overall impact of regulation on raw material availability and costs is expected to be minimal. State agencies have offered to cooperate in clarifying regulatory issues affecting western juniper. A bill was recently passed by the Oregon Senate to require the Oregon Department of Forestry to review its regulations and programs, as well as programs administered by the Department for other state agencies, which affect juniper harvest. There are no known "threatened or endangered" species issues in commercial-quality western juniper woodlands ("commercial quality" is primarily related to how many and how tall trees will grow on a particular site).
- Taxation of Juniper Harvest - The Oregon Department of Revenue has issued a letter saying that one of the two taxes assessed at the time of harvest (Eastern Oregon Privilege Tax) will probably not apply to juniper because juniper has "negative stumpage value" (costs more to harvest than it is valued by the Department of Revenue). The Forest Products Harvest Tax, however, still applies when commercial operations are involved.

SB 1151 was recently amended to include a clause to exempt juniper from both the Eastern Oregon Privilege Tax and Forest Products Harvest Tax. It is unknown what will ultimately be decided by the legislature and Governor. The impact of the Forest Products Harvest Tax on sawlog operations is not expected to be significant, even if SB 1151 does not pass (less than 10 cents per commercial saw log at current tax rates and using Department of Revenue's conversion for small green chip logs under nine-inches in diameter).

- Harvest Technology - Harvest costs, a primary pricing issue for juniper logs, are expected to decrease as much as 30% to 40% over the next few years. Reasons for this include increasing economies of scale and improved harvest equipment (under development).

B. Competitor Analysis

Direct Competitors - There are no direct competitors for truckload quantities of KD graded western juniper lumber at this time. A few producers can provide small lots of green lumber (usually less than truckload quantities), but they lack dry kiln access, capital, and markets. Quality is also highly variable.

The only juniper sawmill capable of producing truckload quantities of KD juniper lumber on short-notice is under-capitalized, and in fact supports efforts to increase the size of the overall market, and find markets for lower grades and manufacturing falldown (letter available upon request from 4-Mac Industries, Dairy).

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Substitute Species - It appears that western juniper can be substituted for eastern redcedar for some applications (e.g. drawer and chest lining, and anti-moth drawer and closet accessories). Eastern redcedar (*Juniperus virginiana*) is a close "cousin" of western juniper (*Juniperus occidentalis*) from the Southeast U.S.

According to Bryant Niebur, Crosscut Hardwoods (Portland), No. 1 Common eastern redcedar (National Hardwood Association cedar grading rules) sells for about \$2.10/BF (dressed to 13/16 in.). Mr. Niebur says he sells about 500 BF/month. Overall, he estimates that his parent company (Emerson Hardwoods) sells about 10 MBF/month in the Pacific Northwest. The parent company buys eastern redcedar by the container load (about 16 MBF) for between \$1,000/MBF to \$1,100/MBF, delivered. Total sales of eastern redcedar in the Pacific Northwest are unknown. The market for eastern redcedar is seen as "mature" (not expanding to any great extent).

C. Target Market and Position Strategy

Target Consumer Market - There are several target consumer markets for KD graded juniper lumber, but all have at least three attributes in common: 1) Interest in something new and different; 2) Higher than average interest in raw material origin and story; and 3) Cost and quality must be competitive with comparable products, no matter what they are made from.

Direct Market - The direct market for the KD graded juniper lumber from this Project will be the two value-added manufacturers and the one wholesaler in the initial flex network (Connolly Wood Products, Pacific Rim, and Juniper Products of Oregon). Other manufacturers, wholesalers, and possibly retailers may eventually be added as initial demand is met.

Positioning Strategy - This project is designed to satisfy the need expressed by several key juniper manufacturers in the Central Oregon region and a number of their potential customers: A reliable source of consistent-quality, graded KD juniper lumber, available on short notice at a competitive price. There is no one else who can do this at this time. The "Brand Oregon" marketing concept will be emphasized as well as environmental stewardship.

D. Marketing Mix Strategy

Product Strategy - Provide a reliable source of consistent-quality, graded KD juniper lumber, available on short-notice at a competitive price. There is currently no one in the nascent western juniper industry who can do this. Manufacturers believe this is a key element to allow the expansion of the western juniper value-added industry.

Pricing Strategy - Cost of material will be comparable to other species and grades used for the same purpose. See table below for comparisons with other species. Mark-up includes a 14% assessment for inventory management, and sales/marketing assistance with lower grades and manufacturing falldown. A 2% discount applies to payments made for lumber within 10 days of delivery ("inbound discount of 2% 10 days"). Full

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payment within 30 days will be required for lumber sales from inventory ("sales at net 30 days").

Western Juniper KD Inventory Project Pricing Strategy (FOB Supplier)			
<i>Species</i>	<i>High Grade</i>	<i>Medium Grade</i>	<i>Low Grade</i>
Western Juniper	\$1,225/MBF (Premium)	\$1,050/MBF (No. 1)	\$625/MBF (Cutstock) *Note: Does not include "rustic" grade.
Knotty Pine	\$1,350/MBF (Superior)	N/A	\$525/MBF (Jacket Board)
Alder	\$1,450 (Clear)	N/A	\$510/MBF (No. 2)
Eastern Redcedar	\$1,400 (No. 1 Common)	N/A	N/A
Redwood	\$2,795 (Clear)	\$957 (Tight-Knot)	N/A
Western Redcedar	\$1,350 (Clear)	\$920 (Tight Knot and Better)	\$735 (No. 2 Common)

Promotion Strategy - Connolly Wood Products, Pacific Rim, and Juniper Products of Oregon, Inc., are responsible for their own promotion strategies. The Western Juniper Industry Facilitator will concentrate on developing markets for lower grades and falldown from manufacturing. Samples of lower grades and falldown will be distributed to prospective users, identified by existing manufacturers and previous Industry Facilitator contacts. The Industry Facilitator will partner with manufacturers and brokers in tradeshows when products utilize lower grades and fall-down.

Distribution Strategy - Graded, KD lumber will be shipped directly to manufacturers who are part of the initial flex network. The Industry Facilitator will work with other manufacturers, brokers, and retail outlets once existing flex net participant supply needs are satisfied. It is assumed that deliveries will be concentrated in the Pacific Northwest for the near future. Efforts to expand to international markets, such as the Far East, will be initiated as opportunities arise, and once a strong "track record" of reliable and quality supply is built.

Sales Strategy - The primary wholesaler for inventory will be Juniper Products of Oregon, Inc. The emphasis of this company will be to satisfy existing demand and known potential markets. Mr. Breedlove, Western Juniper Industry Facilitator, is expected to use the contacts and extensive networks he has created during the last three years to generate demand for lower grades and falldown. Manufacturers will be contacted who service previously-identified markets for lower grades and fall-down. These markets include:

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- Gifts and Awards (includes novelties, frames, etc.);
- Office Accessories (desk sets, frames, business card holders, etc.);
- Outdoor Accessories (raised bed planters, landscape beams, outdoor benches and tables, etc.);
- Horse and Barn (tack accessories, top stall boards, farm lumber, etc.);
- Funerary (cremation urns);
- Timber Frame Homes (timbers, etc.);

Terms of sales will be "net 30 days" (full payment within 30 days for lumber shipped from inventory). Typical order size is expected to be about 15 MBF (approximate truckload). Orders will normally be filled within five days, unless custom sizes are required.

Part 4: Business Organization

A. Management Team and Staff

Some of the most experienced players in the value-added sector of the western juniper industry are involved in this project:

Manufacturing Flex Network - The initial manufacturing flex net is composed of some of the most experienced players in the western juniper value-added industry segment (Connolly Wood Products, Line Shack Log Cabin Kits). In addition, Juniper Products of Oregon, Inc. has probably booked more orders for lumber and millwork than any other firm in the last two years, and Pacific Rim has more experience than any other dry kiln facility in Oregon using the latest juniper drying schedule research.

Key Personnel - Bill Breedlove, Western Juniper Industry Facilitator for the last three years, has agreed to head-up the inventory project. Mr. Breedlove has more contacts in the juniper industry than anyone else. He has been critical in managing the flex networks which account for probably 75% of the job production and sales attributed to juniper over the last three years.

Proven Oversight Team - The ad hoc Western Juniper Commercialization Steering Committee will provide strategic oversight, as it has done for the Western Juniper Industry Facilitator over the last three years and for development of the industry over the last seven years. Members represent value-added processors, primary processors, harvesters, artisans, private landowners, public land managers, scientists, economic development organizations, wood products manufacturer associations, and university extension.

Larry Swan, U.S. Forest Service.....

Mike Connolly, Connolly

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Mark Douglas, NW Forest Industries Howard McGee, 4-Mac Industries

Dennis Long, REACH, Inc.

Dennis Brock, NW Wood Products Assoc.

Scott Leaveng

Terry Anthony,

Brent McGregor, Rocky Mtn. TimberDevelopment Assoc.

Experienced Public Funding Administrator - The fiscal and reporting agent for public funding will be the Klamath County Economic Development Association (KCEDA). KCEDA has performed successfully over the last three years as fiscal and reporting agent for the Western Juniper Industry Facilitator contract.

B. Ownership

Inventory - Inventory will be owned by the public agencies funding this project, and considered collateral for the "low interest" Line of Credit. Inventory will be liquidated after three years to recoup grant funding contributions and loan costs.

Equipment - Forklift will be rented from warehouse facility owner on an as needed basis. No other equipment, except for miscellaneous tools and supplies, such as strapping steel and load protectors, will be needed.

Part 5: Operating Plan

A. Location

KD western juniper lumber will be stored in a Prineville warehouse at the North Main Business Facility in a 2,800 square feet, fully-enclosed, facility. The facility has large doors to permit loading and unloading trucks and all-weather access. Current rental costs of the facility are about \$0.35/ft. (about \$980/month), plus about \$175/month for utilities. Space is currently available and there is room for expansion if needed.

B. Labor Force and Costs

The contracted Project Manager/sales person will be Bill Breedlove, Western Juniper Industry Facilitator. Contract cost for his services and travel for the first 12 months is estimated to be \$36,000, not including administrative fees which may be added if grant money is obtained. Costs for Year 2 and Year 3 are estimated to be the same.

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Training will eventually be an important aspect of Mr. Breedlove's activities since so many problems have been associated with poor log choice, inconsistent sizes during production, poor handling of logs and lumber, and lack of access or knowledge about primary log storage, breakdown, and lumber handling research (paid for by previous Regional Strategy and U.S. Forest Service grants).

C. Inventory Procurement

The average cost per thousand board feet (MBF) for surfaced, graded, and packaged KD western juniper lumber inventory is estimated at \$850 (delivered to warehouse). Costs were calculated based on average prices paid for green western juniper lumber, kiln drying, and transportation as of late fall, 1998.

The ultimate objective is to turn-over at least 835 MBF/year, which would create an economically viable business and establish a source for reliable, consistent-quality KD juniper lumber. Purchases and sales will ramp-up from 600 MBF and 515 MBF respectively by the end of Year 1, to 835 MBF and 831 MBF by the end of Year 3. Inventory purchases will average about 80 MBF to fit kiln capacity and schedules at Pacific Rim. Maximum inventory will be about 265 MBF in November of Year 3 and minimum inventory will be 25 MBF in February of Year 1 (Letters of Intent for initial primary processor and dry kiln/remanufacturer facility available on request).

D. Start-Up and Sales

It will take approximately seven months to build sufficient inventory to meet projected demand during the winter/spring period when access to supply is limited, assuming the Project will begin in June, 1999.

Mr. Breedlove will be contracted to manage inventory and sales. He has more contacts and grading experience than anyone else in the western juniper industry. He is also trusted by manufacturers to balance private and public interests in a legal and equitable manner.

Mr. Breedlove will be under contract to move an average of approximately 40 MBF per month during the first year. Sales are expected to ramp-up from about 10 MBF/month in June, 1998 to 60 MBF by the end of 12 months (Letters of Intent from buyers are available on request). Average sales are projected to be about 70 MBF/month during Year 3. Previous experience indicates that sales will increase as a reliable supply of consistent-quality material is proven-out.

E. Long-Range Plans

This is a three-year project. Its purpose is to build sufficient sales so that the operation can be privatized. The goal is to increase sales to 835 MBF/year by the end of the three year project period.

**Central Oregon KD Juniper Lumber Inventory Business Plan
Part 6: Financial Plan**

A. Capital Requirements for First Three Years

Project Activity	Year 1	Year 2	Year 3	Total
1. WJ KD Inventory @ \$850/MBF (Year 1 = 600 MBF; Year 2 = 750 MBF; Year 3 = 835 MBF)	\$510,000	\$637,500	\$709,750	\$1,857,250
2. Wages: Project Management & Sales	\$36,000	\$36,000	\$36,000	\$108,000
3. Storage Facility (2,800 sq. ft.; Prineville; lease @ \$1,000/month; est. utilities @ \$200/month; 1st month includes 1st & last months rent;)	\$15,400	\$14,400	\$13,400	\$43,200
4. Equipment (rent on-site forklift @ \$250/month;)	\$3,000	\$3,000	\$3,000	\$9,000
5. Inventory Insurance	\$1,500	\$1,500	\$1,500	\$4,500
6. Miscellaneous Equipment and Supplies	\$1,200	\$1,200	\$1,200	\$3,600
7. Contingency Money (@ 10% of fixed costs which includes facility, equipment rental, tools & supplies, wages, and insurance)	\$5,710	\$5,610	\$5,510	\$16,830
8. \$250,000 Line of Credit Interest Expense (@ 3%)	\$585	\$394	\$356	\$1,335
TOTAL	\$573,395	\$699,604	\$770,716	\$2,043, 715

Central Oregon KD Juniper Lumber Inventory Business Plan

B. Financing Plan

Sources of Funding				
<i>Source</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Total</i>
Grant	0	0	0	0
Sales (@ \$970/MBF)	\$499,550 (sales of 515 MBF)	\$698,400 (sales of 720 MBF)	\$806,070 (sales of 831 MBF)	\$2,004,020 (sales of 2,066 MBF)
Inventory Liquidation at End of Year 3			\$101,150 (119 MBF @ \$850/MBF)	\$101,150
TOTAL	\$499,550	\$698,400	\$907,220	\$2,105,170

Central Oregon KD Juniper Lumber Inventory Business Plan

C. Projected Balance Sheet

Pro Forma Balance Sheet - First Three Years of Operation				
<i>Category</i>	<i>End of Year 1</i>	<i>End of Year 2</i>	<i>End of Year 3</i>	<i>Total</i>
Assets - Current	0	0	0	0
Cash (Sales) (*Year 3 includes liquidation value of remaining inventory = 119 MBF @ \$850/MBF.)	\$499,550	\$698,400	\$907,220	\$2,105,170
Inventory	\$72,250 (85 MBF in stock at end of Year 1)	\$97,750 (115 MBF in stock at end of Year 2)	0	\$170,000
Supplies	0	0	0	0
Assets - Fixed	0	0	0	0
Total Assets	\$571,800	\$796,150	\$907,220	\$2,275,170
Liabilities (No Equity)				
Liabilities (Operational Expenses)	\$573,395	\$699,604	\$770,716	\$2,007,715
Long-Term Liabilities	0	0	0	
Total Liabilities	\$573,395	\$699,604	\$770,716	\$2,043,715

D. Statement of Projected Operations and Cash Flows for First 12 Months (see next three pages)

Central Oregon KD Juniper Lumber Inventory Business Plan

Part 7: Risks and Weaknesses

A. Economic Climate and Market Changes

Sufficient market diversity exists for KD western juniper lumber to soften specific market segment downturns.

B. Reliance on Limited Sales Base

Approximately 100% of the first year's sales from inventory is expected to go to initial flex net participants (Connolly Wood Products, Pacific Rim, and Juniper Wood Products of Oregon, Inc.). This is considered an acceptable risk as long as manufacturers maintain a diversified customer base. It is possible that businesses could be sold or owners retire, which would create a short-term uncertain sales environment.

C. Accuracy of Assumptions

Assumptions used are conservative. Past history of the western juniper commercialization project indicates that sales projections are usually higher than assumed.

D. Unforeseen Cost Increases

Raw material costs are not expected to increase. In fact, they are expected to decrease slightly over the long-term. Increasing economies of scale are expected to exert downward pressure on costs.

E. Ill-Defined Markets for Lower-Grade Lumber

Markets for lower grade lumber are ill-defined. Lack of lower grade lumber markets will exert upward pressure on the price of higher grade lumber, and lower profits.

APPENDIX A

Proven and Potential Markets for Sawn Western Juniper (Broken-Out by Lumber Grade)

Premium, No. 1, and Cutstock

- Millwork (e.g. architectural doors, flooring, wall and ceiling paneling, closet lining, and fireplace mantles);
- Indoor Furniture (e.g. drawer lining, blanket chests, benches, magazine racks, end tables, and stools);
- Store Displays;
- Funerary (e.g. coffins and urns);
- Gifts and Awards (e.g. plaques, frames, pen sets, clocks, name tags, and other mementos);
- Home and Kitchen (e.g. cutting boards and knife holders);
- Home and Office Accessories (e.g. plaques, frames, pen sets, clocks, drawer and closet "anti-moth" products);
- Home and Garden (e.g. raised bed planters, outdoor benches and tables, planters, landscape beams, and radius-edge decking);
- Barn and Corral (e.g. tack accessories, and stall and barn lumber);
- Western Tack Accessories;
- Substitution for eastern red cedar in variety of markets (e.g. wholesale/retail outlets, "anti- moth" drawer and closet products, drawer and closet lining, paneling, and chests and chest lining);

Cutstock and Rustic

- Gifts and Awards (includes novelties, frames, etc.);
- Office Accessories (desk sets, frames, business card holders, etc.);
- Home and Garden (raised bed planters, landscape beams, outdoor benches and tables, etc.);
- Horse and Barn (tack accessories, top stall boards, farm lumber, etc.);
- Funerary (cremation urns);
- Timber Frame Homes (timbers, etc.);