

# Klamath Falls, Klamath County, Oregon

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## NEAI Projects\*

Year	Applicant	Project	Funding Source**	Amount
1994	City of Klamath Falls	Public facilities accessibility plan	CDBG	\$86,200
			USFS	33,000
1994	Klamath County	Mobility impaired accessories	CDBG	\$200,000
1995	Klamath County/ Klamath Community Development Corporation	Laminates/Fasttrack Publicly Owned Manufacturing Building	CDBG	\$500,000
			RDA	559,000
			USFS	250,000
			USFS	130,000
			OEDD	100,000
1997	Klamath Arts Council	Conger Heights Master Plan	USFS	\$10,000
1994	OIT/KCEDA	Smart Teams in Small Firms Seminar	USFS	\$2,000
1998	OIT	College Technology Project	USFS	\$15,000
1998	REACH, Inc.	Juniper shavings mill & secondary products manufacturing facility	OEDD	\$100,000
			USFS	40,000
1998	W. Juniper Commer- cialization Committee	Prototype juniper harvest equipment development & field testing	USFS	\$183,649
1994	Klamath-Lake Em- ployment Training Inst.	Retraining Program	JTPA	\$371,290
1995	OR Consortium	Dislocated Worker Training	JTPA	\$640,000
1996	Klamath Community Development Corporation	Commercial Development Plan	EDA-grant	\$60,000
1997		Televillage Project	EDA-grant	\$60,000
2000		Klamath County Telecenter	USFS-cag	\$235,000
1994	Klamath County Economic Development Association	World of Classic Cars	None listed	\$37,500
1994		Planning Assistance – Capacity Building	EDA-grant	\$60,000
1995		TA: Econ. Dev. Capacity Building	EDA-grant	\$60,000
1997		Economic Adjustment Strategy	EDA-grant	\$60,000
			RDA-grant	652,300
			RDA-loan	128,500
1997		Volcanic Legacy Scenic Byway	USFS	\$86,400
1998	Implementation Program	EDA-grant	\$60,000	
1994	Jobs-in-the-Woods	JITW Contracts	BLM	\$13,230
			USFS	61,250
1995		Klamath River Upper Basin Restoration	FWS	\$124,455

\* Project funding reflects initial loan and grant totals. Final funding amounts may be different.

\*\* Key to funding sources: CDBG=Community Development Block Grant, USFS=Forest Service, RDA=Rural Development Administration, EDA=Economic Development Administration, OEDD=Oregon Economic Development Department, JTPA=Job Training Partnership Act, BLM=Bureau of Land Management, FWS=Fish and Wildlife Service

## Background Context

Home to Crater Lake, Klamath County is the fourth largest county in Oregon and is part of the Klamath Basin, a depression formed by a huge prehistoric lake that covered south-central Oregon and north-central California. A remnant of the prehistoric lake at the eastern edge of the Cascade Mountains, Upper Klamath Lake is the largest body of fresh water in the Pacific Northwest covering over 133 square miles and providing habitat to a great variety of wildlife as well as irrigation water for local farmers. The Link River flows out of the southern end of the lake for about a mile until it enters Lake Ewauna, a small and narrow lake out of which the Klamath River begins its flow through south-central Oregon and northern California to the Pacific Coast.

Klamath Falls is located on the southeastern edge of Upper Klamath Lake, along the Link River, and on the east side of Lake Ewauna, about 18 miles north of the Oregon-California border. At an elevation of 4,100 feet in the Oregon high desert country, precipitation at Klamath Falls is only 13 inches per

year, summers are warm, and winters are mild but often snowy. A unique feature of the area is the underground supply of geothermal heated water, which is used to heat homes, businesses, and industry within the city limits.

While the City of Klamath Falls had a 2001 population of 20,940 persons, the Klamath Falls Metro Area (within the Urban Growth Boundary) population is 40,100, over 57 percent of the county population of 70,085. The local economy is based on the wood products industry, agriculture, manufacturing, service, and growing technology, commercial, and tourism industries. Klamath Falls is home to the Oregon Institute of Technology—an institution with a growing reputation for providing quality education in Oregon, the Merle West Medical Center—a major employer (over 1,100 employees), an international airport, and a U.S. Air Force Reserve airbase. The city also boasts the historic 800-seat Ragland Theater, a chorale, a symphony, an art association, and several museums.



The old part of Klamath Falls east of the Link River

## Historical Background

The Klamath Basin was the home of the Klamath, Modoc, and Yahooskin Band of Snake Paiute People for thousands of years. The six tribes of the Klamaths lived along the Klamath Marsh, on the banks of Agency Lake, near the mouth of the Lower Williamson River, on Pelican Bay, beside the Link River, and in the Sprague River Valley uplands. Modoc land encompassed the Lower Lost River, Clear Lake, and the territory that extends south to the mountains beyond Goose Lake in northern California. The Yahooskin Bands occupied the area east of Yamsay Mountain, north of Lakeview, and south of Fort Rock. Altogether, they once controlled 22 million acres of territory in south-central Oregon and northern California (klamathtribes.org 2002).

Sometime between 1825 and 1827, Peter Skene Ogden, Thomas McKay, and 35 others were the first white men to set foot in Klamath County. They stayed for six months, camped along the Link River, and trapped and explored for the Hudson Bay Fur Company. In 1846, the Applegate Trail, a southern cutoff of the Oregon Trail, opened up the Klamath Basin to hundreds of immigrants (Herald and News 1999:32, 83). When gold was discovered in southern Oregon and northern California in 1848, miners, settlers, and homesteaders began to carve up and take ownership of Klamath County's 6,000 square miles. In 1863, Fort Klamath was established at the northern end of Upper Klamath Lake, and when Linkville was established on the Link River in 1867 at the southern end of the lake, a ferry service developed between the Fort and the town (klamathcounty.net 2002).

The Klamath Reservation was established in 1864 and the Modocs, after a long history of hostilities with encroaching settlers, agreed to move to the reservation. Unable to co-exist with their traditional enemies, the Klamaths, the Modocs fled the reservation in 1865, returned briefly in 1869, but left finally in 1870. The war began in November 1872 when the army tried to force Captain Jack's band, camped on Lost River, back to the reservation. The Modocs fled to "The Stronghold"—a vast lava bed honeycombed with outcroppings, caves, and caverns, and the army was unable to dislodge them until April 1873. The

Indians fled south but, lacking supplies and horses and badly outnumbered, were defeated at Sorass Lake in northeastern California on June 1, 1873. Captain Jack and three others were hanged, and the rest of the Modocs were relocated back to the Klamath Reservation (Beck and Hasse 2002).

After the Modoc Indian War, ranchers, farmers, and business-people began to settle the area in earnest, and Klamath County was created October 24, 1874 (Herald and News 1999:32). As Linkville grew to encompass its neighbor, Altamont, residents renamed it "Klamath Falls" in 1893, after a shallow, staircase-like waterfall on the Link River. The falls were submerged when the river was dammed for power and irrigation (klamathcounty.net 2002).

## Economic Background

From early settlement through the 1980s, the economy of Klamath County was based on ranching, logging, and agriculture. The Southern Pacific Railroad line was finished in 1909 and brought with it passenger service. When a railroad line was opened to Eugene, Oregon in 1926, the Southern Pacific line through Klamath Falls, halfway between San Francisco and Portland, became the main north-south route on the west coast (Herald and News 1999:14A-15A). Thus, in the 1920s Klamath Falls became the fastest growing city in Oregon (Herald and News 1999:39). The president of Southern Pacific built the White Pelican, a "magnificent hotel," which "set the stage for a building boom, which turned Klamath Falls into a playground for wealthy San Franciscans." By the 1930s Klamath Falls boasted six "magnificent theaters, some for movies, others for live performances (klamathcounty.net 2002)."

## Timber

The railroad also opened up opportunities for logging. Two years after the railroad reached Klamath Falls, the Pelican Bay Lumber Company opened and began "lumbering in the county in a truly modern sense." The Pelican Bay Lumber Company was the largest in the county until the Ewauna Box Company (established 1912) equaled them in size by 1926 (Herald and News 1999:2). Box factories added planing mills, lumber companies added box factories, and

at one time there were dozens of sawmills and wood products factories in Klamath Falls and surrounding communities. Many burned and were never rebuilt. Others simply closed and sold their equipment and/or their timberland. Others were purchased by or merged with larger companies (Lamm 1944). By the 1990s, only two dominated in the Klamath Falls area—the Weyerhaeuser Lumber Company and the Modoc Lumber Company.

As early as 1904, Weyerhaeuser Company representatives had examined the timber belt between Klamath Falls and Pokegama, about 25 miles west of Klamath Falls. The company purchased the Pokegama Sugar Pine and Lumber Company in 1905 and by 1908 owned more than 158,000 acres of timberland in Klamath County (Drew 1979:6-11). Four miles southwest of Klamath Falls, Weyerhaeuser built the biggest sawmill in the county, a planing mill, and a box factory in 1929. Employees increased from 29 to 500 in just six months, and, in 1971, a fiber mill, plywood plant, and a particleboard plant were added (Drew 1979:6-57). By the mid-1970s, Weyerhaeuser employed 2,300 Klamath Basin residents with an annual payroll of \$30 million, paid \$3 million in property taxes annually, and was referred to as the “Big Brother” of Klamath County by the Klamath Falls Herald and News (Herald and News 1976:31). Layoffs in the timber industry starting in the mid-1980s left only 1,100 Weyerhaeuser employees by the early 1990s, less than half the number employed during the 1970s (Weyerhaeuser Brochure, n.d.).

J. Royal Shaw and a partner organized the Shaw-Bertram Lumber Company in 1920, added a box factory in the mid-1920s, and liquidated the company during the Depression of the 1930s. After World War II, he and his two sons leased the old Ackley Mill on Link River, but in 1946 one of the sons bought them out and organized the Modoc Lumber Company—the only lumber mill located within the Klamath Falls city limits. By 1979, Modoc Lumber Company employed 175 people (O’Connor 1979: 27-28), and in the 1990s it was the fifteenth largest employer in the Klamath Basin (Culverwell 1995:1).

The timber industry recession of the 1980s and the reduced harvests on federal land during the 1990s nearly halved the industry workforce. In

1980, 4,370 people were employed in the timber and wood products industry throughout the Basin, but by 1998 that number was 2,690. In 1990, Weyerhaeuser laid off 388 workers and shut down two of the four main headrig saws. In 1992, the sawmill was shut down for good and 320 employees were laid off, and in 1996, the operation was sold to Collins Products (Herald and News 1999:17A), which closed the plywood mill and now employs 550 people (Klamath Falls Community Profile 2002:4). In 1995, Modoc Lumber Company laid off its 165 workers and closed, citing dwindling timber supplies, costly equipment upgrades to meet new clean-air standards, imports from Canada, and a “booming southern yellow pine industry” (Culverwell 1995:1-2). The closure of Modoc Lumber Company left Thomas Lumber Company as the only sawmill operating in Klamath Falls at the time (Kepple 1995:2).

Thus, the decline of the timber industry hit south central Oregon particularly hard. In only 18 months during 1990 and 1991 nearly 1,200 jobs were lost in the timber industry throughout the Klamath Basin (Swan 1998). Both Klamath and Lake Counties experienced population declines during the 1980s (Sicard 1999:5) as people had to leave the area to find work. During the same period the number of persons below the poverty level increased by 30 percent between 1979 and 1989 (Oregon Benchmarks Statistical Overview 1996:16).

The population losses ended in 1986 with a strong return of lumber and wood products, which produced an upsurge in economic activity. However, in the 1990s the area was hit again by job losses in the still sizeable timber industry as, throughout Klamath and Lake Counties, reduced timber harvests on federal land contributed to the loss of 810 jobs in the lumber and wood products industry, 250 jobs in federal employment, and job losses in businesses that supplied services and products to the wood products industry (Sicard 1999:7-9).

Several factors, however, mitigated the impacts somewhat:

1. Mill workers were laid off over a period of years, not all at once.

2. The Klamath Lake Employment Training Institute was already retraining dislocated timber workers.
3. The local economic development community had begun the process of diversifying the economy.

### **Key Issues**

The singular, most important issue in the Klamath Falls area was the declining timber industry that resulted in high unemployment. In response, the

economic development community focused on diversifying the economy and training/retraining the workforce. New businesses were recruited, industries were developed, and workers were trained for the new jobs. NEAI funds were strategically used to develop the industrial, commercial, telecommunications, and tourism industries as well as the still emerging ecosystem restoration sector (juniper removal and commercialization). Other projects were also funded through the NEAI, but the primary focus was on economic diversification and job creation.

## **NEAI Programs and Projects**

### **Community Economic Revitalization Team (CERT)**

Prior to the Northwest Forest Plan and the implementation of NEAI, much of Oregon was organized into Regional Strategies Boards under the direction of the Oregon Economic Development Department (OEDD). Regional Strategies Boards represented one or more counties and were comprised of elected officials, industry members, and, sometimes, private non-profit organizations and private citizens. Every two years county commissioners would collect proposals from various municipalities and organizations and submit them to the Board for prioritization, sometimes going through several prioritization rounds. The prioritized proposals would then go to OEDD for another prioritization process. If OEDD approved a proposal, funding for the project would come out of state lottery funds, and the local Boards would distribute the money.

From 1988-1996, OEDD and the Regional Strategies Boards focused on key industries, e.g., tourism or agriculture. In 1996, the focus changed from key industries to distressed rural communities, and by 1998 the Regional Strategies approach had been replaced by the Regional Investment Program and Regional Investment Boards. Applicants go through a similar process, but now the Oregon Economic and Community Development Department (OECDD, formerly OEDD) takes the prioritized application to other potential funders by means of a meeting in Salem of numerous federal and state agencies. If a project matches the objectives of one or more fund-

ing sources, a funding agency is selected as the lead to work with the project contact. Projects submitted from both the Regional Investment Program and the CERT process are often considered together at this annual “one-stop centralized meeting.”

The Central Oregon Intergovernmental Council (COIC) out of Redmond, Oregon, administered the Regional Strategies Program in Klamath County from 1993 to 1999 because the local organizational capacity was not in place to take on the required fiscal, administrative, and planning activities. By the time the Regional Strategies Program became the Regional Investment Program, the South Central Oregon Economic Development District had been formed and was able to assume facilitation responsibilities for both Klamath and Lake Counties. On the other hand, the annual CERT process in south-central Oregon was administered by the Klamath County Economic Development Association. Klamath County Economic Development Association facilitated the process of gathering, categorizing, and assisting in the prioritization process for the communities of Klamath County and was very active in the formation of the Community Action Teams that would represent rural communities in the CERT process. Despite the termination of the NEAI Program, the state has continued the CERT process in tandem with the Regional Investment Program.

Although cities and counties were well-represented in the CERT process, the widely dispersed and unincorporated rural communities in the Klamath

Basin were not. The 1990 Farm Bill (Chapter 2, Section 2375) and a 1993 amendment with the support of Rural Community Assistance funds enabled the Forest Service to conduct a “herculean” (according to a Klamath County Economic Development staff) effort to organize those communities in the early 1990s into Community Action Teams. The organization of the Community Action Teams was supported by the County Commissioners and the Economic Development Director for the City of Klamath Falls, who, according to the Rural Community Assistance Coordinator for the Forest Service, “knew that the economic viability of the city was strongly tied to the economic health of the surrounding rural areas that do business in the city.”

Coordinators from the three National Forests in the county (Winema, Fremont, and Deschutes), with the assistance of the Klamath County Economic Development Association, organized Community Action Teams in Bly, Bonanza, Chiloquin, Crescent, Crescent Lake, Fort Klamath, Sprague River, and Modoc Point. The Community Action Teams were assisted in the development and implementation of community action plans, they prioritized projects from the community and the surrounding hamlets within their geographically delimited areas, and they were represented in the county-wide prioritization process. Thus, rural communities gained a voice in the CERT process along with the municipalities and continue to participate in the Regional Investment Program in much the same manner.

While representatives of the municipalities, Community Action Teams, and other organizations continue to prioritize proposed projects at the annual, county-wide meeting, the County Commissioners have the final say. Usually the commissioners accept the list as proposed, but occasionally they do change it. Finally, the list is sent to the state, a meeting of potential funding agencies is convened, and the list is reviewed. Projects are funded on the basis of available and appropriate funding. While projects are often funded by three or four agencies (a “consortium”), occasionally high priority projects are not funded because of the lack of money or appropriate programs in which to fit the project.

## **NEAI Projects**

### *Accessibility Projects for the Mobility Impaired*

In the aftermath of the earthquake and aftershocks during the fall of 1993, both the City of Klamath Falls and Klamath County had to rebuild and repair some of the municipal buildings. At the same time (1994), both municipalities received Community Development Block Grants (CDBG) to remove barriers for the estimated 677 persons who were mobility impaired in the city and 1,799 mobility impaired persons throughout the county. In addition to the CDBG Grant, the City received a Forest Service Community Assistance Grant.

The City of Klamath Falls used the grant money to make changes in the city buildings, public facilities and transportation. Forty handicap ramps or “curb cuts” were installed along various street intersections within the central area of the city, the public restrooms were renovated at Veterans Park, restroom facilities and parking were constructed at Putnam’s Point, and an electromagnetic address system for hearing impaired customers was installed at the Klamath Falls Airport.

The CDBG grant helped the County move forward with its plans to upgrade portions of 10 county buildings including the Courthouse Annex, Mental Health Building, and Juvenile Hall. Construction work included the installation and renovation of elevators, the installation of electric doors, the addition of ramps, and the remodeling of restrooms.

### *World of Collector/Classic Cars*

During 1994-1995, Klamath County and the Klamath County Economic Development Association hoped to generate two to three jobs by attracting a husband-wife team from California to the area, who produced a half-hour Public Broadcasting Service television show on old cars around the country. The loan was for cameras and other equipment with the understanding that the show would be filmed in the Klamath Falls area. The couple wanted to develop an ongoing relationship with the Oregon Institute of Technology, but apparently the President of OIT at the time was not supportive. They left after only one year, but did pay back the loan.

*Conger Heights Master Plan*

The Conger Heights project is a collaborative effort between The Klamath Arts Council and The Klamath Tribes to provide a facility for the appreciation and instruction of Native American arts common to the Tribes of the Klamath area. The facility will be located on approximately 15 acres on an irregularly shaped ridge located east of Link Canyon and the Link River and west of Highway 97 within the Klamath Falls city limits. The area was once a permanent Klamath village and a trading and meeting center for all three Klamath Tribes (Klamath, Modoc, and Yahooskin). It was also the birthplace of Winema, the Indian princess.

The goals of The Tribes and The Council are to provide a culture-based facility in which the community, school children, and tourists can learn more about native cultures and lifestyles as well as native plants and their uses; where artists can be taught native art methods; and where tribal peoples have a venue to create, exhibit, and market their work. The site will be called Eu La Lona, meaning “all along the top,” and will include an artist-caretaker residence, a Winter House Studio and a Summer House Studio to be used for classes and workshops, and a Cultural Center for exhibits, gatherings, special events, and large meetings. In addition, hiking and interpretive trails are planned, and the land will provide areas for solitude and for special events such as weddings and pow wows. The full time artist-in-residence will conduct classes in his/her expertise, develop and expand his/her abilities, and serve as caretaker.

In 1997, the Klamath Arts Council received a \$10,000 grant from the Forest Service Rural Community Assistance Program to complete a site survey, to develop a master plan that included architectural drawings, and for informational marketing materials. The City donated the land to the Tribes and the Council, but tribal land is put in trust and cannot be co-owned. Since The Tribes have had to deal with a contested election, changes in personnel, the struggle to regain their reservation, and the recent Klamath River conflict over water rights, the deed has not yet been transferred and progress on the project has been delayed. When these issues have settled to more manageable proportions, the project will move forward.

*Oregon Institute of Technology Projects*

The Klamath Airport was a United States Naval Airbase during World War II. After the war, veterans with tropical diseases were housed there because the climate was believed to be conducive to healing. While there, the Navy decided that the veterans should get some vocational training, and so a technical school was formed under the auspices of the Oregon State Board of Education in 1946. In 1947, the school was named Oregon Vocational School and offered courses in auto mechanics, welding, cooking and refrigeration. In 1948 the name was changed to Oregon Technical Institute, and in 1960 control was transferred to the State Board of Higher Education. During subsequent years a new campus was built; full accreditation was gained; a nursing program was offered as well as bachelor's degrees in civil, electrical, and mechanical technologies; the vocational programs were dropped; and the name was changed to Oregon Institute of Technology (Herald and News 1999:13A).

The Oregon Institute of Technology (OIT) has been involved with business and industry from its inception and teaching its students industry-relevant skills. The most recent president is very committed to regional economic development, has cultivated relationships with a broad network of communities and organizations, and formed the OIT Economic Development Committee. OIT is now a partner in many of the economic development projects throughout the county: retraining workers referred by The Work Connection, helping to develop the Televillage Project, having a representative on Team Klamath, and so on. The two projects funded directly by the NEAI were the Smart Teams in Small Firms Seminar (1994) and the College Technology Project (1998).

*The Smart Teams in Small Firms Seminar*

The Smart Teams in Small Firms Seminar developed in partnership with the Klamath County Economic Development Association (KCEDA) in 1994. Representatives of the economic development community, government agencies, businesses, and OIT gathered for a presentation by Stuart Rosenfeld of The Aspen Institute in Washington, D.C. Rosenfeld had authored a small book entitled Smart

Firms in Small Towns (1992) that illustrated business and marketing trends, methods of modernizing and increasing the competitiveness of small and rural businesses, “best” or “promising” practices around the country, and the benefits of public-private partnerships. The strategies propounded were (1) to develop interfirm cooperation in order to maximize efficiencies for small businesses; (2) to organize services for specific industrial sectors; (3) to develop industrial extension services; (4) to link small businesses with technical, community, and regional colleges; and (5) to apprentice youth through secondary education (Rosenfeld et al. 1992). Copies of the book were distributed to the participants after the seminar.

### *College Technology Project*

The College Technology Project (1998-1999) was a natural follow-up to the Smart Teams in Small Firms seminar and the result of the OIT President’s and KCEDA Executive Director’s interest in “industry clustering”; that is, focusing economic development efforts on “clusters” of related businesses within a specific industry or sub-industry. The primary objectives were to catalog and integrate OIT’s assets and strengths and to analyze growing industry clusters with requirements that matched OIT’s competencies. The economic development community would then focus efforts on attracting new and developing existing businesses within those industry clusters.

“An Assessment of Institutional Core Competencies in Support of Industry Cluster Analysis,” conducted by the Chair of the OIT Economic Development Committee, concluded that the primary strengths and potential for cluster development were background, teaching, and research interests of the OIT faculty in telecommunications, environmental technologies, medical equipment, and industrial machinery. In addition, computer management and management information systems technology had potential in the development of other industrial clusters (Forest Service Report 2000).

A private consulting firm was hired to do the industry cluster analysis. The consultant selected potential industry clusters for analysis on the basis of the teaching and research competencies of OIT faculty and staff and then looked at the demographics

of those industries; that is, employment growth, rate of growth, and concentration in the western states. Those industry clusters included: (1) horticultural industries that include the soil sciences but not necessarily agriculture (agriculture was not deemed suitable as an economic development target); (2) the primary metals industry related to machinery and equipment manufacturing; (3) communications including hardware manufacturing and service provision; and (4) utility sectors that reflect OIT research work in solar energy, water quality, and solid state waste combustors. Despite considerable variation in the consultant’s findings in production, marketing, employment, and other trends, all of the selected industrial clusters had good potential as economic development targets for the county (Applied Development Economics 1999). Thus, the College Technology Project helped the economic development community focus on the area’s needs and strengths.

### *Klamath County Economic Development Association*

The Klamath County Economic Development Association (KCEDA) is a quasi-governmental organization that administers the Overall Economic Development Program in Klamath and Lake Counties. KCEDA played an important role in the establishment of the Community Action Teams in the rural areas of Klamath County in the early 1990s, it facilitated the CERT process, and it has been a leader in economic development strategic planning, partnership development, and project implementation. KCEDA also acts as a primary leader in business recruitment to the area and as a coordinating and referral agency to direct prospective employers and expanding businesses to institutions or training programs—such as the Oregon Institute of Technology, Klamath Community College, and the Klamath-Lake Employment Training Institute—that can provide the appropriate training service for both employers and employees.

KCEDA received \$60,000 per year of NEAI monies through EDA grants from 1994 to 1998 that were used to enhance economic development by building capacity. The NEAI funds helped pay salaries and administration costs that are now partially funded through the Regional Investment Program.

KCEDA's major accomplishments in capacity-building are the establishment of the South Central Economic Development District in 2001, and the organization of the Klamath Community Development Corporation as an officially recognized 501(c)3 non-profit corporation in 1997.

*Klamath County Commercial Development Plan*

The Klamath County Commercial Development Plan was funded in 1996 through a \$60,000 Economic Development Administration grant and completed in 1997 by the Klamath County Economic Development Association. The Plan included an inventory and analysis of existing commercial business, a marketing and targeting strategy for business recruitment and expansion, and a beginning strategy for regional cooperation in commercial attraction. The population demographic data for the two-state (Oregon, California), four-county area (Klamath, Lake, Modoc, Siskiyou) were gathered to indicate the actual consumer and labor base in the region. Local businesses were surveyed in order to discover their needs, the commercial trading area was identified, the transportation system described, income and employment trends indicated, and a myriad of other data was compiled such as higher education and workforce training resources. The results were:

1. An economic development focus on telecommunications, tourism, and transportation.
2. A promotional tool with which to recruit business and industry to the area.
3. Identification of potential "power centers" or "single-destination sites (as opposed to mixed uses housed on site or within a mall), that are automobile-oriented, and composed predominantly of stores large enough to be considered 'category killer' such as The Home Depot, etc.(KCEDA 1997:119)."

The Klamath County Commercial Development Plan and the Assessment of Institutional

Core Competencies in Support of Industry Cluster Analysis—the product of the OIT College Technology Project—provided the groundwork upon which businesses could be attracted to the area. The Commercial Development Plan also instigated regional cooperation regarding the recruitment of businesses to the area. Traditionally, economic development and information dissemination in Klamath County was divided into three separate entities. The Klamath County Economic Development Association was responsible for industrial development, The Klamath County Chamber of Commerce was responsible for commercial development, and The Klamath County Department of Tourism was responsible for tourism. The Plan proposed collaboration and coordination between these and other organizations.

Over time, Team Klamath emerged – a group of representatives from the Chamber, the County and City, The Work Connection, Oregon Institute of Technology, U.S. Forest Service, and others with KCEDA usually, but not always, taking the lead and coordinating business recruitment efforts. The team was loosely organized, meeting whenever the need arose and meetings attended by representatives of only the organizations relevant to the project at hand. Around 1997-1998, Team Klamath was formally organized. Now monthly meetings include the Mayor, City Council, City Manager, Klamath County Commissioners, representatives of Klamath Falls Community College and OIT, business people as well as the Klamath County Economic Development Association, The Work Connection, and the Chamber of Commerce. Other meetings continue to be held irregularly as the need arises (i.e., a business is interested in relocating to the area). KCEDA does the background research and calls for a meeting of the business with an individual representative of an organization or with the team, the composition of which changes depending on the business needs.

The Klamath County Commercial Development Plan concentrated more on commercial development and provided the data upon which businesses could be persuaded to locate to the area. The focus on industrial and commercial development, telecommunications, tourism, and transportation proved to be fruitful. The industrial focus led to construction

of an industrial building and the attraction of several major telecommunications companies; the focus on commercial development led to the attraction of Applebee's, Wal-Mart, Staples, Big 5 Sporting Goods, Albertsons, and, recently, The Home Depot to Klamath Falls; the focus on telecommunications led to the Televillage/ Telecenter project; and the focus on tourism and transportation led to the volcanic Legacy Scenic Byway project.

#### *Industrial Development*

The Klamath Community Development Corporation was organized for the sole purpose of constructing and administering an industrial building. International Paper had been recruited, and a 57,000 square foot building was built in 1995 to International Paper's specifications. Multiple partners were involved with grants and loans from Forest Service Rural Community Assistance funds, from Regional Strategies lottery funds, from Old Growth money routed through the Oregon Economic Development Department as Strategic Reserve Funds, from a CDBG grant, and from local banks. The building was constructed on city-owned property outside the city limits but within the Urban Growth Boundary across the road from Kingsley Field, Klamath Falls' International Airport.

International Paper agreed to provide 70 jobs, but wound up creating only 13, and went out of business in Klamath Falls after only five years. The Strategic Reserve Fund loan to Klamath Community Development Corporation was forgiven, and the Regional Strategies loan was paid back on a pro rate basis that was attached to job creation and was returned to the state. Recognizing that International Paper was going out of business, the economic development community had sufficient time to recruit Thermo-Pressed Laminates (TPL) based in Portland, a competitor of International Paper. TPL has created 22 jobs, and the CDBG loan is being repaid through the lease agreement with Klamath Community Development Corporation. According to the Director of Klamath County Economic Development Association, Thermo-Pressed Laminates has done much better than International Paper and are "great citizens" of the community.

#### *Telecommunications Development*

According to the Chair of OIT's Economic Development Committee, telecommunications was a "hot issue" in 1996 and 1997, but at the time Sykes, a high tech support service, relocated to Klamath Falls there were no fiber optic connections. OIT and Klamath County Economic Development Association partnered with Lane Community College in Eugene, Lake County, and others to bring a fiber optics connection in from Medford. In 1997, however, the connection was only to Sykes while people in the rural areas would be charged for a long-distance call to access the Internet.

The idea of a telecenter/televillage was conceived, in which a facility would be constructed to serve as a hub ("telecenter") of a South Central Oregon telecommunications network ("televillage"). The telecenter was envisioned as a one-stop center for workforce training, higher education, technology transfer, and business development. Tenants would include the Klamath-Lake Employment Training Institute (The Workforce Connection), an Oregon Institute of Technology Applied Technology Center, Klamath Community College computer labs, long-distance learning classrooms, and economic development agencies. State-of-the-art telecommunications equipment would enable direct service delivery to remote sites around the county. In addition, the facility was to be an urban redevelopment project located on the abandoned Modoc Lumber Company mill site.

Implementation of the project ran into some problems, however. There was some difficulty obtaining the land and building a facility. Purchasing equipment would have resulted in a multi-million dollar project; the monthly bill from the telephone company would have been over \$1,000 per month. Then it took considerable time for the multiple partners to find a practical way for the facility to accommodate everyone's needs. When the partners learned that the telephone company charged high schools only \$100 per month, they used the grant money to install two-way, audio-visual telecommunication systems and computers in every high school and two junior high schools in Klamath County as well as in a Lakeview site. "We were so pleased with

ourselves that we didn't know what to do," said the KCEDA Director. The only drawback, he points out, is that the high schools are only open from 9 AM to 3:30 PM during weekdays, so public access is difficult. "But the kids get it."

Despite the obstacles, the telecenter/televillage concept continues to be pursued under the coordination of Klamath Community Development Corporation. The partners are trying to do a smaller version of it in an existing historic building. Nevertheless, they consider what they have accomplished in the high schools "a notable success."

#### *Tourism Development*

NEAI funds supported efforts to designate approximately 130 miles of county, state, and interstate roads west of and including a short section of U.S. Route 97 as a Scenic Byway with "All American Road" status. The Volcanic Scenic Byway begins at Diamond Lake Junction, about halfway between Bend and Klamath Falls on Highway 97, circles Crater Lake, passes through Fort Klamath, follows the western edge of the Upper Klamath National Wildlife Refuge and Upper Klamath Lake, meets Highway 97 again at Klamath Falls, continues south along Highway 97 between Bear Valley and Lower Klamath National Wildlife Refuges, and ends on the Oregon-California border where the Applegate Trail can be observed.

The Volcanic Legacy Byway is the product of multiple parties and organizations such as KCEDA and the Klamath/Lake/Modoc/Siskiyou Outdoor Recreation Working Group, which originated and organized the cooperative efforts to obtain the Volcanic Scenic Byway designation and "All American Highway" status. The Working Group was organized in 1991 to address the lack of a coordinated regional outdoor recreation strategy. Members include over 130 government, non-profit, and private businesses from the two states and four counties covering about 20,000 square miles. Approximately 20-25 public and private interest representatives meet regularly, and a quarterly meeting of County Commissioners and Supervisors from the four counties is facilitated by the Working Group. In addition to the Volcanic Legacy Byway project, the Working Group has

conducted market research, produced an outdoor recreation brochure series, set up highway rest stop displays, and facilitated other projects.

NEAI funds, administered by the Klamath County Economic Development Association in partnership with Klamath County Chamber of Commerce, were used for travel to Washington, D.C. to obtain the designation, to design and distribute posters and brochures, to produce a 10-minute promotional video, and to strategically locate corridor signs. The Volcanic Legacy Byway has a website and is included in "Off The Beaten Freeway: A Guide To Oregon's Scenic Byways" published by the Oregon Department of Transportation and the Oregon Tourism Commission, and is available in every tourist information center and many hotels throughout Oregon and northern California.

According to the Director of Klamath County Chamber of commerce, the Volcanic Legacy Byway is "a great benefit" to the area as many people want to drive one of the few All American Highways in the country. After they have driven the byway, people have come back for maps so that they can see more of the area. Thus, the investment of NEAI funds in this project will continue to benefit the area for years to come.

#### *Klamath-Lake Employment Training Institute, Inc.*

Klamath-Lake Training Institute, Inc. was awarded \$371,290 in 1994 and \$640,000 in 1995 through the Job Training Partnership Act for dislocated worker training in Klamath and Lake Counties. The Oregon Consortium, a Corvallis-based umbrella organization, administered funds from the Job Training Partnership Act and now administers the Workforce Investment Act funds to 23 rural and coastal counties in Oregon. In Klamath County, the Co-Administrative or Program Office for the Consortium is the Klamath-Lake Employment Training Institute, Inc. The Klamath-Lake Employment Training Institute was organized as a non-profit corporation in 1994-1995, and The Work Connection, the Linkville Alternative Education Center, and the Open Learning Center in Klamath Falls are its subdivisions.

The Klamath-Lake Employment Training Institute approach to employment training is unique in

the state of Oregon in that it combines evaluation services, a training program, an employment service, and a state Department of Employment office under one umbrella and serves both the workforce and the employers. A person looking for a job can walk in and receive services without an appointment, or a representative of the program may go to a company about to layoff workers and talk to the employees to discuss work options. Either way the institute offers a true “one-stop shopping” service that includes:

- Educational and vocational training
- Employment connections
- Career resources
- Community resources referral
- Internet access
- Job preparation and resume writing
- Labor market information
- Computer software and assistance
- Fax and copy machines
- Unemployment insurance

According to the Director of The Workforce Connection, they are “customer focused” and create programs based on community needs. Not only do the programs serve the workforce by evaluating, training, and helping people find jobs, but they also act as a quasi-human resource department for local employers. The Work Connection helps businesses find employees, trains managers, and works with Oregon Institute of Technology and other institutions to develop skill enhancement training that is tailored to employers’ needs. In 2000, when the Job Training Partnership Act was replaced by the Workforce Investment Act, the Klamath-Lake Employment Training Institute was restructured in order to be more responsive to businesses. The board became dominated by business owners, focus groups were conducted with local business owners (“their customers”), and programs were developed on the basis of business needs.

Layoffs in the timber industry started in 1986, but the main closures hit Klamath County in the early 1990s affecting not only the mills, but also the

logging companies, trucking companies, machining companies, and so on. According to The Workforce Connection Director, “It was very difficult at first. People didn’t believe the decline was permanent, so it was a hard sell to work with them. Once it [the timber industry decline] set in, it was less of a hard sell to work with employees.” Of the many hundreds of dislocated timber workers served through the program,<sup>1</sup> about 60 percent received long-term training, while the others relocated or found local employment.<sup>2</sup> Of the 60 percent in long-term training, about 90 percent found jobs at the same pay as in the mills or more, although “some had to leave town for it. We placed the workers and then mentored the hell out of them.” All,” she says, “are still working.”

#### *Ecosystem Restoration: Western Juniper Projects*

There are over 2.2 million acres of western juniper (*Juniperus occidentalis*) woodlands in eastern Oregon of which at least 100,000 acres are in Klamath County. Over 95 percent of the trees are less than 100 years old. Major factors contributing to the increase in trees since the 1800s are believed to be

1. Over-grazing in the late 1800s, which reduced fine fuels and, therefore, the extent of the natural fires that destroyed juniper seedlings and saplings;
2. More aggressive fire control policies and measures beginning in the early 1900s; and
3. Above-average precipitation in the early 1900s (Swan et al 2000:1).

Dense stands of juniper intercept what little precipitation occurs in eastern Oregon during the winter and prevent moisture from reaching the ground. Juniper out-competes other native flora and absorbs large quantities of ground water with its widespread root system. Many areas show “evidence of watershed degradation, loss of site productivity, decrease in forage production, loss of wildlife habitat, and overall reduction in biodiversity.” Since proper juniper management (reduction or harvest) can significantly

1. Estimates of the numbers served range from 800 to 1,000.

2. Note that the mid-1990s was when the Klamath County population decreased.

increase forage yields, improve wildlife habitat, increase overall biodiversity, and significantly reduce soil erosion (Swan et al. 2000:2-3), the management of western juniper woodlands is of interest to many organizations and individuals east of the Cascade Mountains and beyond.

The NEAI contributed funds for the Western Juniper Commercialization Project to develop and test prototype juniper harvesting equipment, for the purchase of a juniper shavings mill, and for an effort to identify potential markets for juniper products. More importantly, about \$100,000 of NEAI funds was used by the Winema National Forest to pay for the Resource Specialist's time spent coordinating and facilitating the project. The funds were leveraged with four to five times the amount from Regional Strategies lottery funds and Old Growth-Strategic Reserve Funds, both sources managed by and distributed through the Oregon Economic Development Department. In addition, an equal amount of in-kind match was contributed, according to the Resource Specialist. "None of this would have happened without NEAI," says the Resource Specialist. NEAI funding contributed the "critical mass" that enabled the leverage of other funds and, therefore, the implementation of projects. The projects "worked" because NEAI funded a person to facilitate, to coordinate, and to develop the personal and business networks necessary to develop a new micro-industry for a little known, and under utilized product.

#### *Western Juniper Commercialization Project*

In 1991, the Winema National Forest organized a Forest Products Industry focus group from the Upper Klamath Basin region to identify critical issues from a manufacturer's perspective and potential areas of cooperation and partnerships; this was a response to the shutdown of several mills and a loss of over 1,200 manufacturing jobs over just 18 months. The outcomes of the focus group were the recognition of the need for better utilization of markets for western juniper and the organization of the Western Juniper Commercialization Project in 1992. In 1993, a Juniper Forum was organized by Oregon State University, the U.S. Forest Service, and the Wood Products Competitiveness Corporation (now the Northwest Wood

Products Association) and attended by landowners, loggers, wood products manufacturers, scientists, natural resource agency personnel, economic development interests, environmental interests, and artisans. A major outcome of the forum was the organization of the ad hoc Western Juniper Commercialization Steering Committee (Swan 1998). As of April 2000, a diverse group of 900 interested parties representing government researchers, non-profit organizations, private landowners, and private industry from Oregon, California, and Idaho are members of the Western Juniper Commercialization project (Western Juniper Commercialization Project 2001).

The Western Juniper Commercialization Steering Committee is made up of industry members, landowners, university extension personnel, government agency representatives, and non-profit economic development organizations. Project activities are coordinated by the Committee, and logistical support and facilitation of the Committee and its projects are a combined effort of the Winema National Forest Resource Specialist, a private business consultant hired by the Committee, Klamath County Economic Development Association, Oregon State University Extension, and the Northwest Wood Products Association (Swan 1998:2).

Since 1993, the Western Juniper Commercialization Steering Committee has overseen well over 100 western juniper projects, many of which are considered "ground-breaking" (Swan et al. 2000:4). According to one of the founders, "everything had to be done from scratch." Research had to be conducted in drying, finishing, and durability characteristics for manufacturing purposes, and in toxicity and absorbency for uses for animals; market outlets needed to be found; cost-effective harvesting had to be developed; private business interest needed to be stimulated; and, above all, a sustained effort was necessary to develop and sustain collaborative efforts as well as to find funding sources (Swan 1998:2-3). Between 2000-2002, the Committee has been less active, but it still meets when the need arises. Now the Committee Co-Chair, the Winema National Forest Resource Specialist, refers manufacturers to and encourages them to join the Northwest Wood Products Association.

### Prototype Juniper Harvest Equipment Development and Testing

Although juniper stands have been cleared or thinned by private landowners and public land managers since the 1950s, most of the juniper removed has been burned, left to decompose, or cut for firewood or fence posts due to the lack of demand and markets as well as to the high costs of harvest and delivery (Swan et al. 2000:2-3). Western juniper is large at the base and tapers quickly; its bark is fluted; and the limbs are large and grow thickly and close to the ground. These qualities make it difficult to harvest, to debark with standard debarkers, and to mill into shop quality timber. Harvesting for chips or hog fuel are viable options, but those markets are highly volatile and depend on proximity of stands to paper mills or power cogeneration plants (Coulter and Coulter 2001:7).

The most common juniper-harvesting method is manual falling and limbing with a chainsaw, which, with the low and “elastic” limbs that are prone to springing back, is dangerous and labor intensive (Coulter and Coulter 2001:8). Although landowner costs for removing juniper average \$35-50 per acre, manual removal can cost as much as \$250 (Swan et al. 2000:3). Various other mechanical delimiting methods are also used, but often the limbs from the first four feet of the tree must still be cut by hand so that the machinery can attach itself to the tree (Coulter and Coulter 2001:10).

In 1998, the Western Juniper Commercialization Committee received a \$183,649 grant from the Forest Service Rural Community Assistance Program

to develop and test new Juniper harvesting equipment. A private consulting company tested two harvesters designed specifically for harvesting western juniper during the winter of 2000 and the summer of 2001. The two systems consisted of (1) a shear, rubber-tired skidder, and a delimeter at the landing (Delimeter 1); and (2) a delimeter that delimited trees while still standing, sheared them off at the base (Delimeter 2), a rubber-tired skidder, and a manual buckler (Coulter and Coulter 2001). According to sources, the harvesting costs of using the two systems were reasonable.

### The Juniper Shavings Mill and Secondary Products Manufacturing Facility

REACH, Inc. has been very much a partner in and beneficiary of the Western Juniper Commercialization Project efforts to develop a juniper “micro-industry.” REACH, Inc. is a non-profit organization which has operated since 1987 and whose purpose is to provide employment and support to people with disabilities. In 1993, REACH, Inc. purchased a 111,000 square foot manufacturing facility and wood mill equipment, which provided the foundation to develop a broad range of work activities and increase production revenue that subsidizes its rehabilitation activities. REACH, Inc. manufactures shipping pallets and runners (2x4s with a groove), specialty crating, calving bins and other products out of fir, but it also runs the first large-scale Western Juniper operation capable of producing three million board feet per year. The Klamath Falls saw mill employs 60 people, two-thirds of them with disabilities.



Machine that shreds juniper for pet bedding and other uses. REACH, Inc.

REACH, Inc. produces fencing posts, corral rails, stable boards, picket fences, fence boards, and landscape timber out of juniper. Numerous products are produced out of juniper chips and “curlies,” the production of which was made possible with the purchase of a juniper shavings mill funded in part by NEAI. The chips are sold for farm animal and pet bedding; the “curlies” (pigtail-like curls that hold together well) are sold as playground soft surfaces to cushion falls, erosion control blankets and logs, and silt control media; and the sawdust and bits are sold in containers or bulk to soak up oil and chemical spills.

Some, but certainly not all, conclusions of research, conducted by Oregon State University in partnership with the Western Juniper Commercialization Project and REACH, Inc., that have facilitated the present and potential production and marketing efforts of REACH, Inc. include: (1) western juniper posts are weather resistant; (2) horses chew on them less than on Douglas fir posts; (3) western juniper shavings have a higher moisture absorbency than Western Red cedar or Douglas fir shavings; (4) juni-

per bedding chips have no toxic effects on dogs; and (5) it has superior odor-masking effects.

In addition to producing western juniper products, REACH, Inc. has also adopted the ecosystem restoration training approach developed by Rogue Valley Ecosystem Training Program in southwestern Oregon. In partnership with the Oregon Institute of Technology and partially funded by the Bureau of Land Management, REACH, Inc. trains ecosystem restoration workers, rehabilitates juniper-infested rangeland, and, at the same time, reduces raw material costs and ensures a steadier supply of raw material.

#### Marketing Project

In 1998, the Oregon Economic Development Department and the Forest Service Rural Community Assistance Program funded the Juniper Shavings Mill and Secondary Products Manufacturing Facility Project (\$100,000 and \$40,000 respectively). The market component involved developing the “seed-and-feed” network; that is, farm supply retail outlets. According to the REACH, Inc. Executive Director,

that network is where they “learned not to go.” Most wood chip products for animal bedding are sold by commercial sawmills, which use the low-cost residue from their lumber operations. REACH, Inc., on the other hand, must pay the costs of harvest and delivery and the juniper chips are the primary product, not the secondary or tertiary wood fiber product. Hence, despite the superior qualities of juniper chips, the retail cost is higher, and customers tend to purchase the lower-cost product.

The result of the Western Juniper Commercialization Project is that the western juniper industry has gone from a few artisans and seasonal firewood and post cutters in 1991 to 35 companies selling juniper products into 11 market distribution channels. Over 35 full-time equivalent (FTE) jobs have been directly created in more than 14 eastern Oregon communities, and another 35 FTE jobs have been created indirectly (Swan et al 2000:4-5). Nevertheless, the market still lacks an adequate infrastructure and the raw material supply from “field to factory” is still inconsistent, according to the Oregon Economic and Community Development Department Regional Development Officer. Thus, there is much more coordination, facilitation, networking, and marketing to be done if western juniper is to become a viable and sustainable “micro-industry,” and if it is to have a measurable, beneficial impact on the environment and on the agricultural/ranching industry.

### **Jobs-in-the-Woods**

NEAI-funded Jobs-in-the-Woods projects in Klamath County from 1995-2001 were located quite some distance from Klamath Falls. The closest projects were at least 15 miles away and downriver from

the city. In addition, the U.S. Fish and Wildlife JITW Program in Klamath County was administered by the Coastal California Fish and Wildlife Office in Arcata, California, and data on the location and origin of JITW crewmembers were not available. Therefore specific JITW projects were not examined and JITW crew members were not interviewed for this case study.

Overall, however, JITW projects were coordinated by the Klamath Basin Ecosystem Restoration Office (ERO) in Klamath Falls with whom government agencies, the Klamath Tribes, ranchers and farmers, fishing and hunting groups, and other organizations cooperate. The ERO is a multi-agency organization established and funded by the U.S. Environmental Protection Agency in 1993 to coordinate restoration activities over the 8,003 square miles that constitute the Klamath Basin and to establish a comprehensive geographic information system (GIS) watershed database, and to implement the best agriculture management practices in high-priority tributary watersheds. It is yet another example of the cross-agency and public-private collaboration so characteristic of the Klamath Falls area—collaboration that has been enhanced by NEAI funded projects.

The Klamath Basin ERO coordinated and cooperated with multiple agencies, the Klamath Tribes, and other organizations to implement the myriad and widely dispersed JITW projects. Those projects included watershed restoration (tree planting and western juniper removal), riparian fencing, instream structure construction, erosion control, debris removal, monitoring and assessing activities, push-up dam alternatives, wetland restoration and enhancement, and stream channel restoration.

## **Socioeconomic Conditions and Effects of NEAI on Community Well-Being**

### **Socioeconomic Conditions**

The NEAI has played a positive role in improving socioeconomic conditions in the Klamath Falls area, although high unemployment and poverty persist. Economic diversification efforts supported in

part by the NEAI have directly and indirectly generated hundreds of jobs in the Klamath Falls area. Sykes, a high tech support service, was actively solicited from North Carolina bringing 500 jobs with them in 1995 but employing 750 people in 2002 (Klamath

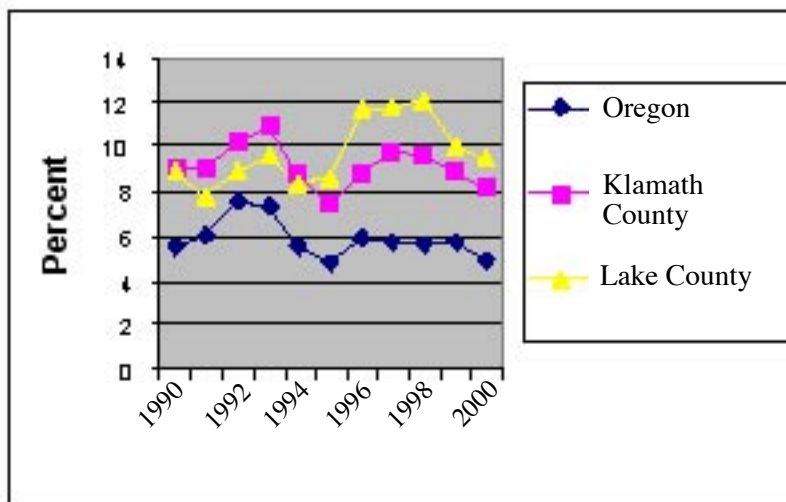
Falls Community Profile 2002). Two other high tech firms brought in nearly 200 jobs, a manufacturing facility was built with the leasing company employing 22 people, the nascent ecosystem restoration micro-industry employs a few dozen people, the commercial and tourism sectors are growing, and other businesses have been attracted. Businesses are “educated” about the strengths of the area; the workforce is trained to suit the needs of these businesses by OIT, The Work Connection, and Klamath Community College; and the foundation for future economic development is largely in place. Overall, socioeconomic conditions have generally improved during the 1990s for which the NEAI can take some credit.

Despite these successes, outside forces that cannot be controlled continue to contribute to high unemployment rates and low incomes. Timber and agriculture, still the two largest industries in the county, both have high levels of seasonal employment and are subject to both domestic and international market fluctuation such as the loss of 110 jobs in Klamath County’s lumber and wood products sector between

1997 and 1998 due to the Asian financial crisis (Sicard 1999:9). As such, the economic development community recognizes that there is still much to do to reduce unemployment and poverty levels.

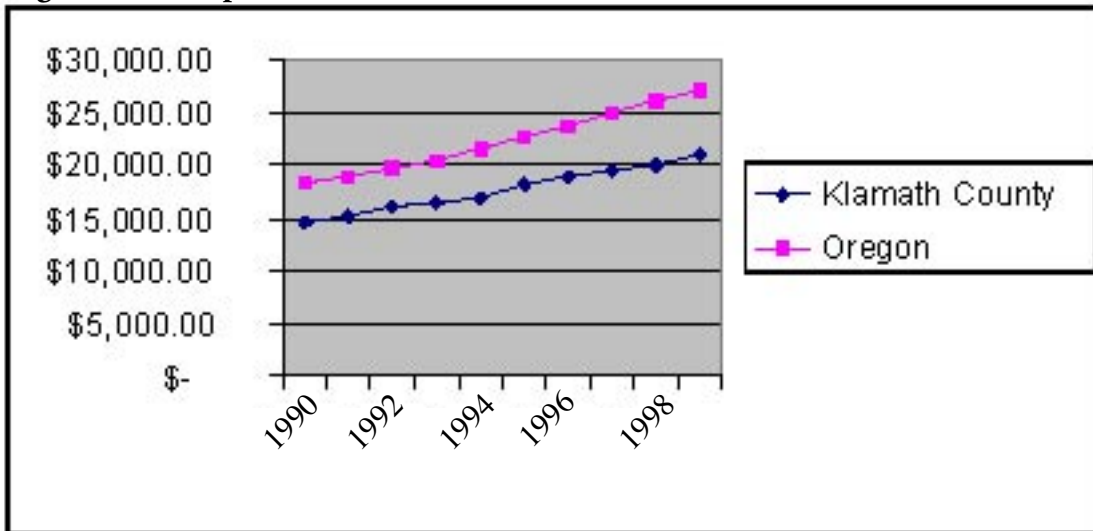
Figure 1 illustrates the general downward trend in average annual unemployment rates in Klamath County that are higher than but parallel the state trends. Reflecting, in part, Klamath County’s economic diversification efforts: average annual employment rates have been lower and median family income higher in Klamath County than in Lake County, because Klamath County has been more successful “at replacing job losses in lumber and wood products with other manufacturing and non-manufacturing jobs (Sicard 1999:32).” It should be noted that Klamath County has some economic development advantages over Lake County, some of which are that two state highways intersect at Klamath Falls, Klamath County is not as remote from population centers as Lake County, and Klamath County’s higher population provides a better workforce and consumer base for companies seeking to relocate.

**Figure 1. Annual Average Unemployment Rate\***



\* Source: Oregon Employment Department

**Figure 2. Per Capita Personal Income\***

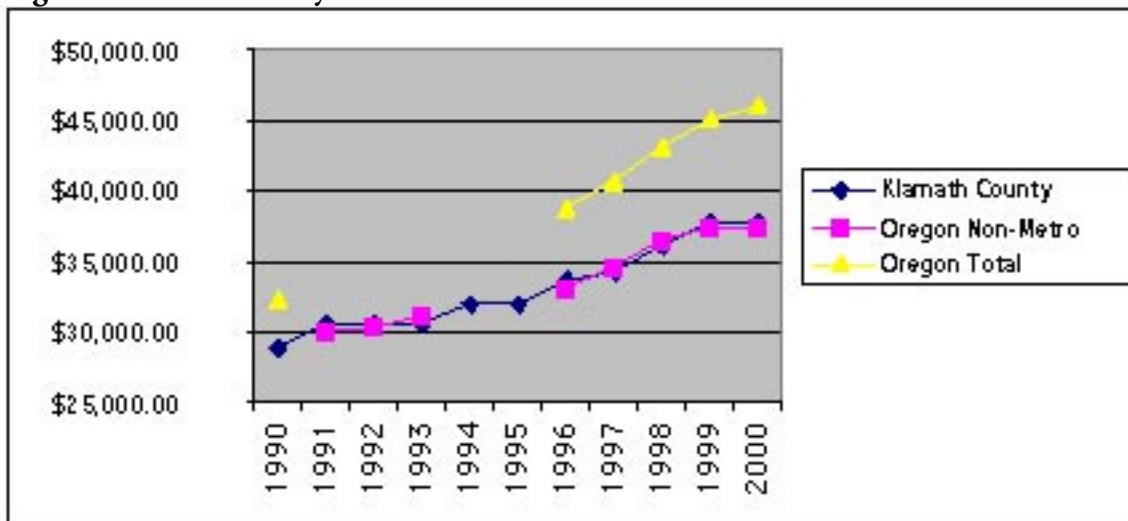


\* Source: US Bureau of Economic Analysis

Per capita personal income (Figure 2) and median household income (Figure 3) have both grown throughout the 1990s in Klamath County as they have throughout the state. Much of the growth in personal income between 1987 and 1997 can be attributed to, first, transfer payments and, second, earnings from the service sector. During the same time period, income derived from manufacturing

declined substantially (Sicard 1999:34-35). Median family income in Klamath County has grown in step with the average non-metro growth throughout the state, but Figure 3 indicates a widening gap in the growth of the median family income between non-metro areas and the state as a whole. In Figure 2, one can also discern a widening gap between the county and the state in per capita personal income.

**Figure 3. Median Family Income\***



\* Source: US Housing and Urban Development

Enrollment in the Free Lunch Program in the elementary schools is an indicator of community impoverishment. Figure 4 illustrates a downward trend in the number of Free Lunch eligible students during the late 1990s in the county elementary schools but an upward trend in the Klamath Falls elementary schools. It is difficult to explain these trends. Average annual wages in Klamath County increased by four percent (adjusting for inflation) between 1990 and 1998, well below the state but an increase nevertheless (Sicard 1999:38). At the same time, much of the growth in the commercial, telecommunications, and other industries occurred in the Klamath Falls metro area.

This contradiction might be explained by the still sizeable seasonal workforce in the agricultural and timber industries despite the increase in full-time jobs in the area. The Supervisor of Food Service for Klamath Falls City Schools suggests that the rising enrollment in the Free Lunch Program may be explained by the large number of children of Latino migrant workers enrolled in the program. Those children tend to attend school in the fall when the count is taken, leave during the winter, and return in the spring. In addition, a subdivision within the city limits with about 200 low-income houses is occupied by many of the migrants, who drive 10 to 20 miles out of town to work, but who are eligible to enroll their children in the city schools and the Free Lunch Program.

**Figure 4. Free Lunch Enrollment**

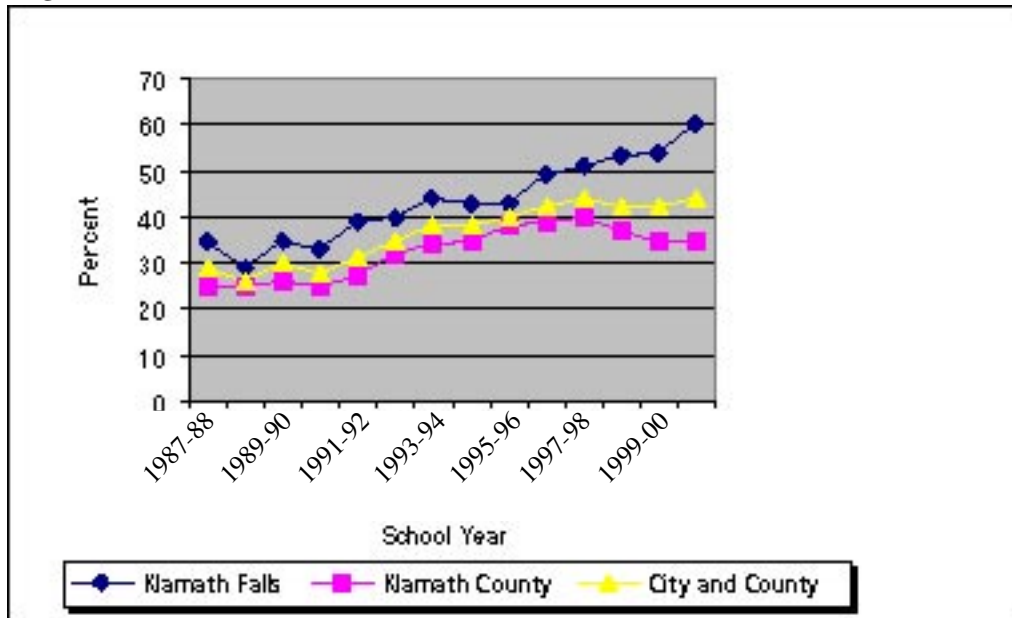
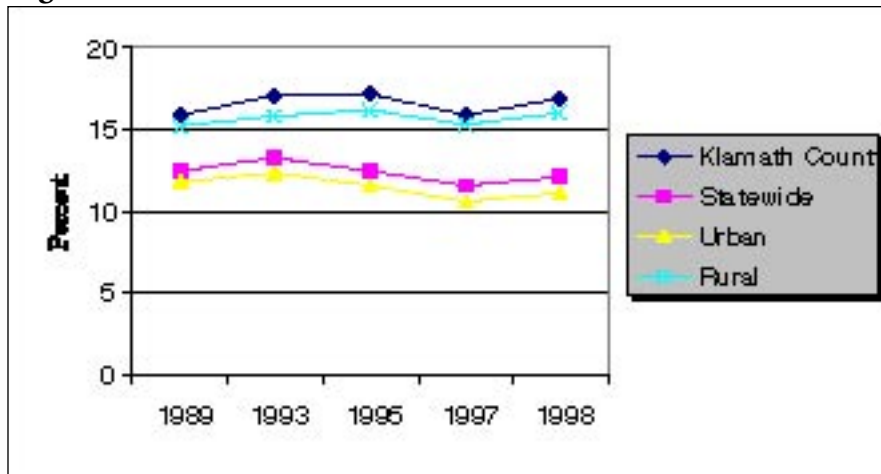


Figure 5 indicates the percent of persons with incomes below the federal poverty level in Klamath County, statewide, in urban areas only, and in rural areas only. Klamath County poverty levels continued to increase into the early 1990s, leveled off between 1993 and 1995, dropped in 1997, and then began to rise again in 1998. One can see that while the economic development community has succeeded in generating hundreds of jobs, Klamath County's poverty level continues to be higher than poverty levels

throughout Oregon's rural areas as well as, less surprisingly, higher than poverty levels in urban areas and statewide.

It appears then that socioeconomic conditions in the Klamath Falls community generally improved during the 1990s, perhaps due in part to NEAI-funded projects, but that seasonal workers in the timber and agriculture industries did not fully benefit from the improvement and that poverty remains stubbornly entrenched.

**Figure 5. Percent of Persons with Incomes Below the Federal Poverty Level\***



\* Source: Oregon Benchmarks

### Community Capacity

Community capacity is the collective ability of residents in a community to respond to external and internal stresses, to create and take advantage of opportunities, and to meet local needs. There are five dimensions of community capacity: (1) physical capital, which includes a community physical infrastructure (e.g., sewer systems, business parks, capital assets such as equipment, housing stock and schools); (2) financial capital, which includes money, credit, and other financial resources available for local use; (3) human capital, which includes the skills, education, experiences and general abilities and capabilities of residents; (4) cultural capital, the myths, beliefs, norms, and lifeways that serve to organize groups and facilitate survival; and (5) social capital, which includes the willingness of residents to work together toward community goals (and not just self-interested goals).

#### *Physical Capital*

Physical capital includes infrastructure. NEAI-supported projects benefited Klamath Falls with handicapped-accessible public buildings, an industrial building, a western juniper shaving mill, computer and teleconference equipment, and the plans for a Native American Arts and Cultural Center. Both city and county public buildings are now accessible by an estimated 677 mobility impaired persons in the city

and 1,799 mobility impaired persons throughout the county. The industrial building, currently housing Thermo-Pressed Laminates, provides jobs and an income stream through the leasing arrangement. The western juniper shaving mill in the REACH, Inc. enterprise provides jobs for persons with disabilities as well as supports efforts in the region to develop an ecosystem restoration program and to develop a micro-industry for the production and marketing of western juniper products. While the computer and teleconference equipment are sited in the county high schools, the city has the potential of benefiting from a well-trained workforce. Construction of the Conger Heights Native American Arts and Cultural Center (Eu La Lona) has not begun, but the NEAI-support master plan with its business plan and architectural design is in place.

#### *Financial Capital*

Financial capital includes money, credit, and other financial resources available for local use. A great deal of financial capital for the NEAI-supported projects alone was infused into the Klamath Falls area. The county was a primary beneficiary as large loans and grants from the Forest Service and the Community Development Block Grant Program leveraged additional funds from both public and private sources to construct the industrial building. The leasing agreement continues to bring an income stream

into the Klamath Community Development Corporation. Financial capital enabled research into western juniper production and marketing potential as well as capacity development for the Klamath County Economic Development Association, both of which laid the groundwork to generate jobs and to attract financial capital into the area in the future. Development of the commercial, industrial, telecommunications, and tourism sectors have provided hundreds of jobs in the community, just as training by The Workforce Connection equipped hundreds of workers with the skills to obtain those jobs with NEAI funds. Not only does increased personal income spent locally further increase financial capital gains in the community, but the groundwork laid by the economic development community to attract and support business and industry has already attracted and will continue to attract financial capital investment in the area.

#### *Human Capital*

Human capital includes the skills, education, experiences and general abilities and capabilities of residents. Hundreds of workers have gained new job skills and/or improved existing skills through The Workforce Connection training program under the aegis of the Klamath-Lake Employment Training Institute, Inc. and through the Oregon Institute of Technology. Training, education, and on-the-job experience can only increase residents' general abilities and capabilities.

Human capital also increased within the economic development community as people learned from their mistakes and their successes. The Klamath County Economic Development Association developed capacity to handle the complexities of economic development, the Klamath Community Development Corporation and the South Central Oregon Economic Development District were formed, and new people with new skills arrived. The Oregon Institute of Technology was able to inventory and then coordinate the expertise of faculty and staff and then focus those resources on community needs more effectively. Most importantly, the economic development community learned how to work together, pooling their resources, through Team Klamath, the Western Juniper Commercialization Project, and other working groups.

#### *Cultural Capital*

Cultural capital includes the myths, beliefs, norms, and lifeways that serve to organize groups and facilitate survival. One major belief that changed in response to economic conditions was the belief that the timber industry would always support workers and the community. Once it was accepted that the timber industry decline was more or less "permanent," workers were more willing to be retrained and the economic development community was stimulated to focus their efforts on diversification. In addition to a retrained workforce, a side effect of recruiting businesses and a professional workforce to the area was a resurgence of cultural development in the theatre and arts that would appeal to spouses and families.

The Conger Heights Native American Arts and Cultural Center (Eu La Lona) will have an important effect on local adults, children, and tourists as people learn about and meet Native Americans. Many myths and beliefs about Indians will undoubtedly change for the better, while at the same time people will experience the richness of Native American culture. Eu La Lona, the Volcanic Legacy Scenic Byway, and other efforts to promote local tourist attractions may also contribute to residents' improved pride in their community.

#### *Social Capital*

Social capital, the willingness of residents to work together toward community goals, may be the most important outcome of the NEAI in the Klamath Falls area, especially in the economic development community. On the level of the general community, it is unlikely that the NEAI had a significant effect on social capital. As one lifelong resident put it and others agreed, "Klamath Falls is not exactly a contentious community, but it's not really a cohesive community either." This may be due to the size of the city, but it also may be characteristic of a culture in which people tend to prefer the solitude of this vast high desert country and tend to mind their own business.

On the other hand, one of the most striking characteristics of the area is that when groups of like-minded people organize to address a special interest, the level of interdisciplinary, interagency, and public-

private collaboration is phenomenal. The Hatfield Upper Klamath Basin Working Group, organized in 1996 to improve resource conditions throughout the Upper Basin, is just one example of cooperation between state, federal, and local government agencies, irrigation districts, private businesses, the Klamath Watershed Council, the Oregon Institute of Technology, the Klamath Tribes, and others. The Klamath Basin Ecosystem Restoration Office organized to coordinate ecosystem restoration efforts throughout the entire Klamath River Watershed in both Oregon and California and involving multiple agencies, public and private organizations, tribes, and local farmers and ranchers is another example.

Many collaboration-oriented organizations preceded the NEAI, and these organizations and their overlapping memberships are extremely dynamic—changing composition depending upon project needs, coordinating complementary efforts, and growing in expertise. NEAI funds facilitated many of these efforts, which often led to more and better communication and cooperation and, therefore, more finely tuned teamwork. Better teamwork resulted in more effective economic development, which, in turn had positive effects on human capital.

Collaborative efforts supported in part by NEAI funds include: (1) the Western Juniper Commercialization Steering Committee to develop a western juniper micro-industry; (2) organizational and resource maximization efforts within the Oregon Institute of Technology that made it a more effective partner in economic development goals; (3) the Klamath/Lake/Modoc/Siskiyou Outdoor Recreation Working Group designed to improve communication and working relationships with multiple public and private organizations between the two states and four counties, and whose efforts led to the Volcanic Legacy Scenic Byway designation, more effective promotion of the area, and improved recreation opportunities; and (4) Team Klamath. Although the formation of Team Klamath was the result of a long learning process throughout the 1990s, many of the projects that facilitated the learning curve and the effectiveness of the team were NEAI-supported projects.

The Klamath County Commercial Devel-

opment Plan (1997) prepared by the Klamath County Economic Development Association (KCEDA), funded by NEAI, led to greater coordination and dissemination of information between KCEDA, Klamath County Chamber of Commerce, and the Klamath County Department of Tourism. As KCEDA, The Work Connection, OIT, the Forest Service, the Klamath County Chamber of Commerce, and others focused on economic diversification and worker training, and as mistakes were made and lessons were learned with NEAI-supported and other projects, the economic development community became more cohesive and effective.

Finally, the formation of the Community Assistance Teams throughout the county could only have a beneficial effect on Klamath Falls even though they represent the rural areas. As rural communities develop social capital—able to work toward community goals—rural populations may be better able to provide a better-skilled workforce (human capital) and a consumer base more apt to spend money in Klamath Falls businesses (financial capital).

In addition, the Native American Arts and Culture Center has the potential to increase community cohesiveness via intercultural exchange and break down some barriers between peoples. The improved access to city and county buildings also makes the city more inclusive to people who are mobility impaired.

### **Effects of NEAI on Workers**

Workers have benefited a great deal from NEAI projects in terms of education, skills, and the ability to obtain jobs, many of which, according to the Director of The Work Connection, pay wages equivalent to those paid by the timber industry. NEAI supported the training of a large number of displaced timber workers, and the businesses attracted to the area as a result of economic diversification efforts have largely provided the jobs. The high tech, commercial, and tourism industries are growing, and the economic development community is getting more skilled in their efforts to attract businesses and to generate jobs. In addition, The Work Connection is learning to better tailor their training programs to business needs and is improving its

ability to appropriately train and place workers. The Oregon Institute of Technology is also improving an already good record in educating, training, and placing workers. The Chair of the OIT Economic Development Committee indicates that OIT has adapted its training program for dislocated workers to suit their unique needs as older and more expe-

rienced workers. According to the Director of The Work Connection, OIT has a reputation for placing 98 percent of its graduates in high wage jobs. Finally, Jobs-in-the-Woods workers throughout the county, REACH, Inc. employees, and others involved in the Western Juniper Commercialization Project have learned ecosystem restoration and other skills.

## Patterns and Themes

The primary factors that enhanced the success of the NEAI in Klamath Falls were:

1. The singular focus of the economic development community on economic diversification and job creation.
2. NEAI funds were used strategically in the context of long-range plans supported by research.
3. The multiple, dynamic, and overlapping networks of collaborating public and private agencies, organizations, and individuals.

Despite the great variation in NEAI-funded projects, nearly everyone was part of the larger objective: to diversify the economy and, thus, to generate jobs. Had the focus been more diffuse, the efforts by the economic development community might have been too thinly spread across numerous unrelated projects.

Wisely, one of the early steps taken was research upon which to base strategic action. The Klamath County Economic Development Association relied on the Klamath County Commercial Development Plan to attract businesses to the area; the Western Juniper Commercialization Committee and REACH, Inc. used Oregon State University and other research to give direction to the production and market-

ing of western juniper; and the Oregon Institute of Technology cataloged faculty and staff expertise and contracted research into potential industry clusters to design industry-appropriate curricula. In all cases, the research generated careful, thoughtful, and, therefore, more effective approaches to economic development.

The pre-existing, interlocking collaborative networks so characteristic of the Klamath Falls area enabled people to take advantage of NEAI funding in constructive ways and with far-reaching effects. In the process of working together, people learned from their successes and failures and from each other, learned to communicate better, and ultimately learned to work together in ever more effective teams. A salient feature of nearly all of the NEAI-funded projects was the absence of one dominant leader. Instead, different people assumed leadership at different times and for different purposes, but even then that person seemed to be a co-leader rather than a charismatic mover-and-shaker standing alone. The tendency for collaboration, the ability to adapt to changing circumstances, and the willingness to share leadership roles undoubtedly provided the foundation for the success of the NEAI Program in the Klamath Falls area: hundreds of trained workers, hundreds of jobs generated, businesses attracted to the area, a growing economy, and a realization that the work is not yet “done.”

## Conclusions

Collaborative networks, sound research, focused objectives, and the timeliness of NEAI funds all contributed to the goal of diversifying the economy and providing jobs in the Klamath Falls area. The most important benefits, however, may be that people and organizations have learned to work even more effectively together and that the organizational infrastructure (KCEDA, Klamath Community Development Corporation, South-Central Oregon

Economic Development District, Team Klamath, etc.) is in place that will enable the community to face future economic development challenges. In addition, the community has the potential to be more cohesive with easier access to public buildings by people with disabilities and with the cultural barriers that may be broken down when the Native American Arts and Cultural Center is open.

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Sheila Crawford	Director, The Work Connection
Tonya Dowse	Regional Programs Manager, South Central Oregon Economic Development District
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Ric Ingham	Economic Development Manager, Central Oregon Intergovernmental Council, Redmond, OR
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