W.5.d.

AGENDA COVER MEMO

DATE: February 8, 2006 (Date of Memo)
February 22, 2006 (Date of Meeting)

TO: Board of County Commissioners

FROM: LCOG, Milo Mecham, Principal Planner

TITLE: Order No. 06_____ IN THE MATTER OF ORDERING THE ADOPTION OF THE BENTON, LANE, LINCOLN, LINN REGIONAL INVESTMENT BOARD 2005-2007 REGIONAL INVESTMENT STRATEGY AND RECOMMENDING THAT THE STRATEGY BE SUBMITTED TO THE GOVERNOR FOR APPROVAL

I. MOTION

MOVE TO ADOPT ORDER NO. 06-_____ IN THE MATTER OF

ORDERING THE ADOPTION OF THE BENTON, LANE, LINCOLN,

LINN REGIONAL INVESTMENT BOARD 2005-2007 REGIONAL

INVESTMENT STRATEGY AND RECOMMENDING THAT THE

STRATEGY BE SUBMITTED TO THE GOVERNOR FOR APPROVAL

II. ISSUE OR PROBLEM

In November, 2005 the Commissioners had a similar order before them and approved it. However, the order did not contain the recommendation that the Strategy (then referred to as the RIB Strategic Implementation Plan) be submitted to the Governor, which Cascades West COG staff now tells me is necessary.

Nothing about the Strategy itself has changed in any way. The other three counties have approved the strategy and recommended it be sent to the Governor. The full text of the Strategy, which is printed in combination with the EDA District CEDS can be found through the links at http://www.ocwcog.org/Documents.asp

III. DISCUSSION

Because this is nearly the same order that the Commissioners approved in November, I will abbreviate the discussion found in that Commission action.

IV. IMPLEMENTATION/FOLLOW–UP

If the Board adopts the proposed Order, staff will communicate that action to the fiscal agent, CWCOG, and the fiscal agent will continue working with the State.

V. ATTACHMENTS

1. Board Order No. 06–_____ IN THE MATTER OF ORDERING THE ADOPTION OF THE BENTON, LANE, LINCOLN, LINN REGIONAL INVESTMENT BOARD 2005-2007 REGIONAL INVESTMENT STRATEGY AND RECOMMENDING THAT THE STRATEGY BE SUBMITTED TO THE GOVERNOR FOR APPROVAL

2. The BL3 Regional Investment Strategy for the 2005-2007 biennium

Attachment 1

IN THE BOARD OF COUNTY COMMISSIONERS, LANE COUNTY OREGON

ORDER No.	)	**IN THE MATTER OF ORDERING THE ADOPTION OF THE BENTON, LANE, LINCOLN, LINN REGIONAL INVESTMENT BOARD 2005-2007 REGIONAL INVESTMENT STRATEGY AND RECOMMENDING THAT THE STRATEGY BE SUBMITTED TO THE GOVERNOR FOR APPROVAL**

WHEREAS, the Lane County Board of Commissioners has formed a Regional Investment Board as a partnership between Lane County and Benton, Lincoln and Linn Counties, and

WHEREAS, the Regional and Rural Investment Fund Program was established by the Governor and the Legislature to provide a flexible source of funding to help regions finance locally-determined economic development projects and to provide a vehicle by which Regional Boards can support job creation and retention and leverage other funding sources to the maximum extent possible in order to improve the economy of the region; and

WHEREAS, the Regional and Rural Investment Fund programs require the Regional Board to develop a Regional Investment Strategy, which describes how the Regional Board will use the Regional and Rural Investment Funds to meet the economic and community development needs of the region; and

WHEREAS, the Regional Board has developed a Regional Investment Strategy for the Benton-Lane-Lincoln-Linn Region that meets the requirements of the Regional and Rural Investment Fund programs; and

WHEREAS, the Regional Board has held public meetings on the Regional Investment Strategy and accepted and responded to all public input.

NOW THEREFORE IT IS HEREBY RESOLVED AND ORDERED that the Lane County Board of Commissioners does adopt the 2005-2007 Regional Investment Strategy of the Benton, Lane, Lincoln, Linn Regional Investment Board, a copy of which is attached.

IT IS FURTHER ORDERED that the Lane County Board of Commissioners recommends that the Regional Investment Strategy be submitted to the Oregon Economic and Community Development Department for consideration, leading to the necessary approval by the Governor.

DATED this 22nd day of February, 2006

Bobby Green, Chair, Lane County Board of Commissioners

APPROVED AS TO FORM
Date 2/14/06 Lane County
OFFICE OF LEGAL COUNSEL

Benton County

Lane County

Lincoln County

Linn County

Comprehensive Economic Development Strategy

Cascades West
Economic Development District

Regional Investment Strategy

Benton-Lane-Lincoln-Linn (BL3)
Regional Investment Board

Prepared by the
Oregon Cascades West
Council of Governments
and the
Lane Council of Governments

Published November 2005

Approval of this document has been recommended by the:

- *Oregon Cascades West Council of Governments Community and Economic Development Committee* (September 25, 2005)
- *Lane Economic Committee* (October 17, 2005)
- *Benton-Lane-Lincoln-Linn (BL3) Regional Investment Board* (October 17, 2005)

For consideration by the:

- *Benton County Board of Commissioners*
- *Lane County Board of Commissioners*
- *Lincoln County Board of Commissioners*
- *Linn County Board of Commissioners*
- *Cascades West Economic Development District Board*
- *Lane Council of Governments*
- *Oregon Cascades West Council of Governments*
- *State of Oregon*
- *U.S. Department of Commerce Economic Development Administration*

This document was produced with grant assistance from the

U.S. Department of Commerce Economic Development Administration

and the

State of Oregon Lottery – Regional Investment and Rural Investment Funds administered by Oregon Economic and Community Development Department

Benton County

Lane County

Lincoln County

Linn County

TABLE OF CONTENTS

Comprehensive Economic Development Strategy and Regional Investment Strategy

Continued on next page

SECTION 1

Introduction and Executive Summary

Document Context

This community and economic development strategy provides a framework for long-term planning efforts in the four-county area of Benton, Lane, Lincoln, and Linn Counties, Oregon. The information and strategy outlined in this document combines and integrates the:

- **Comprehensive Economic Development Strategy** (CEDS) of the Cascades West Economic Development District (CWEDD) required by the U.S. Department of Commerce Economic Development Administration, and the
- **Regional Investment Plan** (RIP), including the Rural Action Plan, required of the BL3 Regional Investment Board by the Oregon Economic and Community Development Department (ORS 285B.242 and 285B.257).

This publication is made possible through:

- U.S. Department of Commerce Economic Development Administration grant funding.
- Oregon State Lottery – Regional Investment and Rural Investment Funds administered by the Oregon Economic and Community Development Department.

Multiple information sources were used to develop the information presented in this document:

- 2004 CONTACT survey of ninety Lane County businesses
- Discussions with twenty Benton, Lincoln, and Linn County businesses
- Interviews with the city manager/administrator/recorder of each city in the region and Port managers of Alsea, Toledo, and Newport
- Discussions with community and economic development partners including the Oregon Employment Division, Linn-Benton Community College, Oregon Coast Community

College, Linn Benton Housing Authority, and the Community Services Consortium

- Employment, population, and income data and projections from various State and federal sources

Based on the information gathered, **strategy development was steered by:**

- Cascades West Economic Development District (CWEDD) – A partnership between Oregon Cascades West Council of Governments and Lane Council of Governments. The CWEDD receives federal funding through the Economic Development Administration to work on economic development priorities. The Oregon Cascades West Community and Economic Development Committee and Lane Economic Committee played lead roles in defining regional community and economic development issues, opportunities, vision, goals, and work programs.

- Benton-Lane-Lincoln-Linn (BL3) Regional Investment Board (RIB) - Members appointed jointly by the commissioners of the four counties are charged with the development and implementation of the State's lottery-funded Regional and Rural Investment Programs in the four-county region. The BL3 RIB Planning Committee provided review and recommendations on the refinement of regional issues, opportunities, vision, goals, and two-year implementation strategy.

Executive Summary

The following Executive Summary provides an overview of key findings in the Benton-Lane-Lincoln-Linn County (BL3) Comprehensive Economic Development Strategy and Regional Investment Strategy (Sections 2 through 7). This Executive Summary also highlights how the region will work to meet these challenges and opportunities (Sections 8 through 10).

Key Issues

Health of Our Economy: Like most of the United States, the region of is facing significant economic challenges:

- Recent economic growth has been focused along the I-5 corridor. Rural communities have had a more difficult time in strengthening their economies due to infrastructure limitations, relative isolation, and smaller employment bases.
- The pressure of globalization makes shifting manufacturing operations to countries with very low wage rates enticing to firms who hope to continue to compete in the world market.
- Manufacturers tied to the region's abundant natural resources (fisheries, timber and agricultural lands) will likely remain near their raw resource, but ever-changing public policies have constrained machinery and facility investment.
- Business owners who keep their operations in the area because they value the quality of life are concerned about how changes in local education, constrained State finances, increasing methamphetamine use, and other rising social issues are impacting their personal and community lifestyles.
- The loss of 5,960 manufacturing jobs from 2000 through 2003 was offset only slightly by the addition of 740 manufacturing jobs in 2004.
- Despite recent employment gains, the region currently has 2,000 less jobs than it did in 2000.
- County unemployment rates remain at or above state and national norms, with just under 20,000 people currently identified as unemployed (not including those who have given up looking for work or who have accepted underemployment).
- The Oregon Employment Department forecasts that the region will grow almost 4,000 new jobs over the next ten years, but that most of these will be in the Tourism Sector (which, on average, has the lowest annual wage) and in Government (linked to expected expansion of Tribal facilities).
- Job losses are forecast over the next ten years in the Forest Products, Fisheries, Metals, and High Tech Sectors.

Health of Our Natural Systems: The region spreads from the Pacific Ocean to the crest of the Cascade Range. 79% of the region is forestland and 8% is prime farmland. State and Federal governments own almost half of the region's land base. Natural system- and resource-related issues include:

- Ocean, other surface water, and riparian area health are being impacted by source and non-point source pollution and by encroaching development pressures.
- Groundwater pollution (primarily nitrates) is being evaluated in the Albany-Eugene basin.

- The Total Maximum Daily Load for mercury, bacteria, and temperature in the Willamette River is being evaluated. More restrictive limits on discharges to the River are expected.
- Areas of the coast experience water shortages during periods of low flow.
- Despite meeting federal standards, Lane County was ranked by the American Lung Association as the seventh-worst county in the nation for air quality.
- 316 sites in the region have been identified as Brownfields and require some level of assessment and/or cleanup.
- Disaster planning and emergency response systems are being evaluated to address natural and human-related hazards.

Health of Our People: An estimated 565,850 people called the region home in 2004. Over half of the region's population resides in the four largest cities of Albany, Corvallis, Springfield, and Eugene. Most incorporated cities (26 of 36) have fewer than 5,000 people. There is growing economic disparity between the haves and have-nots in the region:

- This divide is apparent across the Counties of the region, where the average 2004 household income of Benton County of $33,700 compares with $24,150 in Lincoln County. Average wage rates also indicate this divide, with Benton County's average at $37,247 and Lincoln County's at $26,015.
- This divide is also apparent across employment sectors, where the 2004 average annual wage in Oregon's Tourism sector is $14,000 compared with $50,000 in the Information sector.
- Improving poverty rates between 1990 and 2000 mask a 9% growth in the number of people in poverty. In 2000, 73,790 people were in poverty (almost 30% were children).
- Health care providers report significant increases in charity requests and length of hospital stay due to deferred care, noting a correlation to reductions in health insurance.

Health of Our Communities: Communities in the region are grappling with constrained revenue sources that are typically inadequate to cover infrastructure maintenance responsibilities and capacity improvement needs:

- 33 water systems in the region had drinking water standard violations in 2004, and many cities are struggling to meet federal Safe Drinking Water Act standards.
- Federal Clean Water Act requirements and increases in system infiltration and inflow are forcing many communities to evaluate and invest in waste water system improvements.
- Deferred maintenance and growing traffic volumes are challenging the area's highway and local street networks.
- Rail service to some industrial areas and communities is imperiled by track maintenance costs.
- Increasingly important telecommunication services remain unavailable to some areas of the region.
- Public safety concerns abound, especially as related to methamphetamine abuse.

Key Opportunities for Our Future

While not discounting the value of recruiting new businesses to make the region their home, the heart of the region's economic development strategies is supporting existing businesses and encouraging local start-ups.

- The region has a long history of growing successful start-up businesses, with several major manufacturers having started as garage-based businesses.
- Business development and support programs are in place to help prospective and existing entrepreneurs.
- Economic development partners are committed to building onto the entrepreneurial culture and assets of the region.
- Oregon State University and the University of Oregon attracted $300 million in outside research dollars in 2004. The Universities are focusing on patenting research.

Local leadership remains committed to meeting challenges within their revenue and staff limits. Communities in the region are, often concurrently, working to revitalize their downtown cores, protect and build a community identity, balance land uses, move industrial lands toward development, address water and sewage mandates, plan for natural and human-caused disasters, maintain their base infrastructure, and provide the quality of life resources desired by their citizens. Creating community consensus and building from a community-based vision are increasingly important to move priorities forward.

How We'll Get There

The regional vision and goals remain similar to those developed in the mid-1990s, with an increased emphasis on promoting business and civic entrepreneurship. Regional goals, as refined through this strategic planning effort, are:

- Advance economic activities that provide a range of employment opportunities.
- Build on the region's entrepreneurial culture and assets.
- Support infrastructure assistance to communities.
- Provide technical assistance to communities and support capacity building efforts.
- Partner to improve workforce training and education.
- Support the needs of rural areas.

In order to better meet the challenges and opportunities faced by the region, the District will continue core services while further leveraging its resources to address multiple needs with a single solution using a longer-term view. Economic development partners will be convened to look for ways to leverage individual results and to examine services provided from a systems viewpoint. User-centered service delivery will also become a focus.

The Regional Investment Board will focus on projects and programs that create or retain short- and long-term jobs in the region. Four categories of activities will be considered for funding through the RIB: Business Development, Site Development, Workforce Development, and Capacity Development.

Summary of Contents

The profile of the region (Sections 2-6), regional challenges and opportunities (Section 7), and the regional vision and goals (Section 8) presented in this document are applicable to both CWEDD and BL3 RIB. Work program descriptions for the CWEDD and BL3 RIB are included separately (Sections 9 and 10). Text boxes alongside the following summary of sections delineate the requirements of the Regional Investment Program (ORS 285B.230-.269).

Section 1: **Executive Summary**, a requirement of the Regional Investment Program, provides an introduction to the strategy and summary of key findings. **Section 2: Putting the Region on the Map** provides basic background on the region, including geography, climate, and jurisdictions.

Sections 3 through 6 fulfill ORS 285B.239(2) requirements to present an "analysis of the unique or significant resources that provide the foundation for the regional investment strategy," and supplies, in part, the background necessary for ORS 285B.239(1) "identification of short-term and long-term priorities."

The next four sections delineate the social, environmental, cultural, intellectual, and political "capital" of the region:

- **Section 3: Our People** presents information on demographics, population, poverty, educational attainment, and labor force.
- **Section 4: Our Natural Systems and Resources** includes background on the resource lands; water, air, and land quality; natural hazards; wetlands; and threatened and endangered species in the region.
- **Section 5: Our Community Resources** reviews the status of local funding, land use, infrastructure, transportation, education, health, and other systems and resources in the region.
- **Section 6: Our Economy** completes the review of the region's existing assets and conditions. It presents an analysis of employment, unemployment, traditional industrial sectors, and emerging clusters.

Section 7 fulfills ORS 285B.239(3) requirements to define an "analysis of barriers to implementation and an identification of the means to overcome those barriers." More on the "means to overcome those barriers," is found in the Two-year Implementation Plan in Section 10.

Section 7: Challenges and Opportunities defines the region's strengths, weaknesses, opportunities, and threats (SWOT), obtained from interviews with a wide variety of jurisdictions, agencies, and businesses. This analysis goes beyond a normal SWOT by focusing the analysis on the "health" of communities, individuals, the economy, and natural systems.

Section 8 fulfills, in part, ORS 285B.239(1) requirements for "identification of short-term and long-term regional priorities" and delineates economic partners and defines their input, in fulfillment of ORS 285B.239(4).

Section 8: Regional Vision and Goals provides the overall vision and goals for the region, establishing the framework for identification of short-term and long-term regional priorities. This section also identifies our economic partners.

Section 9: Cascades West Economic Development District Work Program presents the work plans to be undertaken by the two Councils of Governments and is primarily pertinent primarily to the CEDS, although the work plan of the CWEDD does overlap and support the efforts of the Regional Investment Program in numerous ways.

Section 10 addresses multiple Regional Investment Program requirements.

Overview *defines the focus of this section.*

Legal Framework *fulfills ORS 285B.239(9) to demonstrate that a region has the capacity to allocate and effectively use the Regional and Rural Investment Fund resources.*

Organizational Structure and Board Membership *provides information on the BL3 Regional Investment Board and how it does business, as required in ORS 285B.242 and 285B.239(9).*

Long Term Plan *presents the four eligible areas of activity that will drive the efforts of the program per ORS 285B.239(4).*

Two-Year Implementation Plan *defines the focus of the Regional Investment Strategy for the 2005-07 biennium. The program's project application, review, and evaluation process are specified, including information on loan programs, tourism projects, industrial marketing programs, and interface with the State of Oregon's Strategic Reserve Fund. This fulfills ORS 285B.239(5).*

Plan for Minorities and Economically Disadvantaged *details the efforts at outreach and inclusion through all stages of the strategy, from development to contracting with individual projects per ORS 285B.239(6).*

Program Evaluation *satisfies ORS 285B.239(7) and (8) by establishing performance measures and targets, benchmarks, and reporting requirements for the program.*

Section 10: BL3 Regional Investment Board Work Program defines the focus of the Regional Investment Strategy during the present biennium. This section is important to fulfilling the requirements of the Regional Investment and Rural Action Plans, that each subsection will be reviewed individually.

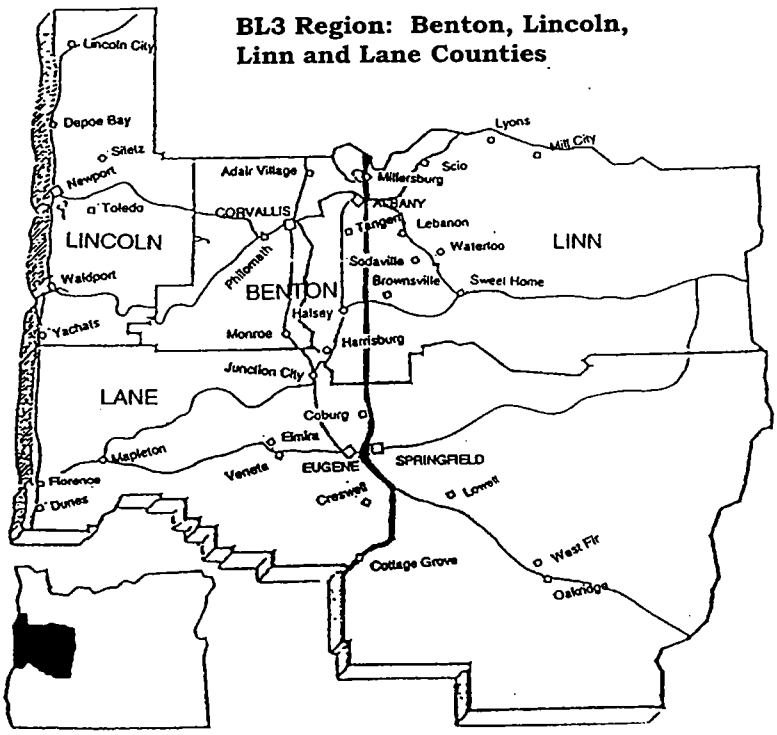
In addition to this summary of Strategy contents, see Appendix D for a guide to where the State of Oregon's "Outline of a Regional Investment Strategy" with Regional Economic Development Act (ORS 285B.269) requirements and references are met within this Strategy document.

SECTION 2

Putting the Region on the Map

Location

The planning region for the Cascades West Economic Development District and the BL3 Regional Investment Board is the four-county area of Benton, Lane, Lincoln, and Linn Counties. The region is located in the center of western Oregon, stretching from the Pacific Ocean eastward over the Coast Range and through the Willamette Valley to the crest of the Cascade Range.



Major highway routes include the north-south Interstate 5 (I-5) Freeway; Oregon Highway 99, also providing north-south access through the Willamette Valley; Oregon Highway 101, connecting the coast area north-south; with major east-west connections provided by U.S. Highways 18, 20 and 34, and Oregon 126. Union Pacific and Burlington Northern/Sante Fe rail main lines and multiple short lines service the region.

Geographic Profile

The region includes a variety of geographic features. Moving from west to east across the region, characteristics include:

- The **Pacific Ocean** coastline is framed by sandy public beaches, craggy cliffs, and the Oregon Dunes National Recreation Area. Rain waters move from the east side of the Coast Range through multiple creeks, rivers, and bays toward the ocean. Natural fresh water lakes dot the coastal area.

- Rain forest precipitation in the **Coast Range** promotes the growth of lush foliage and timber. The Siuslaw National Forest overlays most of the Coast Range within the region.

- **Coast Range foothills** are predominately secondary farmlands, where growth of Christmas trees has established the area as the "Christmas Tree Capitol of the World." Multiple streams and rivers move water from the east side of the Coast Range toward the Willamette River. A dam creates the large Fern Ridge Reservoir.

- Elevations fall to around 200 feet along the Willamette River, which runs north through the alluvial **Willamette Valley** toward its mouth at the Columbia River. Prime and secondary agricultural lands grow a variety of crops, notably the nation's largest grass seed production. Most of the population of the region resides near the Willamette River in the I-5 corridor.

- **Rolling foothills** with timber and secondary farmlands rise to frame the east edge of the Willamette Valley. Streams and rivers move large quantities of water toward the Willamette River. Large water reservoirs are formed in the foothill areas by Dexter, Cottage Grove, Green Peter, and Foster dams.

- Elevations rise in the volcanic **Cascade Range** to peaks at Mt. Jefferson of 10,495 feet and at the 10,385 foot South Sister. The timbered Willamette and Umpqua National Forests overlay much of Cascade Range area of the region. Natural lakes dot the mountain area.

Land Base

90% of the land base in the region is in a natural resource designation. Federal and State governments control at least 46% of the regional land base.

Federal and State lands comprise at least 46% of the total area of the 5.4 million acre (8,601 square mile) region. As illustrated in the following table, 79% of the land base in the region is in forest land and 8% of the region is prime farmland

ACREAGE	Region	Benton	Lane	Lincoln	Linn
Area Total	5,433,000	428,000	2,913,000	631,000	1,461,000
Prime Farmland	457,000	76,000	160,000	0	221,000
Forest Land	4,317,000	268,000	2,477,000	555,000	1,017,000
-State/Fed Forest	2,476,000	85,000	1,582,000	234,000	575,000

Climate

The region has a temperate climate with moderate differences between summer high and winter low temperatures. The region receives more than 40 inches of rainfall per year, which promotes timber growth, a large agricultural sector, and, except in coastal areas, a relatively plentiful fresh water supply.

Cities

Most residents live in incorporated areas, with over half of the population living in the four largest cities. 75% of the cities in the region house fewer than 5,000 people, and 31% have a population of fewer than 1,000.

Incorporated Cities

Benton County:
- *Adair Village*
- *Corvallis **
- *Monroe*
- *Philomath*

Linn County:
- *Albany */***
- *Brownsville*
- *Halsey*
- *Harrisburg*
- *Lebanon*
- *Lyons***
- *Mill City***
- *Millersburg*
- *Scio*
- *Sodaville*
- *Sweet Home*
- *Tangent*
- *Waterloo*

Lane County:
- *Coburg*
- *Cottage Grove*
- *Creswell*
- *Dunes City*
- *Eugene **
- *Florence*
- *Junction City*
- *Lowell*
- *Oakridge*
- *Springfield*
- *Veneta*
- *Westfir*

Lincoln County:
- *Depoe Bay*
- *Lincoln City*
- *Newport **
- *Siletz*
- *Toledo*
- *Waldport*
- *Yachats*

** County Seat*

*** Some cities lie in more than one county:*
- *Albany extends into Benton County*
- *Lyons and Mill City extend into Marion County*

There are 36 incorporated cities in the four-county region. 70% of the regional population resides in these incorporated areas (397,720 of 565,850 people per 2004 estimate).

There are two Metropolitan Statistical Areas in the region: Eugene-Springfield and Corvallis. The four largest cities by population are Eugene (home of University of Oregon), Springfield, Corvallis (home of Oregon State University), and Albany. Over half of the region's population resides in these cities.

Most incorporated cities in the region are small communities. In 2004, 26 cities in the region had a population of under 5,000 and 11 of these cities had a populations of under 1,000 people. Population data is provided in Section 3 – Our People.

Port Districts

Ports manage a variety of recreational, commercial fishing, industrial, and shipping activities and facilities predominately focused along their respective waterfronts. As a form of government, port districts are overseen by elected officials and have the ability to tax and bond. Port districts in the region are:

- Port of Newport, Yaquina Bay in Newport
- Port of Toledo, Yaquina Bay/River in Toledo
- Port of Alsea, Alsea Bay in Waldport
- Port of Siuslaw, Siuslaw Bay/River in Florence

Tribes

Historically, multiple bands of tribal members lived throughout the region. Many Oregon tribes were consolidated onto reservations in what were, in the late 1800's, less desirable coastal areas. Today, the active tribes in the region are:

- Confederated Tribes of Grand Rhonde, based in the rural Polk County community of Grand Rhonde.
- Confederated Tribes of Siletz Indians, based at Siletz with several Lincoln County business ventures including casino, golf course, and motel properties in Lincoln City.
- Confederated Tribes of Coos, Lower Umpqua and Siuslaw, based predominately in Douglas County with a recently opened casino in Florence.

SECTION 3

OUR PEOPLE

The populations of the four counties in the Benton-Lane-Lincoln-Linn region have much in common, but there remain significant population differences from county to county as well as from each county compared to statewide data. Despite these population variances and travel distances within the region, the labor market of the four-county area is increasingly inter-connected.

Population and Growth

Total Population

Total population of the region was estimated at 565,850 in 2004 (Population Research Center, Portland State University). Between 1990 and 2000, the population in the region grew by 13.7% (64,811 people), for an average annual growth rate of 1.3%. Lane County led regional population growth, with a growth of 15.2%.

County Population Trends

Year	Benton	Lane	Lincoln	Linn	Region
1990	70,811	282,912	38,899	91,227	483,849
2000	78,153	322,959	44,479	103,069	548,660
2001	79,000	325,900	44,650	103,500	553,050
2002	79,900	328,150	44,700	104,000	556,750
2003	80,500	329,400	45,000	104,900	559,800
2004	81,750	333,350	44,400	106,350	565,850

1990 and 2000: U.S. Bureau of the Census
2001-2004: Certified Population Estimate, Center for Population Research at Portland State University

Population growth slowed to .8% annually from 2000-2004, compared with 1.3% annual growth between 1990 and 2000.

Sluggish regional economic growth appears to have resulted in a slowing of regional population growth. The total population of the region grew only 3.1% (or .8% annually) from 2000 through 2004, compared to a statewide growth rate of 4.7% for this period.

In-migration is still the primary population growth factor in the region. 68% (37,694) of the population growth in the region from 1990-2000 was due to in-migration. From 2000-2002, in-migration accounted for 59% of the regional growth of 8,090 people. Slow economic growth may account for the recent slowing of in-migration rates.

Population Projections

Growth projections through 2040 are that the region will continue to grow more slowly than the overall state. The State of Oregon Office of Economic Analysis, Department of Administrative Services (OEA) estimates that state population will grow by almost 58% by 2040, while our four counties will grow by only 41%, with the highest growth rate continuing to be in Lane County.

Future growth projections (OEA) estimate that in-migration will accelerate, with in-migration accounting for 83% of regional population growth through 2040. Estimates predict that especially the coastal population will continue to age and that all net growth in coastal areas will come from in-migration.

Urbanization

The population of the four largest cities of the region grew 5.6% from 2000-2004, while the remainder of the region only grew .6%.

The region is increasingly more urbanized, with 70% of the population living in incorporated cities in 2000 versus 64% in 1990 (U.S. Census). The four largest cities in the region of Eugene, Springfield, Corvallis, and Albany are driving regional growth, with a combined growth rate of 5.6% from 2000 through 2004 compared with a .6% growth rate for the remainder of the region.

Demographics

Minorities

Minorities (Black or African-American, American Indian, Asian, Pacific Islander, and Hispanic or Latino) accounted for 11.0% of the population in the region in 2000 compared with 7.1% in 1990. At the state level, the minority rates for the same period are 19.1% (2000 Census) and 11.2% (1990 Census).

As with many population factors, our four counties differ in the composition of our minority populations. Racial diversity in the region is the highest in Benton County (13.3% minority population in 2000), which may be influenced by a higher proportion of Asian/Pacific Islanders (37%) than identified statewide (25%). In Lane County, minorities are 8.0% of County population, with Hispanics accounting for almost 50% of all minorities. Lincoln and Linn Counties both have a minority population rate of 6.1%. Lincoln County, home to the Confederated Tribes of Siletz Indians, has the highest percentage of American Indians (2.3%) in the region and the same percentage of Hispanics. In Linn County, 60% of the minority population is Hispanic.

Growth of the Hispanic population is accelerating. Hispanics accounted for 1.9% of the regional population in 1980. By the 1990 Census, the Hispanic population in the region had risen to 2.4%. By the 2000 Census, Hispanics accounted for 4.5% of regional population. 2003 population estimates indicate that the Hispanic population had risen to 5.1% of the region. Looked at

another way, between the 2000 and 2003, annual overall population growth rates in the region were approximately 0.4% per year while the Hispanic population in the region grew at an average of 4.4% per year (eleven times faster).

Age and Gender

Most of the population in the region is of working age. Work force population in the region is expected to drop from the current 60% to 53% by 2040.

Age patterns in the region are generally similar to those statewide. One in five people in the region are of school age (5-19 years old) and 60% of the regional population is of working age. The region does have a slightly smaller percentage of pre-school age children (5.9% versus 6.6% for the state), and has a slightly higher percentage of population older than 65 (13.6% versus 12.8% for the state).

Projections to 2040 (OEA) forecast that the retirement age population will rise to 20% in both the region and the state. The percentage of school age population statewide is projected to drop by 16%, while it is projected to drop by only 6% at the regional level. Working age population is projected to drop to 56% statewide and to 53% in the region.

50.8% of the population in the region is female and 49.2% is male. The percentage of females is slightly higher in the region than for the state. Lincoln County and coastal Lane County have greater gender disparity, perhaps reflecting the growth of the coastal area as a retirement area.

Income and Poverty

Income Disparity

County average payroll data shows a slight improvement (after inflation) between 1997 and 2002. However, County averages for 2002 remain at or slightly below the statewide average.

While the average payroll after inflation increased in each county between 1997 and 2002, all remain at or slightly below the average payroll in Oregon. Income varies greatly, but consistently, among the four counties of the region and in comparison to statewide data whether measured by average wage, per capita income, or median household income.

Economic disparity between the counties is influenced in part by industrial sector dominance and in part by population composition. Some areas of the region have a strong Leisure and Hospitality sector ($14,000 annual statewide average wage) while others are adding large numbers of jobs in the Information sector ($50,000 annual statewide average wage). The prevalence of small business ownership and a large retiree population also contribute to Lincoln County's lower average income levels. In Benton County, a proportionately large university student population impacts Benton County's median household income but is less evident in that County's median family income data. The impact of university students on County income statistics is not as apparent in Lane County due to its overall larger population base.

Average wages in 2004 were:
- *$37,247 – Benton County*
- *$31,338 – Lane County*
- *$26,105 – Lincoln County*
- *$31,401 – Linn County*
- *$35,621 – State of Oregon*

The Oregon Employment Department uses average wage (AW) as their focal point. In 2004, the AW in Oregon for all covered

employment was $35,621. Benton County's AW was $37,247 (104.6% of state level). Lincoln County has the lowest AW, at $26,015 (73.0%). Lane at $31,338 (88.0%) and Linn at $31,401 (88.2%) are below the state AW but close to each other.

Sources of Personal Income – 2003

	Oregon	Benton	Lane	Lincoln	Linn
Total Personal Income (000's)	$102,418,819	$2,410,599	$8,698,081	$1,196,115	$2,525,489
Net Earnings	66.2%	66.6%	62.1%	53.9%	61.6%
Dividends, Interest, and Rent	18.2%	23.1%	20.1%	23.0%	16.7%
Transfer Payments	15.6%	10.3%	17.7%	23.2%	21.7%

U.S. Bureau of Economic Analysis

Personal income is derived from the three basic sources of earnings, dividends/interest/rent, and transfer payments (retirement, medical, unemployment, and veterans benefits). The table above relates the higher level of transfer payments and lower level of earnings in Lincoln County, likely driven by its higher percentage of retirees.

Poverty and Need

Overall poverty rates in the region are slightly higher than state rates. While the percentage of people in poverty improved between 1990 and 2000, the number of people in poverty grew by 9%.

Poverty rates in the region for all measures (overall number in poverty, various iterations of families in poverty, and those qualifying for food stamps) are slightly higher than state rates, but within a reasonable range. Benton County has lower rates than the state in all measures except for overall poverty, which in Benton County is affected by the college student population.

The percentage of the population in poverty (poverty rate) improved between 1990 and 2000 in the region (U.S. Census). However, the number of people in poverty grew substantially during that same time period, with a 9% increase in the number of individuals in poverty in the region.

73,790 individuals in the region were in poverty in 2000 (for example, $19,307 was the poverty threshold for a family of four). The percentage of people of all ages in poverty was 12.2% in the region, which is somewhat higher than the state poverty rate of 11.3%.

38% of families headed by women were in poverty in 2000. Almost 30% of those in poverty in the region are children.

19,590 children ages 0 through 17 years were in poverty. The rate of children in poverty in the region of 16.1% was slightly higher than the state's rate of 15.1%. Children represent almost 30% of the impoverished in the region.

The highest poverty rates in the region were for families headed by women with children under 18 years of age. In the region, over 38% of these families are in poverty; at the state level the poverty rate for these families is 33.3%.

Other indicators also reflect that a large portion of the population in the region is in need. In 2004, 29.7% percent of the population

in the region qualified for food stamps (eligibility is 185% of poverty rate) compared to a statewide 26.9% eligibility rate. Overnight shelters in the region housed 1,695 people on the evening of the State of Oregon One Night Count. In the 2004-05 school years, 50% of students in Lincoln County qualified for free/reduced fee lunches compared with 43% in Linn, 37% in Lane, and 24% in Benton Counties.

Labor Force

The 2000 U.S. Census divides the labor force into six basic occupational categories (see table below). Our four counties vary significantly amongst themselves and in comparison to the state.

Occupation in 2000 - U.S. Census

	Oregon	Benton	Lane	Lincoln	Linn
Total Employed	1,627,769	38,356	155,460	19,263	46,140
Management/Prof.	33.1%	46.9%	31.9%	27.3%	25.1%
Service	15.3%	14.8%	15.7%	21.9%	15.9%
Sales/Office	26.1%	20.7%	26.3%	27.5%	23.7%
Resource Industries	1.7%	1.7%	1.3%	2.9%	2.3%
Construction/Maint.	9.1%	6.3%	9.3%	10.4%	11.0%
Production/Transp.	14.7%	9.7%	15.5%	9.9%	21.9%

Lane County closely reiterates the state percentages. Benton County exhibits the effects of its two primary employers (Oregon State University and Hewlett Packard), with a 50% higher number employed in management and professional activities. Lincoln County has a significantly higher percentage employed in service positions, reflective of its visitor-based economy. Linn County exceeds the state percentage for those working in production and transportation by 50%.

Educational Attainment

Educational measurements indicate very different populations in each of the counties of the region. K-12 test scores, high school dropout rates, and educational attainment data show Benton County and Lane County exceeding state education norms, while Lincoln County and Linn County typically lag far behind Benton and below state levels.

Testing measures typically show educational performance has improved in the K-12 schools of the region over the past five years. With a few exceptions, average countywide test scores typically exceed statewide averages.

High school dropout rates for the population over age 25 in the region have improved over time. Dropout rates in Benton (2.8%) and Lane (3.8%) Counties are significantly better than statewide averages (4.9%). However, the dropout rates in Lincoln (6.0%) and

Linn (6.1%) Counties significantly exceed the statewide dropout rate.

The over age 25 populations of Benton and Lane Counties both exceed state norms for attainment of high school diplomas and Bachelor degrees (see Table). Populations in Lincoln and Linn Counties both exceed state percentages for those whose highest level of education was high school or some college (including associates degrees), but who have not achieved a Bachelor Degree. In Linn County, 18.1% of the population over age 25 did not hold a high school or equivalent diploma, compared with only 6.9% of Benton County, 12.5% of Lane County, and 15.1% of Lincoln County.

Educational Attainment – 2000 Census

Age 25+ Completing	Oregon	Benton	Lane	Lincoln	Linn
- High School or Higher	85.1%	93.1%	87.5%	84.9%	81.9%
- Bachelor Degree or Higher	25.1%	47.4%	25.5%	20.8%	13.4%

SECTION 4

Our Natural Systems and Resources

Agricultural and Forest Lands

Agricultural Lands

456,000 acres (8.4%) of the region is prime farmland. The majority of the prime farmland in the region lies along the Willamette River. Vegetables, berries, grass seed, and variety of other crops are grown on these prime agricultural lands. Secondary, foothill, and coastal lands also play an important role in the regional agricultural picture, producing high-value nursery stock and vineyards, and establishing the region as the Christmas tree and the grass seed "capitol of the world."

A healthy agricultural economy is promoted in the region through land use zoning, designation of urban growth areas, and property tax deferrals.

Policies to promote a healthy agricultural economy include land use zoning, designation of urban growth areas, and property tax deferrals. In addition to providing economic diversity and food production, keeping land in agricultural use promotes land conservation, which is particularly important where agricultural lands lie in close proximity to urban areas.

Forest Lands

Forest lands are important to the region for their economic, environmental, recreational, and quality of life benefits. Forest lands cover 75% of the region, with 50% of the region in State or Federal forest land.

Douglas fir is the primary timber species in the Cascade and Coast Ranges. Much of the forest has a mixed lower canopy of Sitka spruce and western hemlock, and there are alder-dominated pockets.

Economic and community health in the region are directly impacted by Federal and State timber policies.

Federal- and State-owned forests comprise 57% of all forest lands and include the Siuslaw, Willamette and Umpqua National Forests plus Bureau of Land Management holdings. (Refer to Section 2, Land Base Table.) With 46% of the regional land base in federal and State forest land ownership, public timber policies have a dramatic impact on economic and community health. Federal timber harvest policy changes in the mid-1990's deepened an economic recession and, in many communities, eliminated primary employers.

Timber harvest reductions have dramatically reduced the number of professional staff in the region focused on forest health. Federal staff reductions have resulted in closure of multiple U.S. Forest Service ranger stations, removing another employer from already economically fragile rural communities. While restoration, limited harvesting, and road abandonment efforts continue to place professionals in the forests, reduced oversight of remote areas allows illegal uses (poaching, marijuana cultivation) and fires to remain undetected for longer periods of time.

Surface and Ground Water Quality

Water quality and quantity issues have a large impact on development in the region. Water resources are used extensively for recreation, agriculture, industrial and commercial activities, and domestic needs. These human-oriented uses must be balanced with the habitat requirements of fish and wildlife.

Surface Water Health

Multiple creeks, streams and rivers flow toward either the Pacific Ocean on the west side of the Coast Range, or toward the Willamette River on the east side of the Coast Range. Natural lakes dot the region, especially along the coastline and in the mountain areas. Dam structures have created larger lakes at Fern Ridge, Cottage Grove, Dexter, Foster, and Green Peter.

Pacific Ocean: The vast body of the Pacific Ocean defines the western edge of the region. The coastal area has numerous rivers and drainage basins that discharge directly into the Pacific Ocean. While professional opinions vary on the extent to which man-generated pollutants are impacting ocean health, the ocean is going through a warming cycle that appears to correlate with reductions in anadromous fish runs.

A warming cycle in the Pacific Ocean appears to correlate with anadromous fish run reductions.

Urban storm water runoff and sewage effluent discharges impact bay health.

Bays serve critical functions in the ocean ecosystem. They also serve important economic functions as the home of marine life research, commercial fisheries, recreational fishing, and tourism. Urban storm water runoff and discharge of sewage effluent challenge bay health that, in turn, challenges economic health.

Willamette River Drainage Basin: The Willamette River Drainage Basin covers approximately twelve percent of the State of Oregon. The river system within the basin consists of the Willamette and thirteen major tributaries. The Willamette is the tenth largest river in the continental U.S. in terms of total discharge at its Columbia River mouth. Thirteen in-stream structures regulate flows above Albany (the northern edge of the region).

When finalized, the Willamette TMDL will be used to assess and regulate surface water uses. Additional information about TMDLs and other Willamette River planning efforts can be found at:

http://www.deq.state.or.us/WQ/Willamette/WRBHome.htm

http://governor.oregon.gov/Gov/Willamette_River_Legacy/restore.shtml

In the Willamette Basin, many competing water uses contribute pollutants to the water supply, and the quality of both surface water and groundwater sources is a major concern. Several planning efforts have assessed the conditions of waterways in the Willamette Basin in the past decade. Among those efforts is current work being done by the Oregon Department of Environmental Quality (DEQ) to establish a Total Maximum Daily

Load (TMDL) for temperature, bacteria, and mercury in the Willamette River. When finalized, the Willamette TMDL will be used to assess and regulate surface water uses that have an impact on pollutant levels.

Groundwater Health

Groundwater is an important natural resource. It recharges area streams and rivers and provides a non-surface drinking water source for multiple community water systems.

The quality of groundwater sources in the region are influenced by human activities as well as natural factors. One factor affecting groundwater quality and quantity is development and associated stormwater runoff. When stormwater is channeled directly into a surface water body, less water goes into the ground. Even where stormwater is recharged to the ground through a pond or trench, it can carry pollutants in amounts that, over time, can contaminate groundwater. Other influences associated with development, such as septic system releases, lawn and garden chemical applications, and pollutants associated with vehicle use can also cause groundwater pollution. In addition to nitrate pollution of the groundwater, there are areas in the Willamette Valley where the groundwater is contaminated by naturally occuring arsenic.

Significant levels of nitrates have been identified in groundwater between Eugene and Albany. For further details on the Southern Willamette Groundwater Management Area visit:

http://www.groundwater.oregonstate.edu/willamette/

Research by the Oregon Department of Environmental Quality (DEQ) identified significant levels of pollution, primarily nitrates, in groundwater between Albany and Eugene. DEQ established the Southern Willamette Groundwater Management Area in 2004 due to the level of identified pollution. A plan for the management area is to be developed to guide State agencies' decisions that are related to groundwater in the management area.

Air Quality

Air quality is impacted by almost every natural and man-influenced factor; from plant growth and naturally occurring decay, to industrial and vehicle emissions.

Every day we breathe about 35 pounds of air. High levels of air pollution can impact those with heart or lung disease, asthma, and challenged immune systems. Air pollutants may also impact habitat and water quality.

The U.S. Environmental Protection Agency (EPA) has established six health-based Nation Ambient Air Quality Standards that are monitored in areas that have or had air quality problems.

Generally, air quality in the region remains of high quality. However, the American Lung Association recently ranked Lane County as the seventh-worst county in the nation for air quality.

Many of the inland areas of the region experience periods of air stagnation. When this happens in winter months, cold air often becomes trapped at the Willamette Valley floor with warmer air aloft, creating temperature inversion conditions. The combination of cold, stagnate air and restricted ventilation causes air pollutants to become trapped near the ground. Wintertime air inversions contribute to high particulate levels, while summertime inversions contribute to an increase in ozone levels, both causing the local air quality to deteriorate.

In the region, the U.S. Environmental Protection Agency (EPA) only requires environmental monitoring of air quality in Lane County, where three of the six National Ambient Air Quality Standards are monitored:

- Particulate Matter: The Eugene-Springfield area was designated as a PM non-attainment area in 1980, re-

designated in 1987, and last exceeded the federal standard in 1987. Oakridge was designated a PM non-attainment area in 1994; and, while Oakridge occasionally experiences high PM levels, federal air standards have not been exceeded there since 1993.

- Ozone: Eugene-Springfield remains in attainment with federal ozone standards.
- Carbon Monoxide: Eugene-Springfield was designated a non-attainment area in 1978, last exceeded the federal standard in 1986, and was re-designated as an attainment area in 1994.

While fine particulate levels remain below EPA standards, Oakridge exceed the American Lung Association's benchmark level for healthy air on 20 days in 2000, 25 days in 2001, and 17 days in 2002. By comparison, the Eugene-Springfield area exceeded that level on just 6 days in 2000 and 2001, and on seven days in 2002. The Lane County Regional Air Pollution Authority, City of Oakridge, and federal funding programs are expanding air clean-up efforts by launching a "Warm Homes, Clean Air" project targeted at reducing wood heating.

Land Quality: Brownfields and Superfund Sites

Brownfield Sites

DEQ defines "brownfield" as:

"A real property where expansion or redevelopment is complicated by actual or perceived environmental contamination."

DEQ notes that every city and county has vacant, underused, and potentially contaminated properties.

316 sites in the region require some level of assessment or clean up.

As of August 2005, 476 sites in the BL3 region were identified on the Oregon Department of Environmental Quality (DEQ) Environmental Clean-up Site Information (ECSI) database. The variety of sites within the region listed on the ESCI database includes neighborhoods above contaminated groundwater plumes, vacant and abandoned properties, and active business locations. Past and current land uses on listed sites include dry cleaners, manufacturing operations, trucking facilities, gas stations, an abandoned mine, rail yards, landfills, army bases, and residences with leaking oil tanks.

DEQ has determined that "No Further Action" is needed on 160 of the sites listed for the region, leaving 316 sites still requiring some level of assessment and/or cleanup. The ability to develop or redevelop sites without No Further Action status is in question until the existence of contamination is clarified and, if needed, remedied.

Only 6 of the 48 sites where hazardous substance contamination has been identified have received No Further Action status. 14 sites have been declared an "Orphan Site" because contamination is not tracked to a single contaminator, the contaminator is out of business, or the contaminator does not have resources to conduct cleanup.

Details about sites with known and potential contamination and current clean-up status are listed by DEQ at: http://www.deq.state.or.us/wmc/ecsi/ecsiquery.htm

Sites where petroleum releases from underground storage tanks have been reported are recorded by DEQ at: http://www.deq.state.or.us/wmc/tank/LustPublicLookup.asp

DEQ's map-based program that identifies sites in its database is at: http://deq12.deq.state.or.us/fp20/

Active Brownfields

The level of potential heath and/or environmental threat from contamination has moved the clean up of some sites onto DEQ's "Active Brownfield" list (August 2005):

- Coffin Butte Landfill, north of Corvallis, is being monitored for on-site groundwater contamination.
- Evanite in Corvallis is monitored at four locations: its waste water facility where trace TCE and other contaminants were identified, where a 1978 TCE spill was covered by a parking lot after soil removal, lagoon of a prior paper mill that is now under a building, and at an underground mineral spirits tank.
- Black Butte Mine, south of Cottage Grove, was a mercury mine from late-1890 into mid-1960. Arsenic and mercury were identified on the site and at area creeks. Orphan status was granted in 2002. OSU monitors site conditions.
- Potter Manufacturing Facility in Eugene has completed clean up, with DEQ granting No Further Action status in 2001.
- Springvilla Dry Cleaners in Springfield has removed PCE contaminates caused by a broken drain line. DEQ issued a "Contained-In" determination in 2005.
- UPRR Eugene Yards has operated since 1918 as a rail maintenance yard. Contamination from drips and spills of creosote, solvents, grease and oil has been contained. Nearby wells have been remedied. DEQ granted a partial No Further Action approval in 2004.
- Lebanon Area Groundwater to the west of Lebanon's Century Park is contaminated by PCE, TCE, DEC and TCA. Remedial action at three dry cleaners is underway.
- Ridgeway Logging site in Sweet Home was granted Orphan status. Contamination in nearby Midway neighborhood wells required connections to City water in 2000. DEQ is determining if additional clean-up is necessary.
- Sweet Home Area Groundwater in the Midway area was granted Orphan status in 1996. Two groundwater plumes with PCE, TCE, and TCA have impacted wells in the area.

Superfund Sites

The level of potential heath and environmental threat from contamination moved the clean-up of some sites into the more intensive federal "Superfund" clean-up program. The National Priorities List (NPL) for the Superfund program includes ten Oregon sites, two of which are located in the region:

- United Chrome Products in the Corvallis Airport Industrial Park was listed on the NPL in 1984. Between 1956 and 1985, United Chrome's plating tanks leaked into groundwater and aquifers. Contaminate traces were identified in surface waters two miles from the site. Clean-up has been completed and the site is currently under a one-year monitoring program. In July 2005, DEQ made a preliminary conclusion that no further action will be needed.

- Teledyne Wah Chang in Millersburg was identified for the NPL in 1987. Three areas have been remedied and DEQ expects

that the site will be cleared within the fifteen-year timeframe specified under the NPL based on a three year review of:

- Seven unlined sludge ponds adjacent to the Willamette River where clean-up was completed in 1993 by removal of over 100,000 cubic yards of soil and solidification.
- Groundwater and sedimentation in Truax Creek was cleaned-up and finalized in December 2002.
- Remediated surface and sub-surface soils.

Addressing Brownfields

Further information on DEQ and other State brownfield assistance is available on DEQ's website:

http://www.deq.state.or.us/wmc/

Several assistance programs are in place to help identify contamination, and to move brownfield sites toward clean-up and redevelopment.

- Site-Specific Assessments: DEQ accesses federal funds to gather detailed site condition information, and to prepare recommendations and cost estimates for any clean-up.
- Funding through the State for assessments and clean-up are available for specific development proposals.
- Orphan sites are designated when contamination poses a serious threat to human health or the environment and responsible parties are unknown, unable, or unwilling to pay for remedial actions. Orphan status opens public technical assistance and funding access.
- Independent Clean-up Pathway allows low- and medium-priority sites to be cleaned without ongoing DEQ oversight.
- Prospective Purchaser Agreement between DEQ and a prospective purchaser legally limits the purchaser's liability to the State for environmental clean-up of a property in return for a commitment to clean-up or fund clean-up of the site.

Natural Hazards

Disaster Preparedness

The communities in the region continue to develop and refine planned responses to natural hazard emergencies, to avoid the hazard if possible, and to minimize any long-term negative impact resulting from the hazard. Local emergency management plans are mandated by the Federal Emergency Management Agency (FEMA) to qualify for pre- and some post-disaster assistance.

A Regional All Hazard Mitigation Plan, completed for the region in 1998, focused primarily on the hazards of flooding, severe storms, mudslides, and landslides. All counties have emergency response plans. If a major emergency strikes, Benton, Lane, and Linn Counties will work with Marion, Polk, and Yamhill Counties. Lincoln County and coastal Lane County cooperate with other coastal areas.

The level of detail in local plans varies greatly. Some communities are working with their County emergency services staff to prepare base-level plans, while others are preparing full-scale response procedures. For example, Sweet Home's 2002 update of their plan provides 400 pages of details that include lists of private entities with pumps and generators, and recommended policies for

emergency procedures and preventing new home construction in flood plane areas (most of which have since been enacted).

Floods

Communities continue to strive to balance development interests with flood management requirements and interests.

Traditionally, the most commonly occurring natural emergencies in the region have been floods. The region has continued to work on flood control, with damages from 1996 floods (reaching over $34 million) resulting in attention to refining and adjusting emergency procedures and in the re-designation of some areas near Willamette Valley waterways as flood plain.

A current example of continuing flood management efforts are repairs and improvements underway on the Fern Ridge Reservoir dam. While the development and recreation value of the reservoir is most apparent, the long-term positive value of flood control in maintaining economic stability is often overlooked. There are thirteen in-stream structures regulating Willamette River basin waters upstream of Albany (the northern edge of the region).

Communities continue to monitor designated flood hazard areas to make certain that any development in those areas is safe and appropriate for flood management. Assessment of storm drainage systems, policies that encourage percolation instead of runoff of storm waters, and evaluation of fill requests have all been elevated in importance over the past decade.

Tsunamis

Most coastal communities in the region are focusing efforts on clarifying tsunami hazards, with attention to refined hazard boundaries, development policies, and evacuation plans.

Tsunami hazard zones appear along the Pacific coastline of the region, extending inland along bay fronts, rivers, and streams. Tsunamis are a series of sea waves usually caused by a displacement of the ocean floor by an undersea earthquake. As tsunamis enter shallower water near land they increase in height. Recent research suggests that tsunamis have struck the Oregon coast on a regular basis. Typical wave heights over the last eighty years occurring in the Pacific are twenty to forty-five feet at the shoreline. A few waves have reached one hundred feet or more due to local conditions.

The December 2004 tsunami that wiped out entire communities along the Indian Ocean reminded residents along the Pacific Coast of the importance of tsunami planning. Threats of a Pacific Coast tsunami in the spring of 2005 further alerted coastal officials to adjustments needed in their response systems, as portions of the coast failed to receive emergency response warnings.

Most coastal communities are in the process of reviewing their tsunami hazard zones, refining tsunami evacuation plans, and identifying how development plans within hazard zones should be adjusted. The premier wave research lab at Oregon State University provides researchers world wide with tsunami modeling capabilities.

Earthquakes

The region is located in the Cascadia Subduction Zone. If plates along the Cascadia ridge shift, earthquakes of up to 9.0 on the Richter scale could be experienced. Scientists project that this would have a devastating impact in most of Oregon and Washington.

Weather-Related Hazards

Weather in the region is typically relatively mild. Unlike many other areas of the U.S., there are few weather-related events that actually result in the slowing-to-stopping of business and community operations:

- In the Willamette Valley, interruption of power and reduced mobility is infrequently created by ice and windstorms. In 2002, the last major wind event swept through the Willamette Valley at up to 100 mph, downing trees and power lines, and leaving some areas isolated and without power for several days. Because most cities lack sanding and snow removal equipment, local access can be hampered during infrequent heavier snowfalls and ice events.
- On the coast, high winds are a more severe and more frequent occurrence. Areas of the coast do often experience brief power outages as winds top 60 to 75 mph at times.
- The more mountainous areas of the region are often impacted by snowstorms, which can limit access over mountain passes and cut power supplies to outlying homes.
- Rain inundated clay soils and unstable road banks infrequently result in slides that, while in predominately-unpopulated areas, can close roadways and strand communities.

Wetlands, Riparian Zones, and Conservation Areas

Functioning wetlands serve as riparian cleaning zones, helping to remove contaminates before waters reach streams, rivers, and the ocean. They slow runoff and provide water storage capacity important to flood water management. They are also primary nurseries for fish.

Natural resource planning under Oregon's Land Use System requires that jurisdictions consider how to address and protect a variety of resource values. Jurisdictions are working to balance sometimes conflicting development goals with these resource-related goals. Many communities are emphasizing new land use patterns that bring natural resources into a development as an amenity, increasing the value of the development.

Planning sponsored by watershed councils at the watershed level allows the multiple interests within each watershed to be represented. Watershed councils in the region also provide restoration and enhancement education, project development assistance, funding, and implementation of projects.

Wetlands

Wetlands in the region range from apparent marsh and bog wetlands to well-drained grass seed fields in the Willamette Valley. Historically, many industrial sites have been located in wetlands; this has been especially true of lumber mills. Other wetlands have been diked, tiled and/or drained for farming. Many of the vacant, undeveloped, industrially zoned lands in the Valley contain identified wetland areas. The presence of alluvial soils designates most of the Valley floor as potential wetland.

Wetlands on the National Wetlands Inventory come under the jurisdiction of the U.S. Army Corps of Engineers, but the Oregon Department of State Lands (DSL) oversees most wetland review requests. There is a "no net loss" of wetlands approach that applies to both public and private lands.

Many of the vacant industrially zoned properties in the Willamette Valley contain identified or suspected wetland areas. State approval of wetland delineation and mitigation planning is needed to move these sites toward development.

Many cities have invested in further identification of wetlands. Local wetlands inventories identify and refine wetland boundaries. Cooperating with property owner to delineate wetland area allows developers to move proposals forward with a higher level of certainty.

Wetlands can be addressed in a variety of ways. The size of the Willamette River Drainage Basin provides a large area in which wetlands can be mitigated offsite. Many developments have elected to retain wetland areas as site amenities. There are also efforts underway to restore some wetlands to a natural state to take advantage of positive attributes of the wetland.

Riparian Areas

Urban areas in the region are re-evaluating setbacks along their waterways to determine the effectiveness of current standards and whether additional setbacks or riparian protection measures are needed. On forest lands, the timber industry-supported Oregon Forest Practices Act establishes Riparian Management Areas of fifty to one hundred feet along streams and wetlands on private lands. More stringent buffers are typically required on federal and State timberlands. Recent outreach and demonstration projects have helped to improve agricultural land practices impacting riparian areas.

Conservation Areas

Purchased and leased conservation easements are increasingly being offered in the region by non-profits and public agencies to encourage protection of natural resource values. Easement lease agreements can be structured to allow owners to continue producing agricultural commodities and timber on their land, with protection plans legally defining restoration and maintenance responsibilities.