NORTHWEST FOREST PLAN
THE FIRST 15 YEARS (1994–2008)

Socioeconomic Status and Trends

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USDA United States Department of Agriculture

Forest Service

PNW Pacific Northwest Research Station

The **Forest Service** of the U.S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the national forests and national grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

Abstract

The Northwest Forest Plan 15-year report shows potential trends in socioeconomic well-being in the NWFP area. To reveal trends in socioeconomic well-being, the 15-year report tracks demographic data as well as data on agency expenditures and several forest-related resources. Unlike the 10-year report, the 15-year report does not attempt to evaluate causation.

Acknowledgements

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Preface

The Northwest Forest Plan (NWFP) 10-year report aimed to demonstrate whether or not the Plan met its socioeconomic goals by focusing on goods and services produced from federal land management. The analytical framework used for the 10-year report uncovers linkages between the socioeconomic data and federal land management under the Plan.

The primary purpose of the 15-year report is updating data and trends displayed in the 10-year report. The 15-year report draws heavily on the 10-year report (Charnley et al. 2006). The 15-year report is similar to the 10-year report in displaying data related to socioeconomic well-being in the NWFP area. While the 10-year report provided data from the years 1994 to 2003, the focus of the 15-year report is generally on the next five year period, from 2004 to 2008.

The analytical frameworks for the 10-year report and the 15-year report are also different. Unlike the 10-year report, the analytical framework used for the 15-year report was not designed to uncover linkages between socioeconomic data and federal land management actions under the Plan. The 15-year report tracks demographic data as well as data on agency expenditures and several forest-related resources to display potential trends related to socioeconomic well-being. The differences between the 10-year and the 15-year reports are primarily due to new priorities and methodologies for NWFP monitoring agreed upon by the Regional Interagency Executive Team (RIEC) in March 2006.

The monitoring report is presented in 11 chapters. Chapter 1 offers an introduction and key findings. Chapter 2 though Chapter 6 address data in timber production and other resource outputs, including special forest products, grazing, minerals and recreation. Chapter 7 though Chapter 10 evaluate data in economies that may be associated with federal forest management in the NWFP area. Chapter 11 provides a summary.

Contents

Chapter 1: Introduction

The Northwest Forest Plan (NWFP) was developed partly in response to the controversy over the harvest of old-growth forests in the Pacific Northwest. By the late 1980s and early 1990s, the controversy became a crisis as a series of lawsuits severely limited federal timber harvest in the Pacific Northwest. In response to the crisis, President Clinton held a summit in 1993 that led to his issuance of a mandate for federal land management and regulatory agencies to work together to develop a plan to resolve the conflict (Charnley et al. 2006). The result is the Northwest Forest Plan (USDA and USDI 2004b), which amended Forest Service and BLM land management plans to include strategies for forest management, economic development, and agency coordination.

One of the overarching goals of the Plan is balancing the need for forest protection with the need to provide a steady and sustainable supply of timber and nontimber resources in order to promote socioeconomic well-being in NWFP area communities. Plan monitoring is a required tool for determining the effectiveness of the Plan in meeting this and the other goals of the Plan. The purpose of this 15-year report is to update the Regional Interagency Executive Committee (RIEC) and interested publics about the trends related to socioeconomic well-being in the NWFP area.

Socioeconomic Monitoring Questions

During the first decade of NWFP monitoring (1994-2003), the socioeconomic monitoring focused on evaluating two questions: are predictable levels of timber and nontimber resources available and being produced; and are local economies experiencing positive or negative changes that may be associated with federal forest management? The answers to both of these questions provide important information about socioeconomic well-being in the NWFP area. The 10-year socioeconomic monitoring module included collection of both primary and secondary data to answer the questions posed above about predictable levels of timber and non-timber resources and changes experienced by local economies.

In March 2006, the RIEC agreed upon new regional priorities and methodologies for NWFP monitoring. The RIEC developed a new socioeconomic monitoring question: What is the status and trend of socioeconomic well-being?[1] In order to answer this question, the RIEC specified periodic regional analysis of existing social, economic and agency data. Due to budgetary constraints, no new data was collected.

This 15-year report provides the data compiled in response to the RIEC's modification of NWFP's socioeconomic monitoring questions posed in the NWFP Record of Decision (ROD).[2] The 15-year report also addresses the RIEC's direction to use existing data rather than a combination of existing data and primary research as was the protocol for the 10-year report. The aim of this report is to assemble the secondary data in a way that shows the potential trends in socioeconomic well-being in the area.

Data on natural resource uses and management activities on federal forest land contributes to our understanding of socioeconomic well-being in the NWFP area. Because over 40 percent of the land area of the states in the NWFP area is federal land (Census 2011), monitoring data related to natural resource use shed light on potential relationships between socioeconomic data and federal land management actions. For example, employment in the wood products manufacturing industry is related to change in federal timber harvest. Agency employment is also related to change in federal timber harvest and to agency budgets. A better understanding socioeconomic data and data on federal land management actions allows land managers to make more informed and better natural resource management decisions that potentially affect socioeconomic well-being of neighboring communities. This information may also assist land managers in prioritizing work.

Existing social, economic and federal agency data are also used to assess the status and trends in social and

[1]For an explanation of the term well-being, see Donoghue E.M.; Sutton N.L. 2006. Socioeconomic conditions and trends for communities in the Northwest Forest Plan region, 1990 to 2000. In Northwest Forest Plan: the first 10 years (1994-2003): socioeconomic monitoring results. Volume III: Rural communities and economies. Chapter 2. Gen. Tech. Rep. PNW-GTR-649, ed. S Charnley, tech. ed., pp. 7-35. Portland, OR: U.S. Department of Agriculture, Pacific Northwest Research Station, p. 18-19.

[2]The Record of Decision (ROD) is one of two key documents establishing policy and direction for the NWFP; the other document is the Standards and Guidelines (S&G).

economic well-being in the NWFP area. Data of population, ethnicity, unemployment, employment, and personal income are charted. Data on quantifiable resource management activities on federal forest lands that contribute to social and economic well-being are also tracked. These include: timber, special forest products, grazing, minerals, and recreation. Lastly, data about agency budgets and employment levels, and agency revenue contributions to local governments are analyzed.

Methods and Data Sources

The time period used for monitoring in the 10-year report was generally 1994 through 2003. The 15-year report builds on the analysis completed for the 10-year report and examines additional data through 2008. Annual data for all indicators in the time period were not always available. The data displayed in the 15-year report vary based on availability, consistency between years, and the need to present the analysis clearly and effectively to show recent social and economic trends. Comparisons of recent data to those in the 10-year report are also discussed.

Most of the social and demographic monitoring was conducted at the county-level. The data are mostly based on surveys conducted by the U.S. Census Bureau. The advantage of using this scale of information is that the data are available and affordable. On the other hand, counties are large and using data at this level often masks change in well-being occurring at the sub-county or community scale. Counties are also part of larger economies that characterize the NWFP area, and as such they show differences within these economies.

The 10-year report uses census block group data in addition to county-level data to represent the sub-county scale. Block groups are made up clusters of blocks, which are very small, containing approximately 30 people and are bounded by geographic features. Block groups contain between 250 and 550 housing units. Data from the census long form, which includes all of the indicators for which the census collects information, are available at the block group level every ten years. Block groups can be aggregated to community-level units of analysis. However, the 2010 decennial census data are not available for this 15-year report.

Economic Contributions of Federal Land Management Agencies

The 15-year report includes data on the economic contributions from federal land management agencies to counties in the NWFP area. These data are used to estimate how various resource outputs, uses and recreation opportunities affect jobs and income. They are closely related to other social data and the status and trends of socioeconomic well-being in the NWFP area.

The data for these indicators, and many of the other indicators discussed in the following chapters, come from Forest Service Regional and BLM State resource specialists, state and federal social and economic data bases, and models. Most of the agency data represent complete counts of the identified indicators such as timber harvest, agency employment, and budgets. Other data are based surveys such as recreation use. The survey data used as indicators are described in more detail in the relevant chapter.

Key Findings

Timber harvest and wood products employment were key components of social and economic issues. Timber harvest remains an important factor supporting employment opportunities especially in rural communities. Employment supported by federal timber harvest as well as other management activities is related to social and economic well-being because employment instability can cause severe hardships on individuals and families, as well as distress in local and regional economies.

In the NWFP area, recent data show the quantity of timber harvested from all ownerships rose from 2001 to 2004; then harvest declined back to 2001 levels by 2007 (fig. 1-1). Data for non-federal lands were not available for 2008.

On federal lands, timber offered for sale more than doubled and timber harvest nearly doubled between 2001 and 2008 (fig. 1-2), but federal harvest remains a relatively small contribution to the total harvest level from all ownerships. The percentage of timber harvested on federal lands compared to total harvest on all ownerships, increased from two to six percent from 2001 to 2007 (fig. 1-1).

Even though the number of timber industry jobs generated per million board feet of timber harvest has remained

relatively stable since 2003 (fig. 1-3), total employment in the timber industry declined by eight percent between the years 2001 and 2007. This can be attributed in part to reductions in timber harvest on non-federal lands. This decline in timber industry employment has likely affected social and economic well-being in the NWFP area.

Most of the timber harvested in the NWFP area comes from nonmetropolitan counties. Forest products manufacturing employment makes up about 10 percent of employment in nonmetropolitan counties and only 1 percent of employment in metropolitan counties. Because the nonmetropolitan counties are less diverse economically, the effects of changes in timber harvest and wood products related employment will likely be more pronounced. Moreover, in the past decade, the population of the nonmetropolitan counties has increased only slightly compared to the metropolitan population (fig. 1-4). This low rate of growth suggests that employment opportunities are also not increasing.

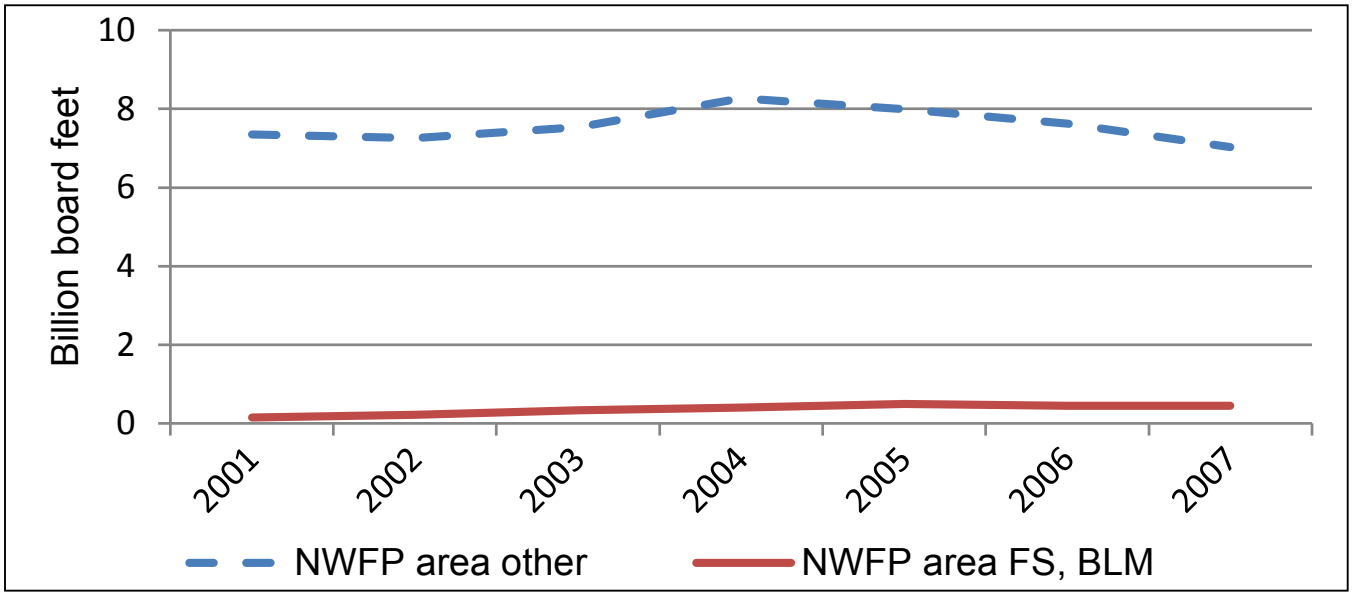


Figure 1-1: Timber harvest on all ownerships, 2001-2007

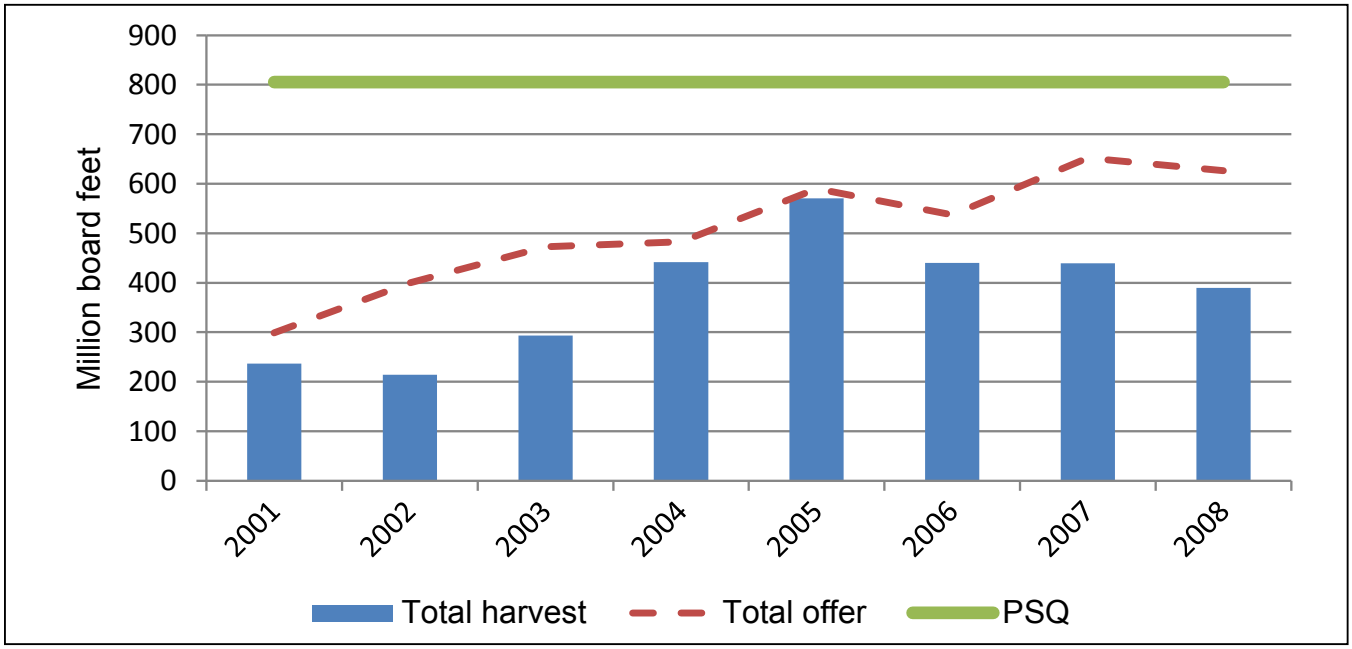


Figure 1-2: Total timber offered for sale, timber harvest and probable sale quantity (PSQ) on federal lands, 2001-2008

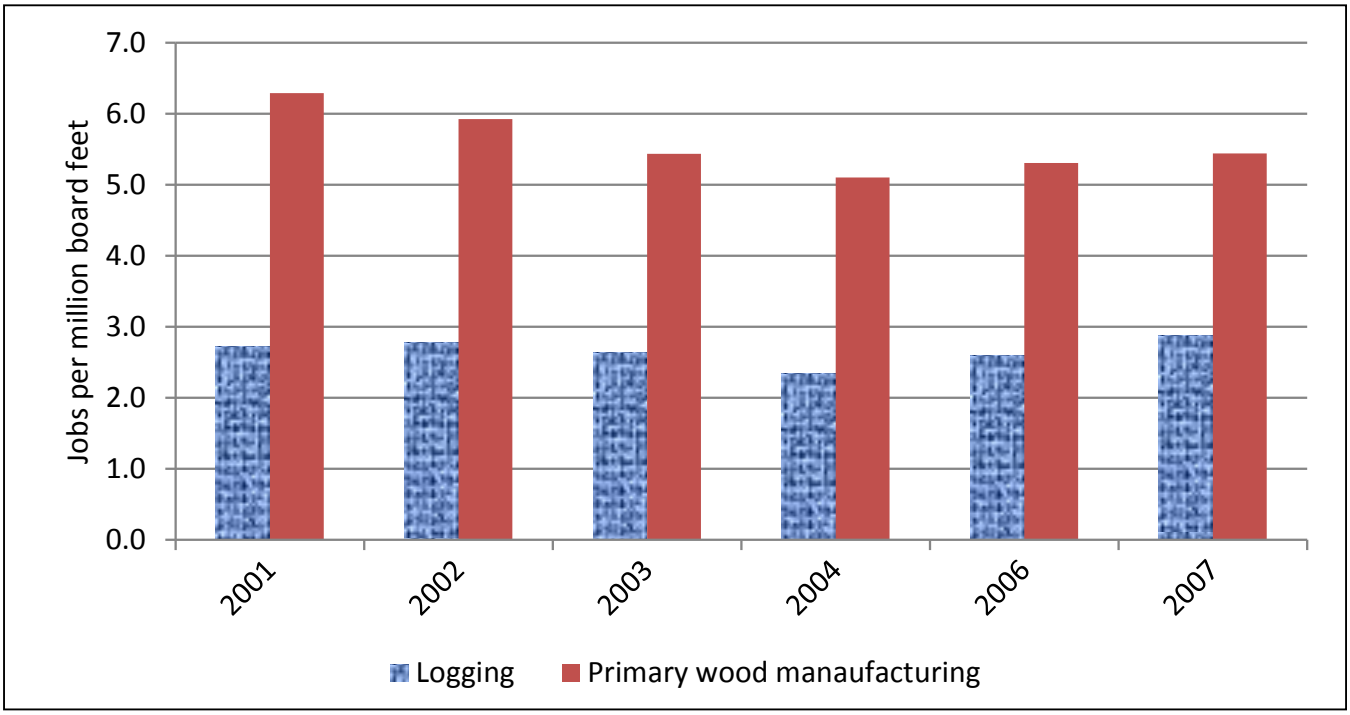


Figure 1-3: Jobs per million board feet of harvest on all ownerships, 2001-2007

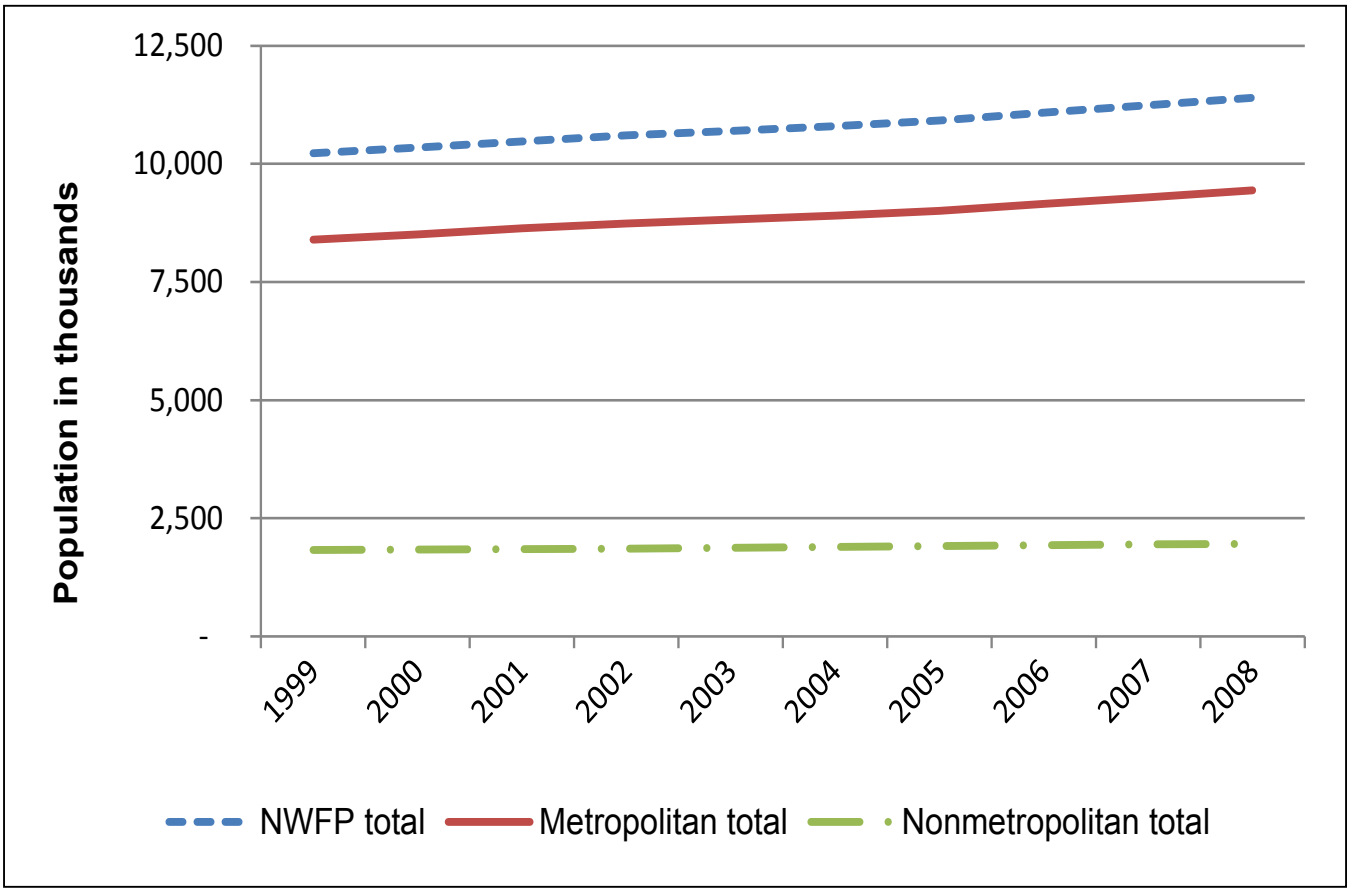


Figure 1-4: Metropolitan and nonmetropolitan population change in NWFP counties, 1999-2008

Chapter 2: Timber

"During the 1990s, much of the discussion about the Plan's socioeconomic goals focused on timber production (Charnley et al. 2006)." A prevailing concern was that the Plan's cutbacks in federal timber harvesting would negatively affect local forest communities in the Pacific Northwest. Many of these communities had residents who worked in the timber industry as loggers, mill workers, secondary wood products manufacturers, and transporters of wood and wood products. Any reduction in federal timber harvest volumes had the potential to incur social and economic impacts on timber workers and their families in the region (Charnley et al. 2006).

This chapter examines data in the total volume of timber offered for sale by the agencies. These data are compared to the total Probable Sale Quantity (PSQ).[3] Some interpretation of the data is also provided. Predictability of future volume offered for sale and specific features of timber sales such as their size and type, and qualifications for bidding on the sales are not assessed for purposes of this monitoring report.

Data Analysis

The Forest Service and BLM maintain corporate timber reports on: volume of timber offered for sale, volume of timber sold, and volume of timber harvested. Volume offered is the amount of timber that the federal agencies make available for sale in a given fiscal year (October 1-September 30). Not all timber sales that agencies offer are purchased; therefore, volume of timber sold is the timber that actually receives a bid from a qualified purchaser and is awarded. Once sales are sold, purchasers generally take two to three years to harvest. As a result, the volumes sold and harvested in a given year are rarely the same. Socioeconomic impact analyses use volume harvested, because it is the timber-related value that enters the economy. It is the measure of the timber from federal forests that contributes to employment in a given year.

This chapter uses volume of timber offered for sale as an indicator of intended accomplishment by the agencies. Volume offered for sale measures all volume made available for sale by the agencies, including volume offered from late-successional and riparian reserves, and volume not meeting forest utilization standards. As described above, the PSQ component of that volume is the amount of timber offered for sale from matrix lands and adaptive management areas. In this chapter, the PSQ and other harvests are not identified separately. The Forest Service data on the volume of timber offered for sale, sold, and harvested are expressed in terms of long logs. The BLM timber data are expressed as short logs. Long logs are scaled to 32 feet for timber volume measurement and short logs are scaled to 16 feet. BLM short log volume is converted to long log volume using a conversion factor equal to 0.825 times the short log volume.

Results

During the 1980s, the total volume of timber offered for sale in the NWFP area from National Forest System and BLM lands was about 4.5 billion board feet. Timber volumes offered for sale dropped dramatically after 1990 following the Endangered Species Act (ESA) listing of the northern spotted owl (*Strix occidentalis caurina*). As a result of the ESA listing, injunctions against timber sales on federal forests in the owl's range were issued in response to legal challenges associated with this listing.

Although much lower than the volume offered in the 1980s, the volume of timber offered for sale by both the Forest Service and the BLM increased as expected during the first two to three years of Plan implementation (fig. 2-1). The volume offered for sale then declined through 2000 because of lawsuits brought by the Oregon Natural Resources Council (ONRC) and the Pacific Coast Federation of Fishermen's Associations (PCFFA). Since then there has been a slow general increase in the volume of timber offered for sale by both agencies. The volume offered for sale from National Forest System lands was about 60 percent lower in 2008 than it was during the early years of the Plan, and the BLM has reached a level about 90 percent of the volume offered in 1998, the highest amount of BLM volume offered since the implementation of the Plan.

[3]For an explanation of Probable Sale Quantity (PSQ), see Charnley, S., tech. coord. 2006. Northwest Forest Plan: the first ten years (1994-2003): socioeconomic monitoring results. Gen. Tech. Rep. PNW-GTR-649. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Vol. II, p.7.

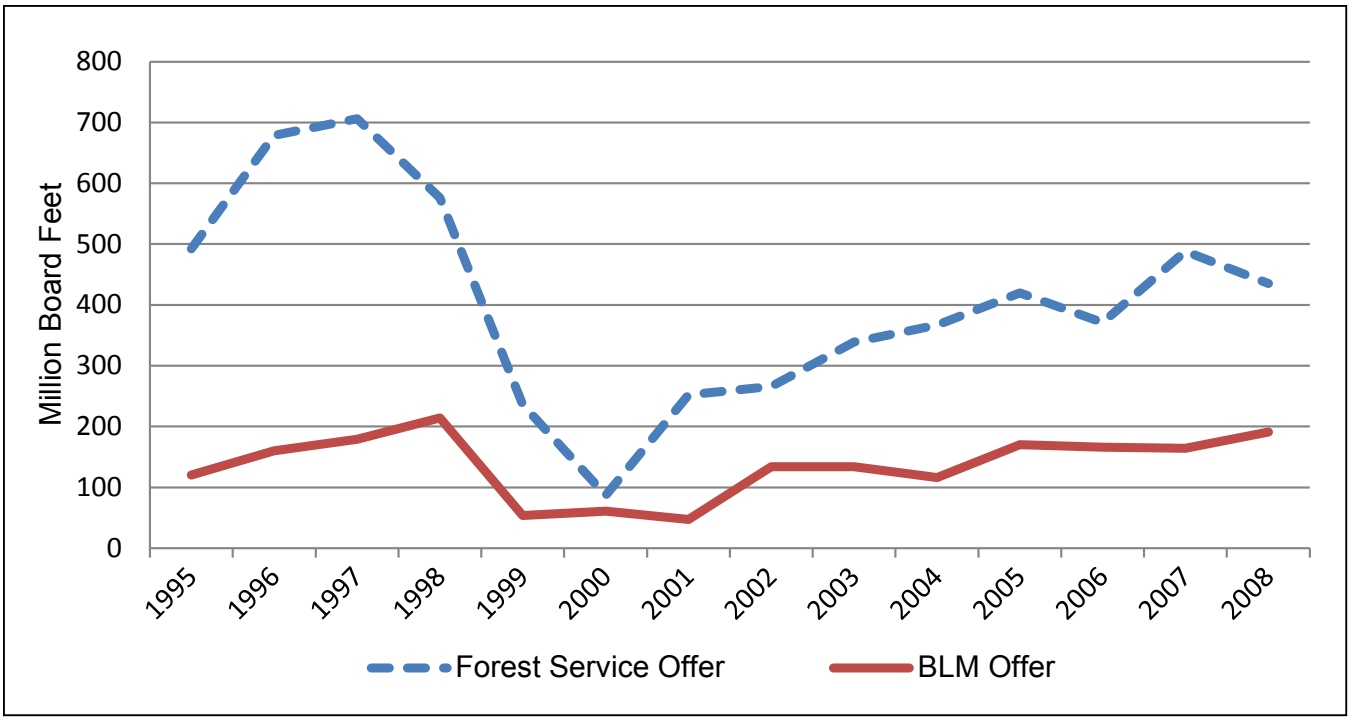


Figure 2-1: Timber offered for sale on National Forest System and BLM lands in the NWFP area, fiscal years 1995-2008

Note: The BLM data include all volume for the Lakeview District. Data for the Klamath portion only within the NWFP area were not available for the 15-year report. This results in an upward bias of 8 percent on average when compared to data in the 10-year report when Klamath only data were available.

The volume of timber offered for sale by both agencies (fig. 2-1) is combined and compared with PSQ in this analysis (fig. 2-2). Between 1995 and 2003, the PSQ was adjusted from 958 million board feet to 805 million board feet. During the first decade of Plan implementation, eighty percent of the volume offered was estimated to have come from matrix and adaptive management area lands. The remaining 20 percent is estimated to have come from timber sales in the reserves. Thus, the average annual PSQ volume produced between 1995 and 2003 was about 421 million board feet (Baker et al. 2005). The agencies did not produce the anticipated PSQ volumes during the first decade of the Plan, although they came close to meeting timber sale objectives between 1995 and 1998. An offer of just over 800 million board feet was produced on average from 1996 through 1998 after Plan startup. A large drop in volume offered occurred in 1999. The low for the period was 148 million board feet in 2000. Since then, sale volumes have gradually increased, but they have not yet returned to 1996–98 volumes.

The total volume of timber harvested and volume offered by all national forests and BLM districts in the NWFP area during 1995 through 2008 is shown in figure 2-3. The 10-year report shows major decrease in offer, sale and harvest volumes in the early 1990s, an increase in offer and harvest for a few years following Plan implementation, and then sharp declines during 1999 and 2000 resulting from the lawsuits filed by ONRC and PCFFA. Beginning in 2001, and continuing to the present, there have been increases in volume offered for sale. However, beginning in 2006, there have also been annual declines in harvest volume. The increases are due to resolution of the ONRC and PCFFA lawsuits as well as increased funding for the timber sale programs during a period of high market demand for timber. The recent decrease in the amount of timber harvest from both National Forest System and BLM lands is due in part to the national downturn in building construction (Bureau of Economic Analysis 2010).

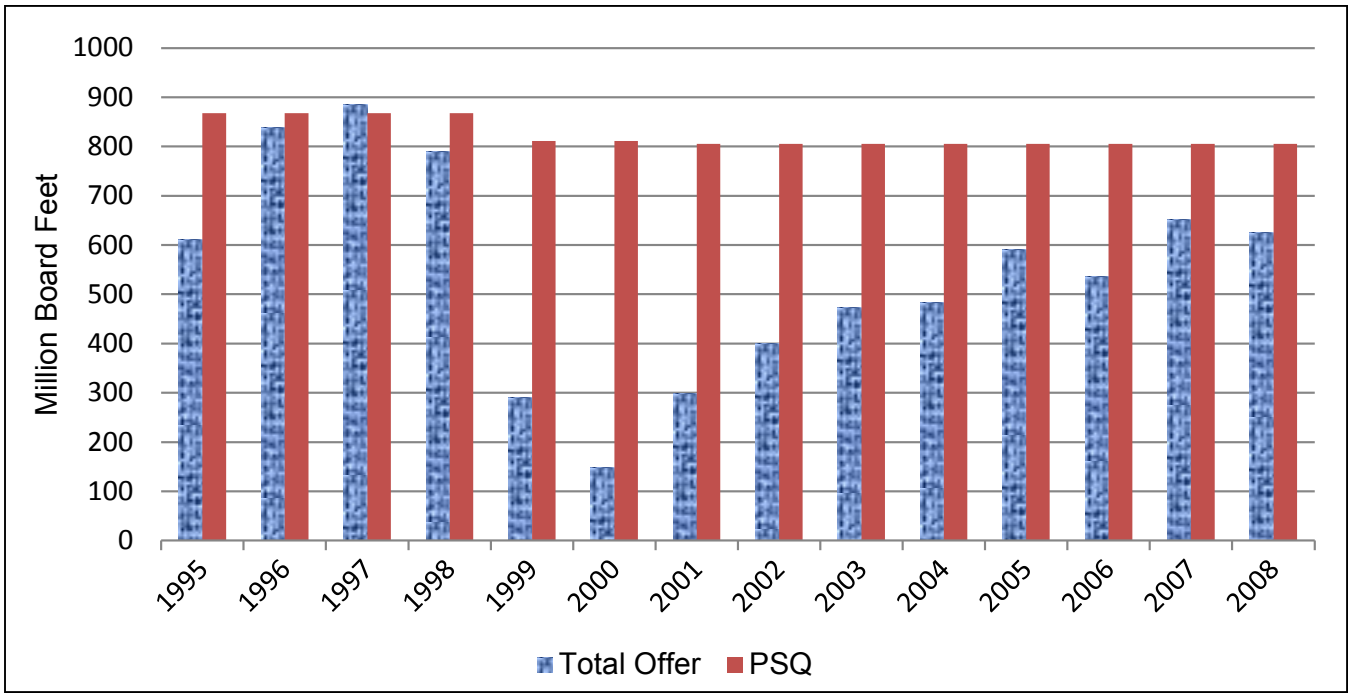


Figure 2-2: Timber offered by the Forest Service and BLM compared to PSQ in the NWFP area, 1995-2008

Note: The BLM data include all volume for the Lakeview District. Data for the Klamath portion only within the NWFP area were not available.

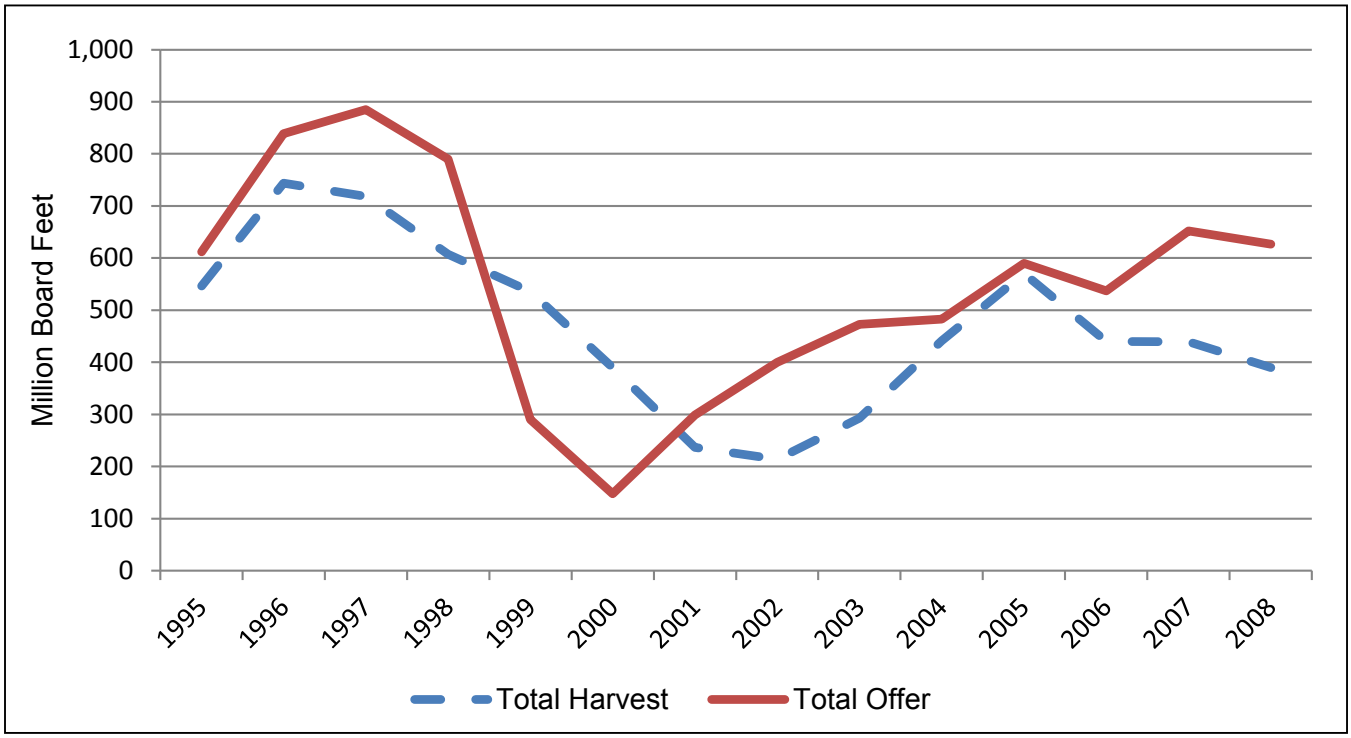


Figure 2-3: Total harvest compared to total offer on National Forest System and BLM lands in the NWFP area, 1995-2008

Note: The BLM data include all volume for the Lakeview District. Data for the Klamath portion only within the NWFP area were not available.

Discussion

Since the year 2000, the volume offered for sale from agency lands has continued to increase gradually. The eight year improvement provides an indication that timber supplies from agency lands are becoming more stable and predictable compared to the early years of Plan implementation. However, the recent drop in timber harvesting is a result of broader economic conditions including the national downturn in building construction.

Chapter 3: Special Forest Products

Since the late 1980s, interest in special forest products has grown considerably. Not only has consumer demand increased domestically and internationally, but the volume of special forest products harvested has also increased. Opportunities for harvesting special forest products were expected to continue under the Plan, however, restrictions on quantity and methods of harvesting in certain areas were expected.[4]

Data Analysis

The special forest products data for the Forest Service and the BLM are not combined; the data are reported and discussed separately. The BLM data are primarily for the Salem, Eugene, Roseburg, Medford and Coos Bay districts. Data from the entire Lakeview District are also included because they are partially in the NWFP area and are difficult to separate from the non-NWFP area components.

The Forest Service data are for NWFP area national forests. The Oregon data include all of the Deschutes, Okanogan and Winema National Forests even though parts of these forests are outside of the NWFP area. The data exclude the California national forests in the NWFP area, because the data for Region 5 were not in a format that could be readily used. The NWFP area national forests in California are expected to follow the trends found in the part of the NWFP area in Oregon and Washington. Additional data on special forest products are available in Appendix B of the 10-year report.

"The Forest Service tracks special forest products in a database called the Automated Timber Sale Accounting System. These data come from permits and contracts that the Agency issues to allow members of the public to harvest special forest products on Forest Service-managed lands (Charnley et al. 2006)." Four measures are tracked in the Automated Timber Sale Accounting System, they are: quantity of product sold, value of product sold, quantity of product removed, and value of product removed. The 10-year report relies on the quantity of the special forest product sold as the monitoring indicator. This 15-year report uses quantity and value of product sold for the BLM, and value sold along with quantity and value removed for the Forest Service to provide broader monitoring of special forest products.

Value of products sold and the value of products removed are important because the dollar measure of different products can be summed for a single total for all special forest products. Quantities of different forest products cannot be added, because the units vary. The quantity and value sold are also measured, because they are not necessarily the same as the quantity and value harvested. The quantity and value sold generally refers to the maximum amount of harvest permissible under a permit, which is based on Agency estimates of the amount people will harvest under the permit. The quantity and value harvested indicates the amount of special forest products removed. The Forest Service data for all indicators reported in this chapter are by fiscal year.

For the BLM, data are available for the amount and value of the special forest products sold. The data represent the quantities that were authorized for harvest and the funds received for those permits. Harvesters operate largely on an honor system and the actual quantities harvested may differ. The 10-year report includes only the amount sold as the indicator. This 15-year report uses both the value and the amount sold. Value provides a consistent measure across all products. The BLM data reported in this chapter are by fiscal year.[5]

Results and Discussion

Figures 3-1 and 3-2 present data on the value and quantity of BLM's special forest products sold. The figures show that most of the quantity and value come from boughs, floral and greenery, mushrooms and fungi, and wood products. These four categories comprise 95 percent of the

[4]For background on specials forest products in the NWFP area, see Charnley, S., tech. coord. 2006. Northwest Forest Plan: the first ten years (1994-2003): socioeconomic monitoring results. Gen. Tech. Rep. PNW-GTR-649. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Vol. II, p.19.

[5]Unlike the 10-year report, this 15-year report uses data for BLM districts within the NWFP area. This includes all of the Lakeview District, which is only partially within the NWFP area.

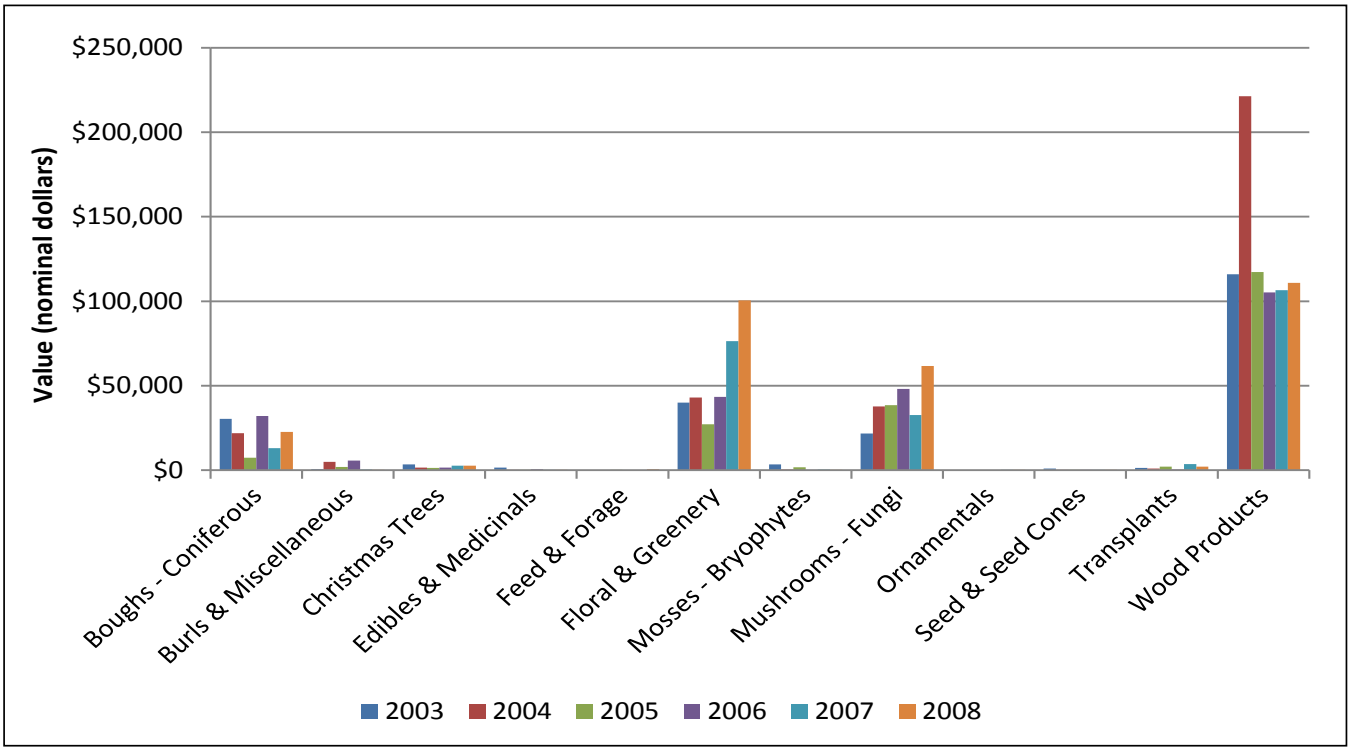


Figure 3-1: Value of special forest products from BLM lands in the NWFP area, 2003-2008

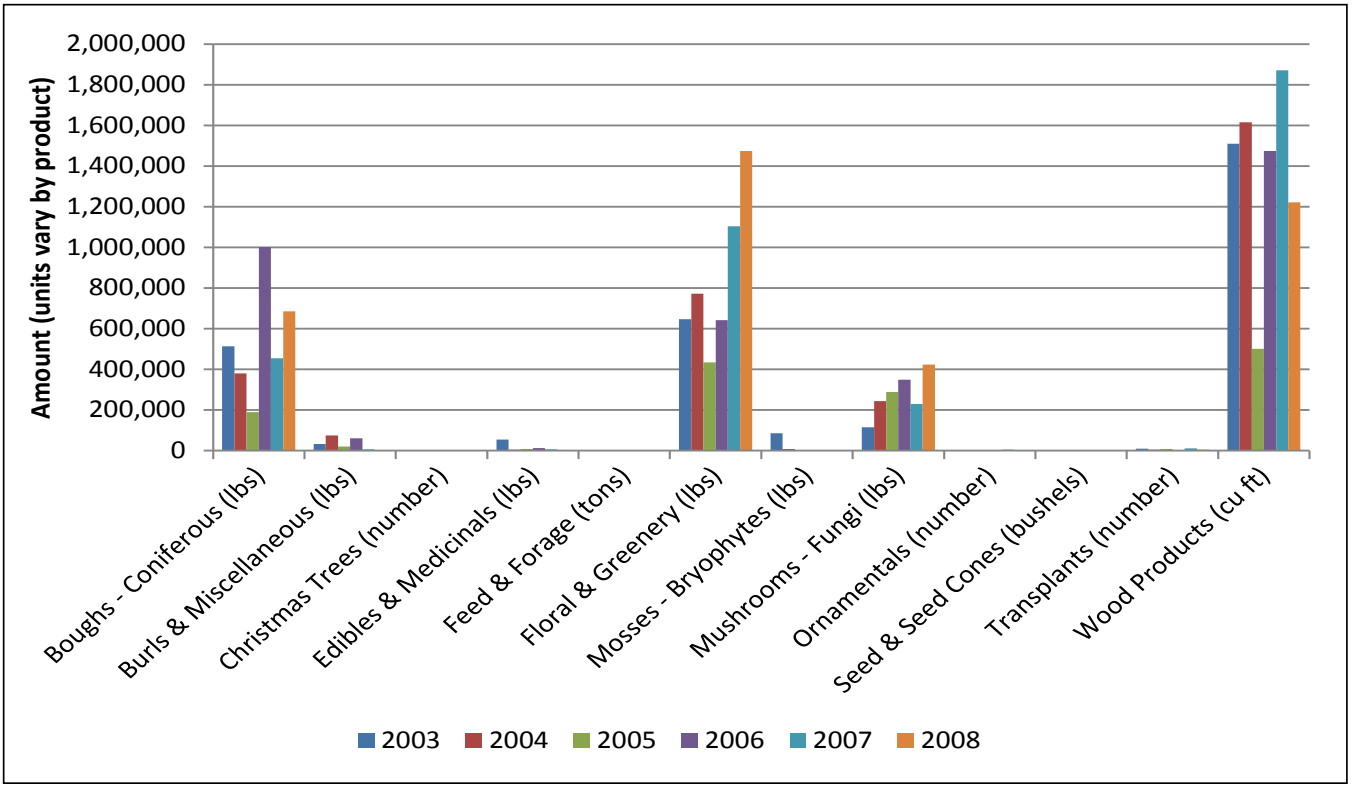


Figure 3-2: Amounts of special forest products sold from BLM lands in the NWFP area, 2003-2008

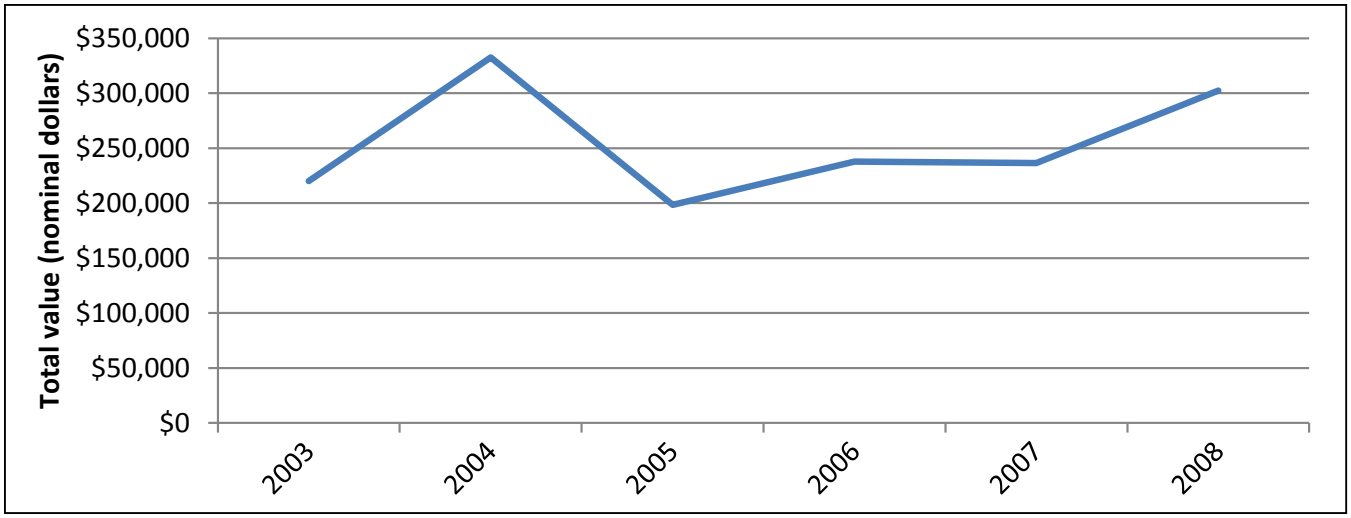


Figure 3-3: Total value of special forest products sold from BLM lands in the NWFP area, 2003-2008

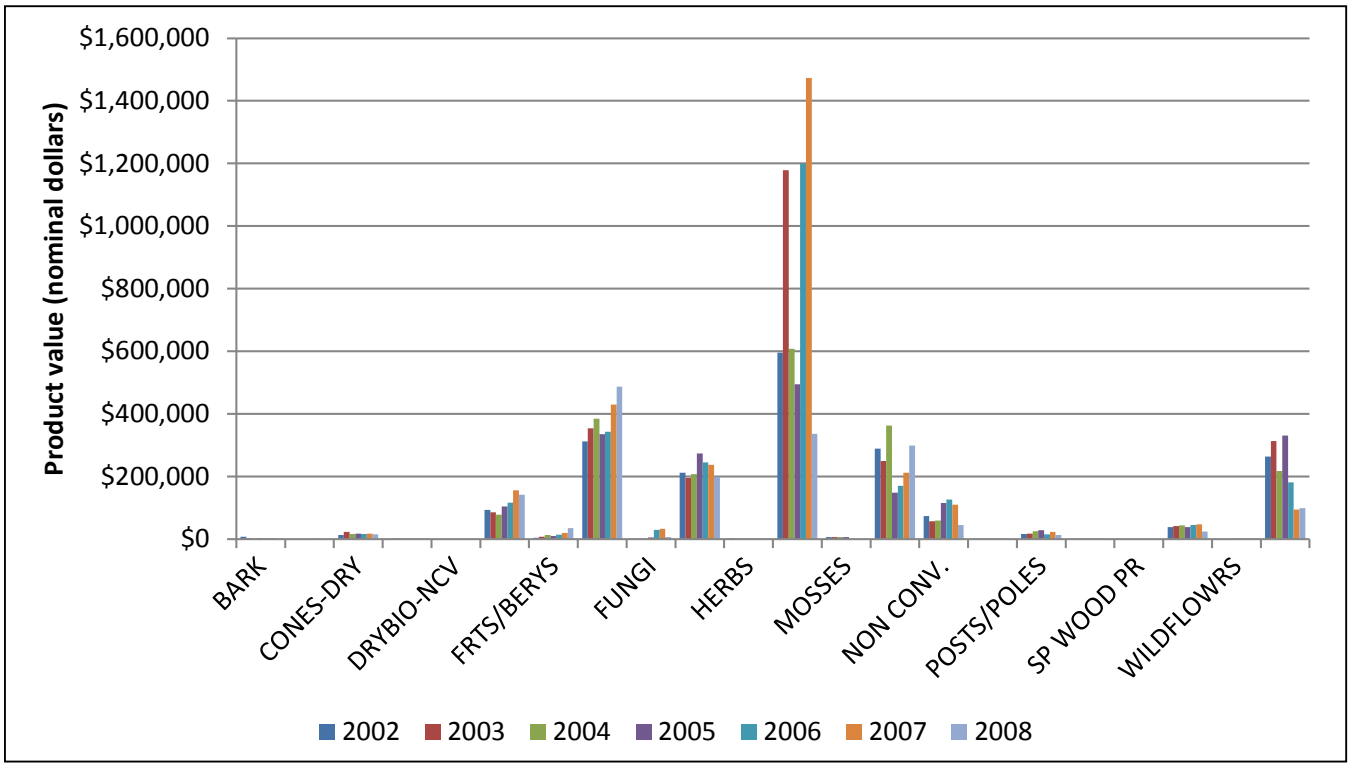


Figure 3-4: Value of special forest products sold from National Forest System lands in the NWFP area, 2002-2008

value of special forest products. Annual trends are generally increasing in the floral and mushrooms groups; trends are generally decreasing in the boughs and wood products groups. The wood products spike in 2004 appears to be an anomaly. Overall the value of special forest products from BLM lands has increased since 2005, and the total value in 2008 is 37 percent greater than the total value in 2003 (fig. 3-3).

For the Forest Service, the special forest products program is concentrated in foliage, fuelwood, grass, limbs/boughs mushrooms, nonconvertible products and Christmas trees (fig. 3-4). These six categories comprise over 94 percent or more of the value of all special forest products sold in each year. Trends within the product groups show annual increases in the foliage and fuelwood groups. In terms of

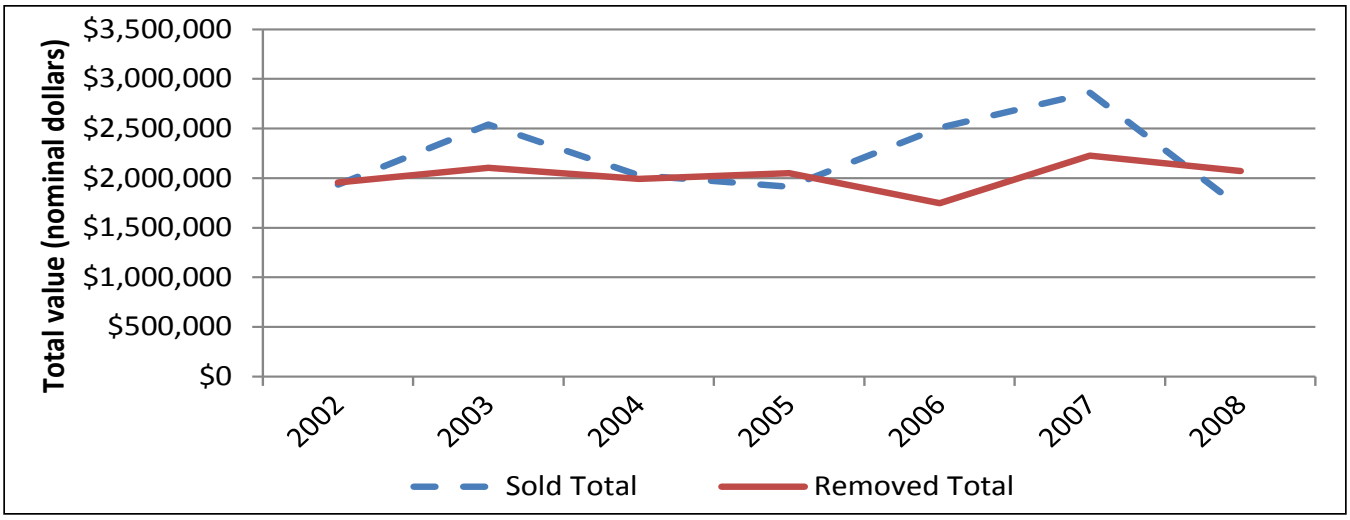


Figure 3-5: Total value of special forest products sold and removed from National Forest System lands in the NWFP area, 2002-2008

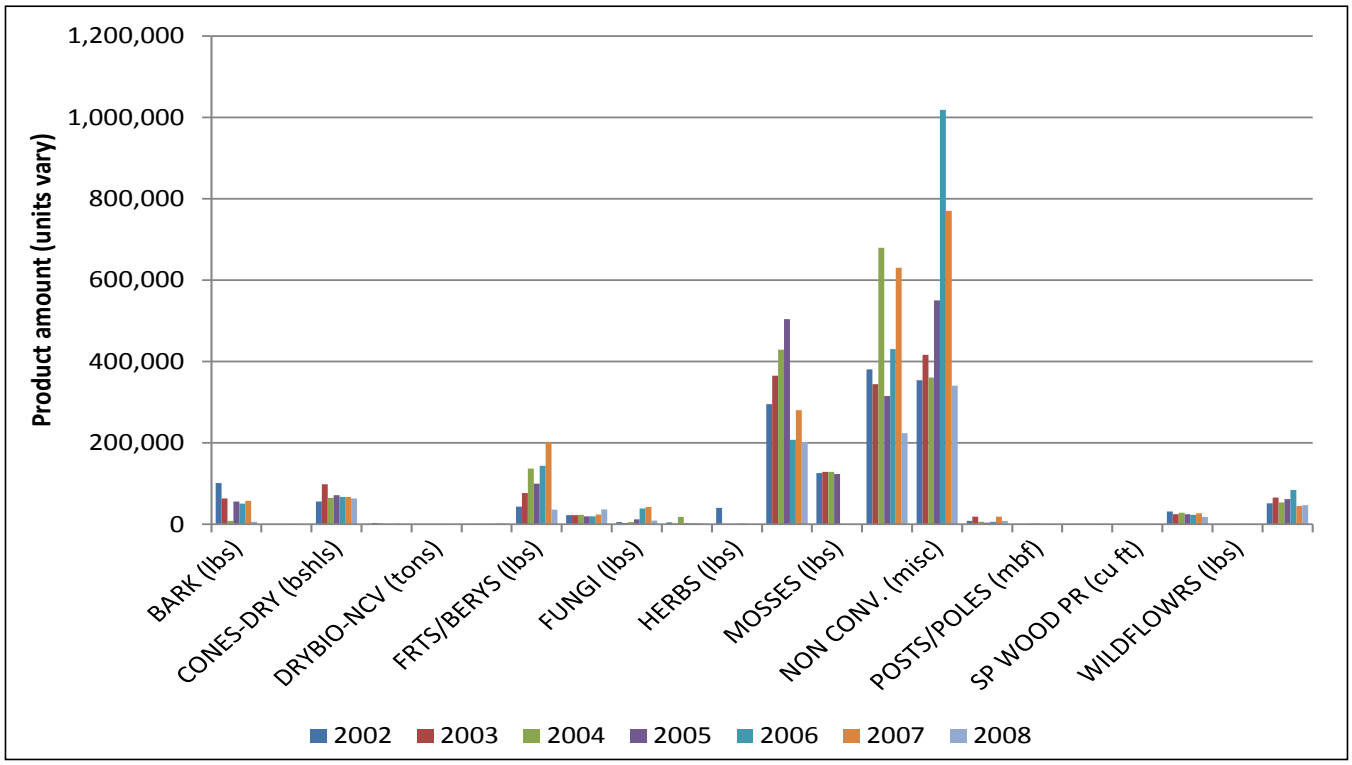


Figure 3-6: Amounts of special forest products sold and removed from National Forest System lands in the NWFP area, 2002-2008

value of product removed, the Christmas tree group shows a decreasing trend. The variability in the rest of the categories makes identifying any trends difficult. Considering both the value of products sold and the value of products removed for all special forest products from National Forest System lands, the apparent trend over the past six years is flat (fig. 3-5).

Figure 3-6 presents the quantity of special forest products removed from National Forest System lands. The data show the annual variability within the product groups. Comparing the quantity across the groups is not possible due to the variability in units. A large number of the groups are measured in pounds while others are measure in tons. The non-convertible group is measured using a variety of units including pieces. The units for this group are labeled as miscellaneous.

Chapter 4: Grazing

"Grazing on National Forest System and BLM lands in the NWFP area is minor compared to grazing on federal lands in eastern Oregon and Washington and northeastern California (Charnley et al 2006)."

Data Analysis

This 15-year report uses the permitted AUMs and authorized AUMs as indicators of range use.[6] One AUM is the amount of forage a 1,000 pound mature cow and calf consume in a 30-day period, which is about 780 pounds of dry weight. Permitted AUMs are measures of planned capacity. Permitted AUMs are the number of AUMs that are specified on the grazing permit for the duration of the permit (FSM 2230.5). The permit is usually valid for ten years (FSM 2231.03). Permitted AUMs provides a comparable indicator for Forest Service and BLM grazing capacity. Authorized AUMs are the amounts of forage permittees pay for and are authorized to use in a given year. Authorized AUMs indicate how much of the planned capacity is used annually. It is this amount which contributes to jobs and income.

The Forest Service AUM data used in this 15-year report are not completely comparable to that used in the 10-year report. The 10-year report uses district-level data; districts outside of the NWFP area were excluded. For the 15-year report, district level data were unavailable. Instead, this report uses forest-level data. The data for the entire Okanogan and Wenatchee, and Deschutes National Forests were used even though these forests are partially outside of the NWFP area. Data from the Winema National Forest are excluded, because this forest was combined with the Fremont National Forest, which is completely outside of the NWFP area. The use of forest level data creates an upward bias of approximately 30 percent overall. Most of the bias is associated with the inclusion of the entire Okanogan and Wenatchee National Forests. One half of these two national forests' AUMs are outside of the NWFP area. These two national forests contribute about 50 percent of the total

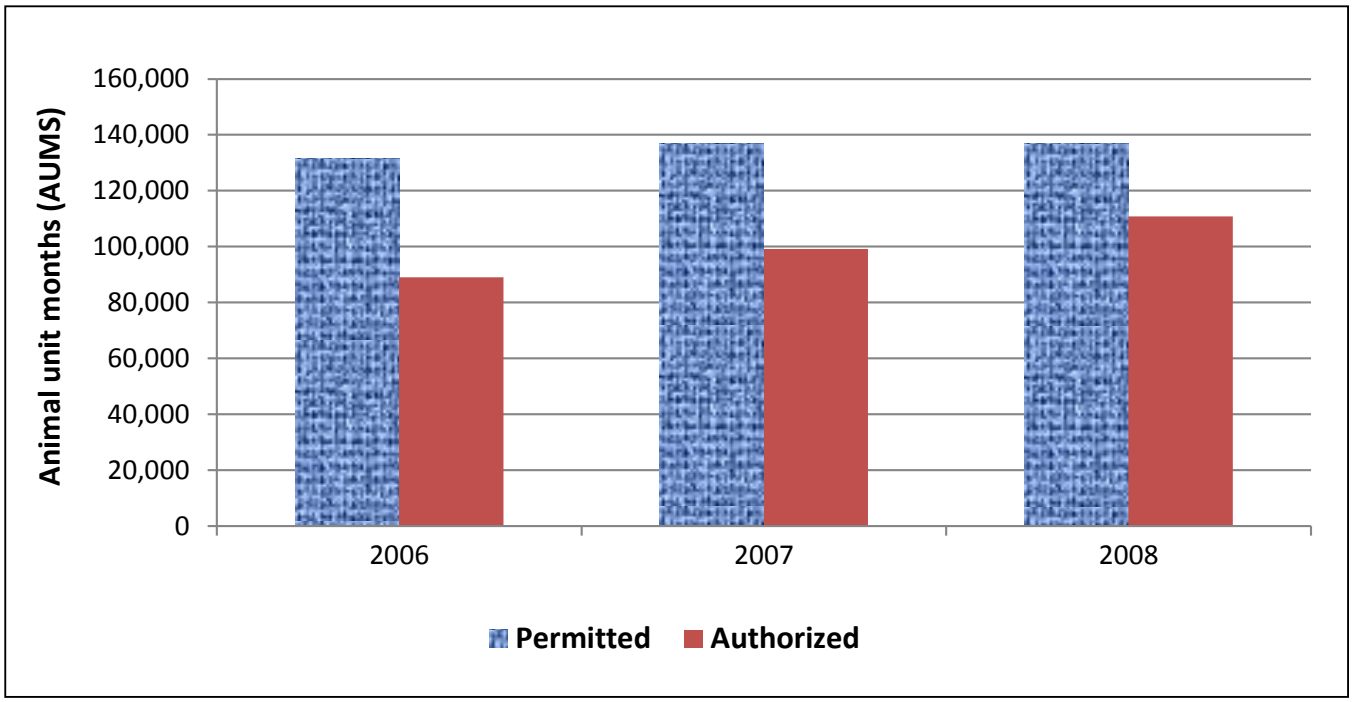


Figure 4-1: Permitted and authorized grazing on National Forest units in the NWFP area, 2006-2008

Sources: Forest Service I-Web Reports.

[6]For more information on how the Forest Service and the BLM track AUMs, see Charnley, S., tech. coord. 2006. Northwest Forest Plan: the first ten years (1994-2003): socioeconomic monitoring results. Gen. Tech. Rep. PNW-GTR-649 Vol. II. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, p. 29

authorized AUMs across all of the national forests in the NWFP area.

Like the Forest Service data, BLM data used in the 15-year report are not seamlessly comparable with the data used in the 10-year report. This chapter includes data for the Klamath Falls Resource Area, which is the portion of the Lakeview District in the NWFP area. This data was not available for the 10-year report.

Results and Discussion

The NWFP area grazing data for the national forests and BLM districts are shown in figures 4-1 and 4-2. The Forest Service data (fig. 4-1) indicate an increasing trend in authorized AUMs. Between 2006 and 2008 authorized AUMs increased by 11 percent. Permitted grazing increased slightly between 2006 and 2007. Since then it has leveled off. The 10-year report shows a 19 percent decrease in permitted AUMs and a 31% decrease in authorized AUMs between 1994 and 2002. A drop in grazing activity on NWFP-area forests was expected (Charnley et al. 2006).

Between 2001 and 2008, the number of BLM permitted AUMs (fig. 4-2) was constant. Authorized AUMs during that period remained fairly stable with less than eight percent increases and decreases between years . These patterns are a continuation of those observed since 1996. In sum, there was a variable annual pattern in BLM authorized grazing between 2001and 2008.

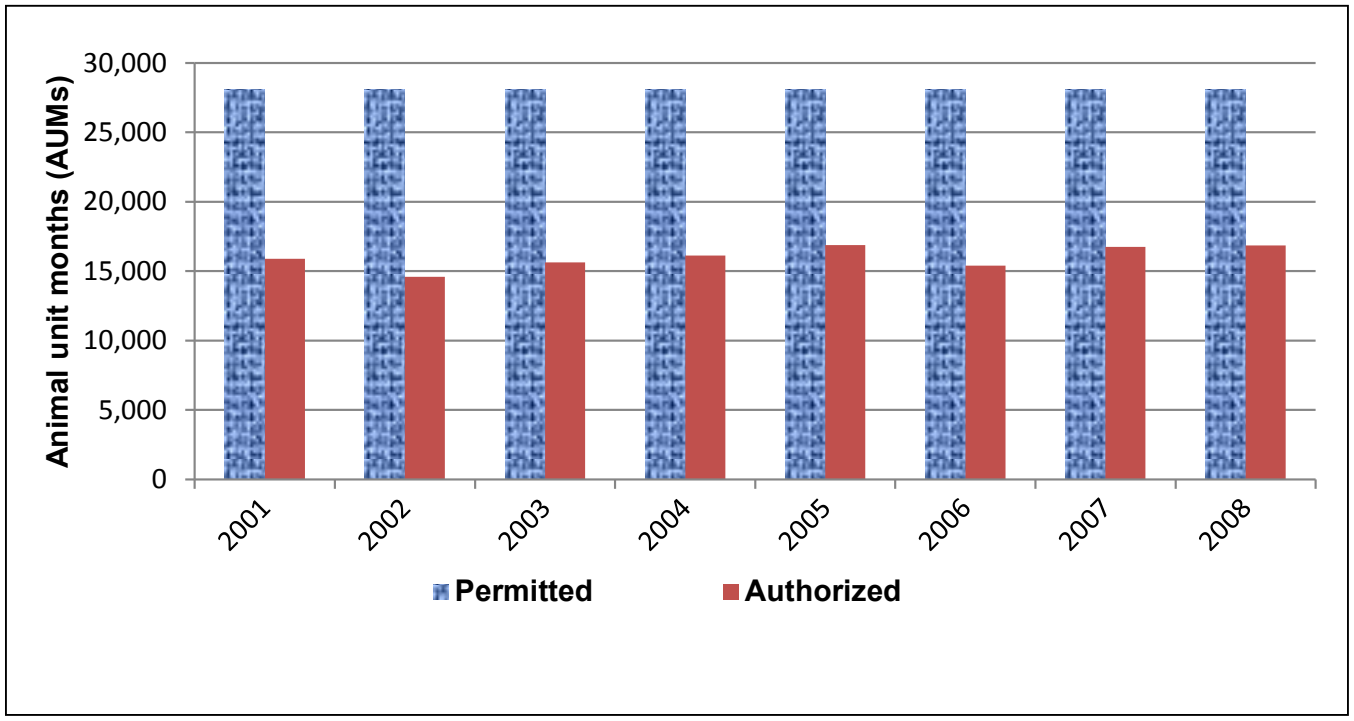


Figure 4-2: Permitted and authorized grazing on BLM units in the NWFP area, 2001-2008

Source: BLM Oregon State Office

Chapter 5: Minerals

There is little mining on National Forest System and BLM lands in the NWFP area. Leasable minerals production is nonexistent, and information about locatable minerals production is proprietary and not collected. Salable minerals (gravel, stone, sand) occur throughout the NWFP area. They are used by the managing agencies, other government and commercial entities, and private individuals mainly for construction and road building.

Data Analysis and Results

Annual data in mineral production on National Forest System lands for salable minerals are readily available for the years 2000 - 2008.[7] No data are available for Region 6 before 2000 for free-use permits or contracts of sale for salable minerals. The data are assessed between 2000 and 2008 for even-numbered fiscal years to simplify the presentation.

The volume of salable minerals removed from national forests in the NWFP area fluctuated greatly, with a high of 600,000 tons in 2000 to a low of 150,000 tons in 2002. The volume rose again to 450,000 tons by 2008 (fig. 5-1). Production also varies among the different types of use (Forest Service, free, and sold). The value of salable mineral production varies greatly both in total value across the years and within the different types of use (fig. 5-2). The high was over $2 million in 2000. The value dropped to $280,000 in 2004. It then increased to almost $1 million by 2008.

Discussion

The socioeconomic impact of minerals production is relatively small compared to other resource outputs and management activities. Mineral production trends are difficult to determine, since leasable minerals production is nonexistent, and information about locatable minerals production is proprietary and not collected. Salable minerals are variable in terms of value and generally valued at less than $1 million annually. Leases and mining claims

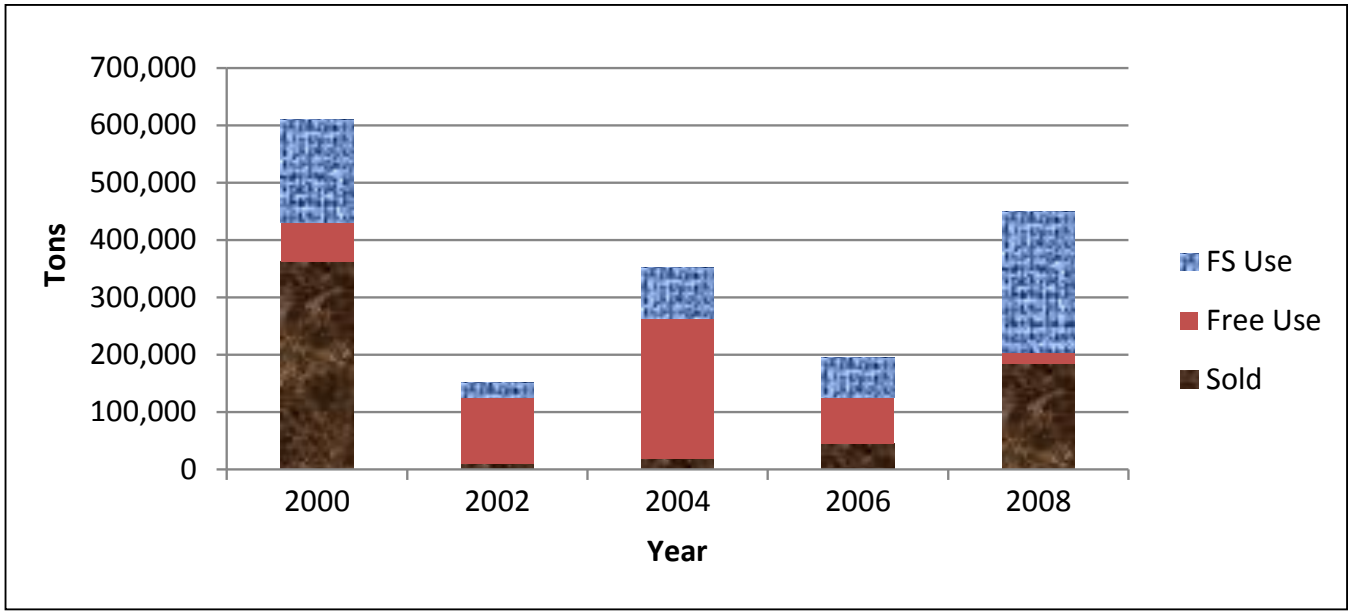


Figure 5-1: Salable minerals production on national forests in the NWFP area

[7]Finding good indicators for mining is challenging. For more information see, see see Charnley, S., tech. coord. 2006. Northwest Forest Plan: the first ten years (1994-2003): socioeconomic monitoring results. Gen. Tech. Rep. PNW-GTR-649 Vol. II. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. pp. 35-36.

are poor indicators of minerals production and have data consistency and collection problems. Given all of the above information, the value of continuing to track mining and mineral production as part of socioeconomic monitoring is questionable.

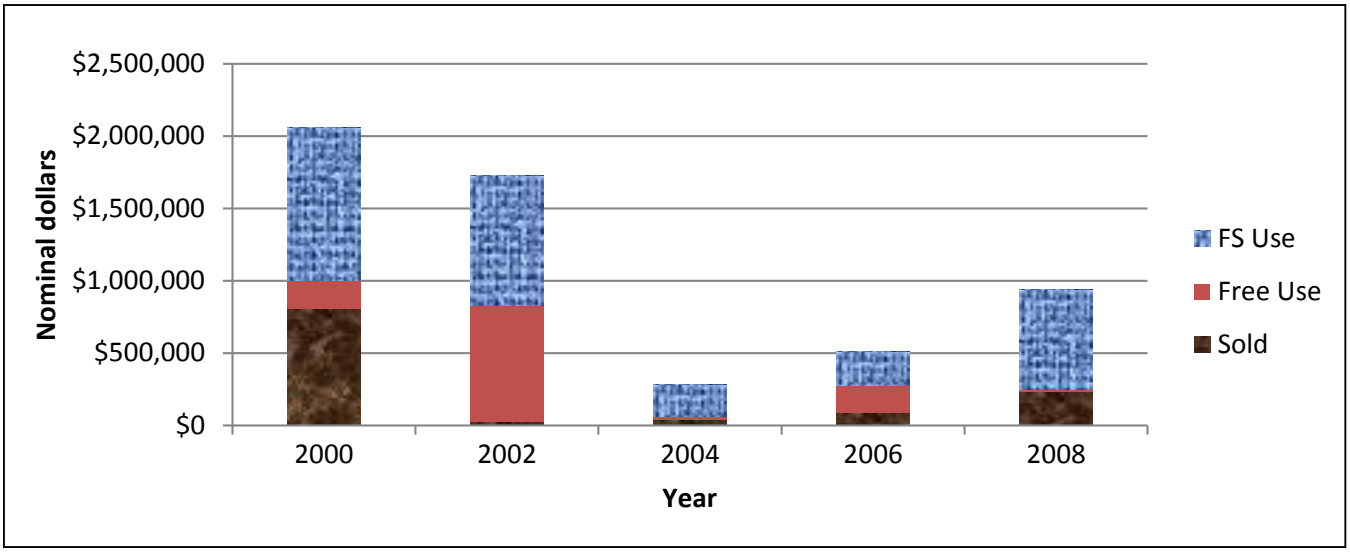


Figure 5-2: Salable minerals value on national forests in the NWFP area

Chapter 6: Recreation

In the Pacific Northwest, the Forest Service and BLM are major suppliers of dispersed recreation opportunities. Dispersed recreation is recreation that does not occur at specific sites. Hunting, back-packing, and scenic driving are all examples of dispersed recreation, which can be important for economic development and diversification. "By providing a stable or increasing supply of recreation opportunities on federal lands, the Forest Service and BLM are contributing to economic prosperity in the NWFP area (Charnley et al. 2006)."

Data Analysis

Agency recreation data provide information related to the supply of and the demand for recreation opportunities on federal forest lands. The 10-year report focuses on recreation supply to assess whether predictable levels of recreation opportunities were produced under the NWFP. The 10-year report does not address the nature or quality of recreational experiences or site-specific recreation opportunities. In the 10-year report, the following indicators are addressed: acres of wilderness, road miles, number of recreation residences, ski-area visitation, number of outfitter guide permits, the number and capacity of developed sites, as well as recreation visitation. Recreation data prior to 1999 were unavailable for most of these indicators (Charnley et al. 2006). Data for most of the indicators were available only for more recent years and usually only for a single year. The lack of data limits the usefulness of the indicators.

The 15-year report only tracks data on road miles to indicate recreation opportunities as measures of supply and visitation as an estimate of demand. The number of trail miles is not used as an indicator due to the implementation of the Forest Service's Travel Management Rule, which is a major policy shift in the management of off-highway vehicles and other recreation opportunities. Travel management planning on National Forest System lands masks the potential effects of the NWFP on recreation supply and demand. Other indicators were not used due to the general lack of available and consistent data.

Results - Recreation Supply

The agencies road systems provide recreation opportunities including driving for pleasure, one of the most popular outdoor recreation activities in the United States (USDA FS 2003). Road mileage can be used as an indicator of recreation opportunities. Roads provide access to dispersed recreational opportunities such as hiking, camping, hunting and fishing. The Forest Service and BLM maintain five levels of road systems. Level 1 includes roads closed to traffic year-round. Level 2 roads are maintained for high-clearance vehicles. Level 3, 4, and 5 roads are maintained for passenger car, although levels of convenience and comfort vary. System road miles are the roads agencies include in their inventories and are responsible for maintaining. National forests also have "unclassified" roads, which are not managed as a part of the forest transportation system. They include abandoned travel ways, roads proposed for decommissioning, and off-road vehicle tracks that are not designated and managed as trails by the agencies. Unclassified roads are not evaluated because the Forest Service does not consistently manage data on them and they are not intended for public use.

In this 15-year report, road mileage results are only compiled for Region 6 national forests in the NWFP area since these units had readily available data. The Region 6 national forests make up slightly over 60 percent of all forest service and BLM lands in the NWFP area. We believe the percent changes in total road mileage and mileage by maintenance level in Region 5 national forests and BLM units in the NWFP area should be similar but less than patterns shown in Region 6. The BLM and R5 national forest budgets did not decline as much as those in Region 6.

Data for system roads were obtained for fiscal years 1999 through 2008. Between those years, the number of miles of roads classified as level 1 or 2 increased; and, levels 3, 4, and 5 decreased. The total mileage of system roads on Region 6 NWFP area forests decreased by 1,185 miles or two percent (table 6-1). Since roads can shift from one maintenance class to another, it is not possible to determine the miles of roads by maintenance level that were removed from the system. The primary shift in roads (almost 3000 miles) was out of the Level 3 maintenance class.

Table 6-1: Historic road mileage in operational maintenance Levels 1-5 in the NWFP area

Year	ML 1	ML 2	ML 3	ML 4	ML 5	ML 3-5	Total
1999	7,996	30,944	7,918	1,412	664	9,994	48,935
2000	7,959	30,991	7,252	1,410	661	9,323	48,273
2001	8,219	30,996	7,023	1,370	655	9,048	48,263
2002	8,295	30,996	7,019	1,382	584	8,984	48,305
2003	8,477	31,035	7,003	1,375	649	9,026	48,538
2004	8,528	31,226	6,583	1,374	644	8,601	48,357
2005	8,478	32,662	5,351	1,283	568	7,201	48,344
2006	8,729	32,765	5,171	1,160	457	6,787	48,287
2007	8,797	32,544	5,020	1,156	457	6,633	47,978
2008	8,915	32,235	5,003	1,149	442	6,594	47,749
Change in miles 1999 to 2008	919	1,291	-2,915	-263	-222	-3,401	-1,185
Percent change 1999-2008	11%	4%	-37%	-19%	-33%	-34%	-2%

Overall, the number of miles of roads open to passenger cars decreased by about 3,400 miles while the number of miles of Level 1 and 2 roads increased by about 2,210 miles. The increase in level 1 and 2 roads is mostly the result of reducing the maintenance level of the remaining roads. Most of these changes in road miles and maintenance levels occurred between 2004 and 2005.

The relative distribution of roads miles by maintenance class shifted between 1999 and 2008 (fig. 6-1). The proportion of Level 2 miles increased by five percent in 2008 compared to 10 years earlier. This increase primarily came from the decrease proportion of Level 3 miles.

Results - Recreation Demand

Data are available on changing trends in outdoor recreation from the Oregon Parks and Recreation Department (Oregon State 2003) and the Washington State Recreation and Conservation Office (Washington State

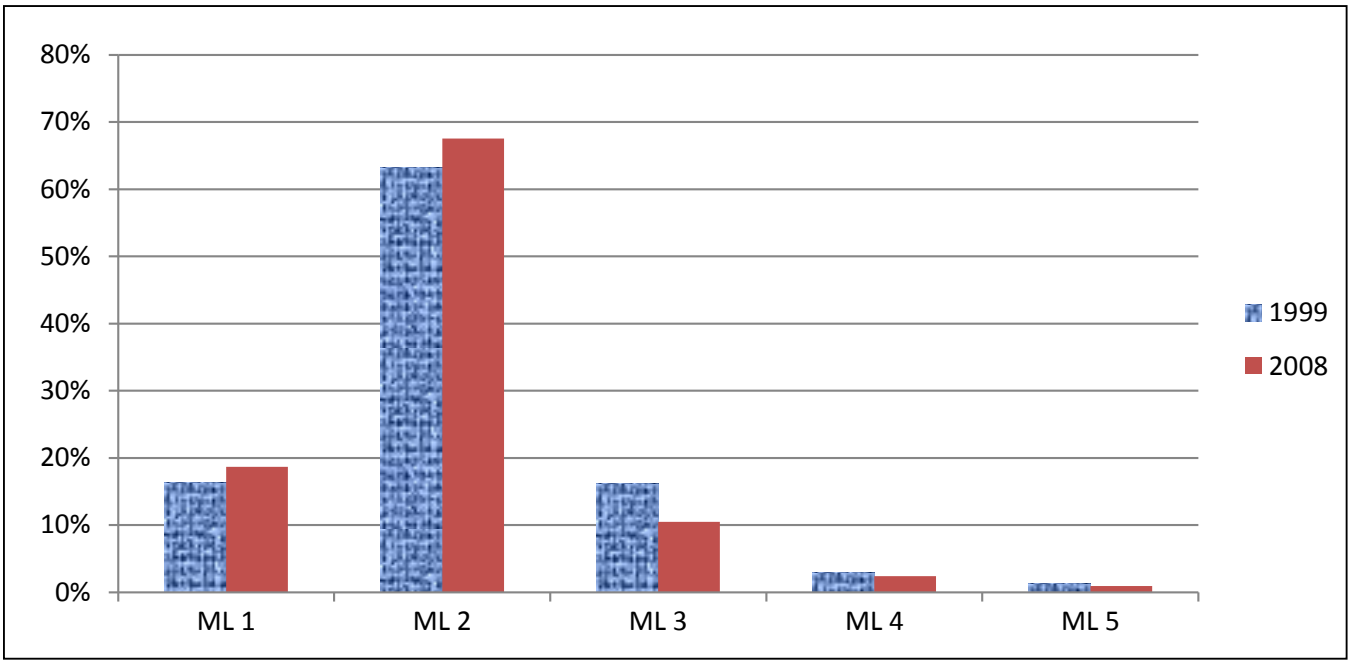


Figure 6-1: Percent of NWFP area Region 6 roads in operational maintenance classes in 1999 and 2008

2007). Population growth in Oregon and Washington is expected to increase demand for outdoor recreation on public land. This trend will be tempered by changes in the social and demographic composition of the population. Changing age structure and income levels of the population correspond to different participation rates in recreational activities. Although participation rates for older Americans are increasing, they are still participating at rates lower than people in other age groups. As the population ages, demand for passive activities may increase. Low income people participate at much lower rates than higher income people in outdoor recreation.

The growing disparity between wealthy and poor people in the NWFP area, which mirrors that in the nation, may lead to further inequities in opportunities for participation. State recreation planning documents for Oregon and Washington have identified this issue as a significant concern for recreation providers (Oregon State 2003, Washington State 2007).

Another important factor in recreation activities in the region is ethnicity. Different ethnic groups participate in outdoor recreation at different rates, exhibit different preferences for specific activities, and use recreation sites in different ways. In Oregon, the Hispanic population may triple by 2020, and in Washington, this segment of the population may double.

Forest Service

Some recreation data for the Forest Service are derived from the National Visitor Use Monitoring (NVUM) system. The 10-year report uses the first NVUM survey as a measure of recreation demand. The data for the first survey were collected by national forests between 2000 and 2003 (Charnley et al. 2006). The second round of NVUM data was collected five years later (Forest Service 2010a).

Although visitor use data were collected twice on each forest, the authors of the NVUM study caution against comparing first and second round results due to changes

Table 6-2: Annual Visitation Estimate (thousands) for the NWFP area Forests

State	Forest	NVUM Round 2		
		Year	Visits (thousands)	90% confidence interval
Washington	Okanogan	2005	678.9	73.5
	Wenatchee	2005	2,312.2	30.6
	Mt. Baker-Snoqualmie	2005	1,677.5	10.1
	Gifford Pinchot	2006	1,137.8	14.2
	Olympic	2005	827.6	45.2
Oregon	Mt. Hood	2006	1,830.8	11.6
	Willamette	2007	1,360.4	13.6
	Siuslaw	2005	1,146.5	21.2
	Deschutes	2008	1,894.9	12.3
	Umpqua	2007	540.9	30.5
	Winema	2008	296.2	13.9
	Rogue River	2007	402.3	19.6
	Siskiyou	2007	513.5	27.8
California	Klamath	2008	303.5	35.9
	Six Rivers	2008	224.3	23.4
	Shasta-Trinity NRA	2008	1,292.3	21.8
	Shasta-Trinity Non NRA	2008	630.4	24.6
	Mendocino		346.6	16.6
Total		**2005-8**	**17,416.6**	

in the study protocols. The process of collecting NVUM data during Round 1 revealed the need for improvements in identifying sites, classifying days into use levels, and ensuring consistency across locations. Because the improvements were concurrent with external factors that can affect visitation estimates, comparing Round 1 with Round 2 is not possible. Therefore, only Round 2 is presented here.

Bureau of Land Management

The BLM tracks visits using the Recreation Management Information System (RMIS) to show recent data in recreation use. It is an internet based system that allows recreation managers to record recreation data for their field offices. The data are gathered using a combination of census, sampling and estimation methods. The overall data by individual District show mixed trends (fig. 6-2). Some Districts, especially Medford and Roseburg showed large increases in visits over the last decade, and some Districts (Eugene and Salem) showed decreases during the past ten years (table 6-3). Overall, visits in BLM NWFP area districts increased by about 20 percent.

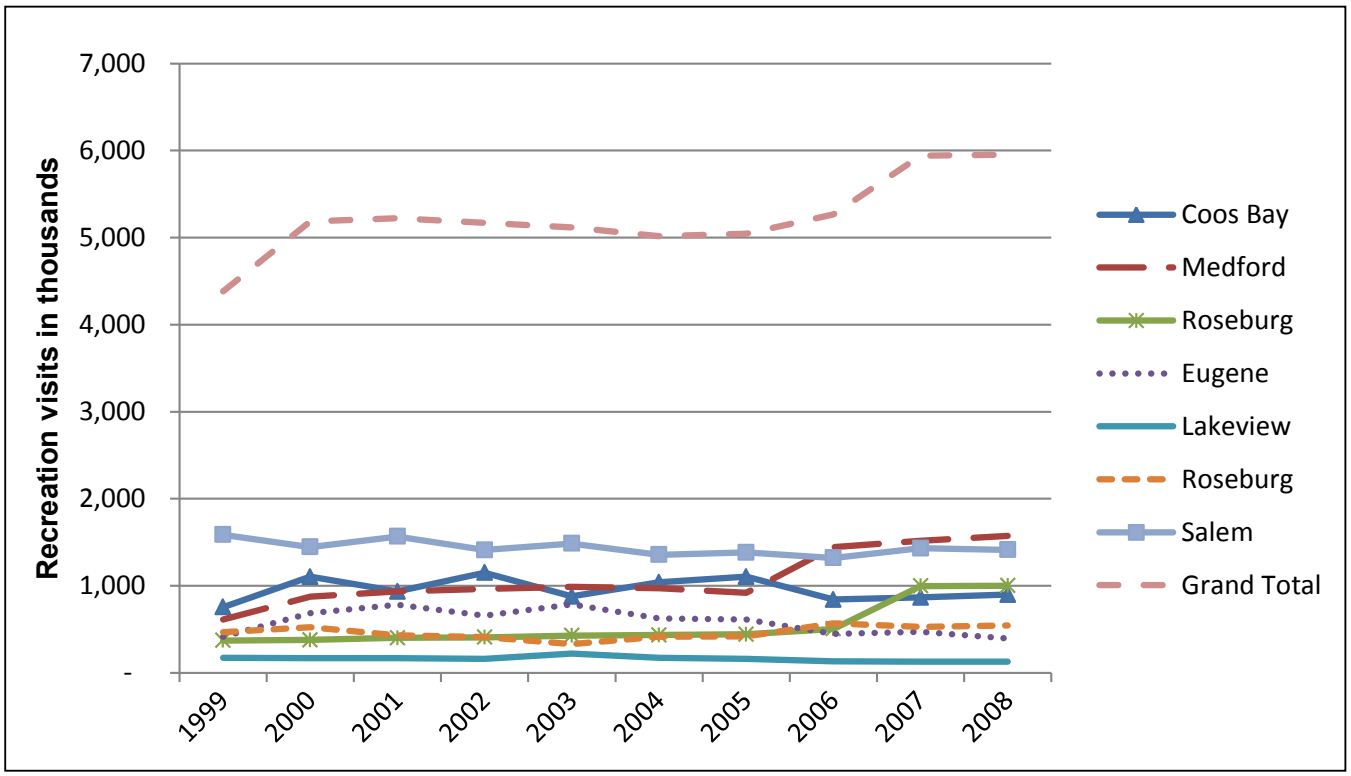


Figure 6-2: BLM Recreation visits 1999-2008, NWFP area

Table 6-3: Change in BLM Visits during 1999-2008 and 2004-2008

	1999-2008 Change		2004-2008 Change	
District	**Visits (1,000)**	**Percent**	**Visits (1,000)**	**Percent**
Coos Bay	142	19%	-142	-14%
Medford	961	157%	599	61%
Roseburg	630	169%	568	131%
Eugene	-21	-5%	-232	-37%
Roseburg	78	17%	130	31%
Salem	-174	-11%	56	4%
Grand Total	**1,567**	**36%**	**933**	**19%**

Discussion

The 10-year report concludes that the demand for recreation and tourism grew in the Pacific Northwest during the first decade of NWFP monitoring, but the conclusions were limited due to the lack of reliable data. These data were only available for wilderness acres, recreation residences and skier days (Charnley et al. 2006). These indicators represent a minor component of the overall recreation program on agency lands, and they are not closely tied to changes expected under NWFP direction.

For the 15-year report, the quality and quantity of available reliable recreation related data did not improve. The changes the study protocol used in Round 1 and Round 2 of Forest Service NVUM visitor use surveys make it difficult to use the data to track trends on National Forest System lands. BLM recreation use data generally show upward trends in visitation. The Washington State Recreation and Conservation Office as well as the Oregon Department of Parks and Recreation estimate that demand is increasing.

The overall decrease in road mileage also potentially affects the quantity of recreation opportunities associated with driving for pleasure. The miles of roads in Levels 3, 4, and 5 show declines leading to fewer opportunities and decreases in quality related to the reduced access to dispersed sites and, in combination with increased demand, more crowding at accessible sites. While this reduction is likely to negatively impact those in passenger cars, the increase in the number of Level 2 miles may positively impact those using high clearance vehicles. The impacts of these changes in terms of magnitude and quality are unknown.

Chapter 7: Socioeconomic Conditions and Trends for Counties

The 15-year report addresses social and economic change at the county scale. This level of detail was selected because data are readily available at this scale. The 72 counties displayed in table 7-1 are included in the analysis. The counties were identified because of their proximity, and social and economic ties to the national forests and BLM districts in the NWFP area. The counties are the same counties used in the 10-year report which provides a more consistent base for socioeconomic data comparisons between the 10-year and 15-year reporting periods.

Data Analysis

The counties in the NWFP area county are divided into two groups: metropolitan or nonmetropolitan. The designation is determined by the U.S. Office of Management and Budget. The 2008 designations were obtained

Table 7-1 - Counties in the Northwest Forest Plan area (2008 designation)

State, county, designation	State, county, designation
CA, Colusa County (nonmetropolitan)	OR, Polk County (metropolitan)
CA, Del Norte County (nonmetropolitan)	OR, Sherman County (nonmetropolitan)
CA, Glenn County (nonmetropolitan)	OR, Tillamook County (nonmetropolitan)
CA, Humboldt County (nonmetropolitan)	OR, Wasco County (nonmetropolitan)
CA, Lake County (nonmetropolitan)	OR, Washington County (metropolitan)
CA, Lassen County (nonmetropolitan)	OR, Yamhill County (metropolitan)
CA, Marin County (metropolitan)	WA, Adams County (nonmetropolitan)
CA, Mendocino County (nonmetropolitan)	WA, Benton County (metropolitan)
CA, Modoc County (nonmetropolitan)	WA, Chelan County (metropolitan)
CA, Napa County (metropolitan)	WA, Clallam County (nonmetropolitan)
CA, Shasta County (metropolitan)	WA, Clark County (metropolitan)
CA, Siskiyou County (nonmetropolitan)	WA, Cowlitz County (nonmetropolitan)
CA, Sonoma County (metropolitan)	WA, Douglas County (metropolitan)
CA, Sutter County (metropolitan)	WA, Franklin County (metropolitan)
CA, Tehama County (nonmetropolitan)	WA, Grant County (nonmetropolitan)
CA, Trinity County (nonmetropolitan)	WA, Grays Harbor County (nonmetropolitan)
CA, Yolo County (metropolitan)	WA, Island County (nonmetropolitan)
OR, Benton County (metropolitan)	WA, Jefferson County (nonmetropolitan)
OR, Clackamas County (metropolitan)	WA, King County (metropolitan)
OR, Clatsop County (nonmetropolitan)	WA, Kitsap County (metropolitan)
OR, Columbia County (metropolitan)	WA, Kittitas County (nonmetropolitan)
OR, Coos County (nonmetropolitan)	WA, Klickitat County (nonmetropolitan)
OR, Crook County (nonmetropolitan)	WA, Lewis County (nonmetropolitan)
OR, Curry County (nonmetropolitan)	WA, Mason County (nonmetropolitan)
OR, Deschutes County (metropolitan)	WA, Okanogan County (nonmetropolitan)
OR, Douglas County (nonmetropolitan)	WA, Pacific County (nonmetropolitan)
OR, Hood River County (nonmetropolitan)	WA, Pierce County (metropolitan)
OR, Jackson County (metropolitan)	WA, San Juan County (nonmetropolitan)
OR, Jefferson County (nonmetropolitan)	WA, Skagit County (metropolitan)
OR, Josephine County (nonmetropolitan)	WA, Skamania County (metropolitan)
OR, Klamath County (nonmetropolitan)	WA, Snohomish County (metropolitan)
OR, Lane County (metropolitan)	WA, Thurston County (metropolitan)
OR, Lincoln County (nonmetropolitan)	WA, Wahkiakum County (nonmetropolitan)
OR, Linn County (nonmetropolitan)	WA, Walla Walla County (nonmetropolitan)
OR, Marion County (metropolitan)	WA, Whatcom County (metropolitan)
OR, Multnomah County (metropolitan)	WA, Yakima County (metropolitan)

from the Bureau of Labor Statistics (http://www.bls.gov/oes/current/county_links.htm, accessed 6/29/10). Classifying the counties into metropolitan and nonmetropolitan groups is helpful because the social and economic conditions are different in urban and rural areas. If the two were combined then positive and negative data may cancel each other out. Separating the counties into two groups might help to identify trends more clearly.

This chapter uses U.S. Census population data, Implan employment data, and Bureau of Labor Statistics populations and unemployment data to address conditions and trends for the following indicators:

- Total Population (BLS 2010)
- Metropolitan vs. Nonmetropolitan Population (BLS 2008)
- Total Population Change(BLS 2010)
- Population by Age(Census 2010a)
- Population by Race (Census 2010b)
- Employment and Personal Income by Industry (2001- 2007) (MIG 2009)
- Unemployment (BLS 2010)
- Total Population and Metropolitan vs. Nonmetropolitan Population

The total population of the NWFP area grew by almost 1.2 million people, from 10.2 million to 11.4 million between 1999 and 2008 (fig. 7-1). This was an annual average growth rate of slightly over one percent.

The growth rates for metropolitan and the nonmetropolitan were different. The population in the 31 metropolitan counties identified in table 7-1 comprises over 80 percent of the total population in the NWFP area. Ninety percent of the population growth over the decade occurred in these counties with an average annual growth rate of 1.2 percent. In comparison, the nonmetropolitan counties grew at an average annual rate of 0.7 percent (table 7-2). Compared to the total population growth of the three states – Oregon, Washington, and California – the NWFP area counties grew faster. During the same time period the average annual growth rate of all metropolitan counties in California, Oregon and Washington States combined was one percent, and all nonmetropolitan counties in the states grew by 0.6 percent.

Population by Age

The average age of the population of the NWFP area has increased since 2000 with most of the increases occurring in the 45 years and older age classes in both metropolitan and nonmetropolitan counties. All age classes in figures 7-2 and 7-3 are indexed to 100 to compare how the different age classes are growing. The age 18 – 24 group

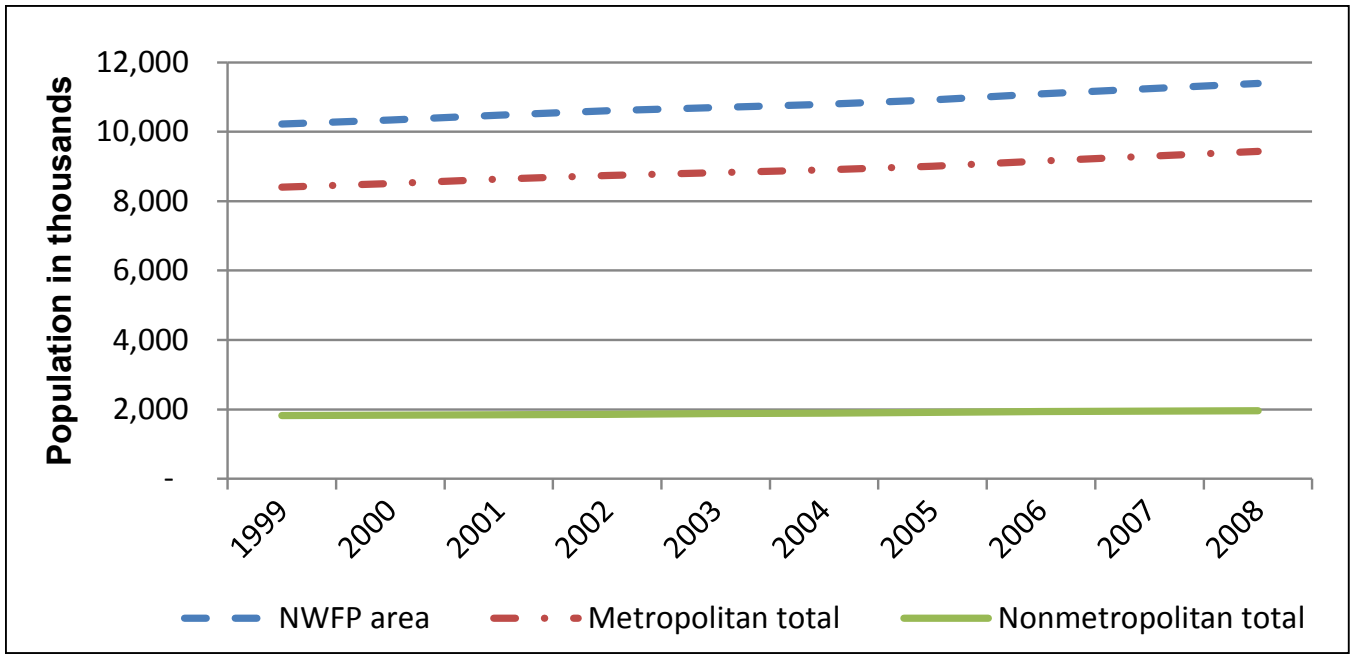


Figure 7-1: Total NWFP Area, NWFP/Metropolitan, and NWFP/Nonmetropolitan population trends

Table 7-2: Population change by metropolitan and nonmetropolitan counties, NWFP area counties and state totals.

		1999-2008		2004-2008	
CA –					
NWFP area counties	Total	112,178	6%	40,352	2%
	Metropolitan	89,433	7%	33,613	3%
	Nonmetropolitan	22,745	5%	6,739	1%
OR –					
NWFP area counties	Total	389,497	12%	209,681	6%
	Metropolitan	354,843	14%	190,491	7%
	Nonmetropolitan	34,654	6%	19,190	3%
WA —					
NWFP area counties	Total	670,565	13%	350,718	6%
	Metropolitan	594,891	13%	312,830	6%
	Nonmetropolitan	75,674	11%	37,888	5%
Total NWFP Counties	Total	1,172,240	11%	600,751	6%
	Metropolitan	1,039,167	12%	536,934	6%
	Nonmetropolitan	133,073	7%	63,817	3%
Oregon, Washington,					
California	Total	4,193,726	10%	1,613,222	4%
	Metropolitan	4,046,901	10%	1,550,387	4%
	Nonmetropolitan	146,825	6%	62,835	3%

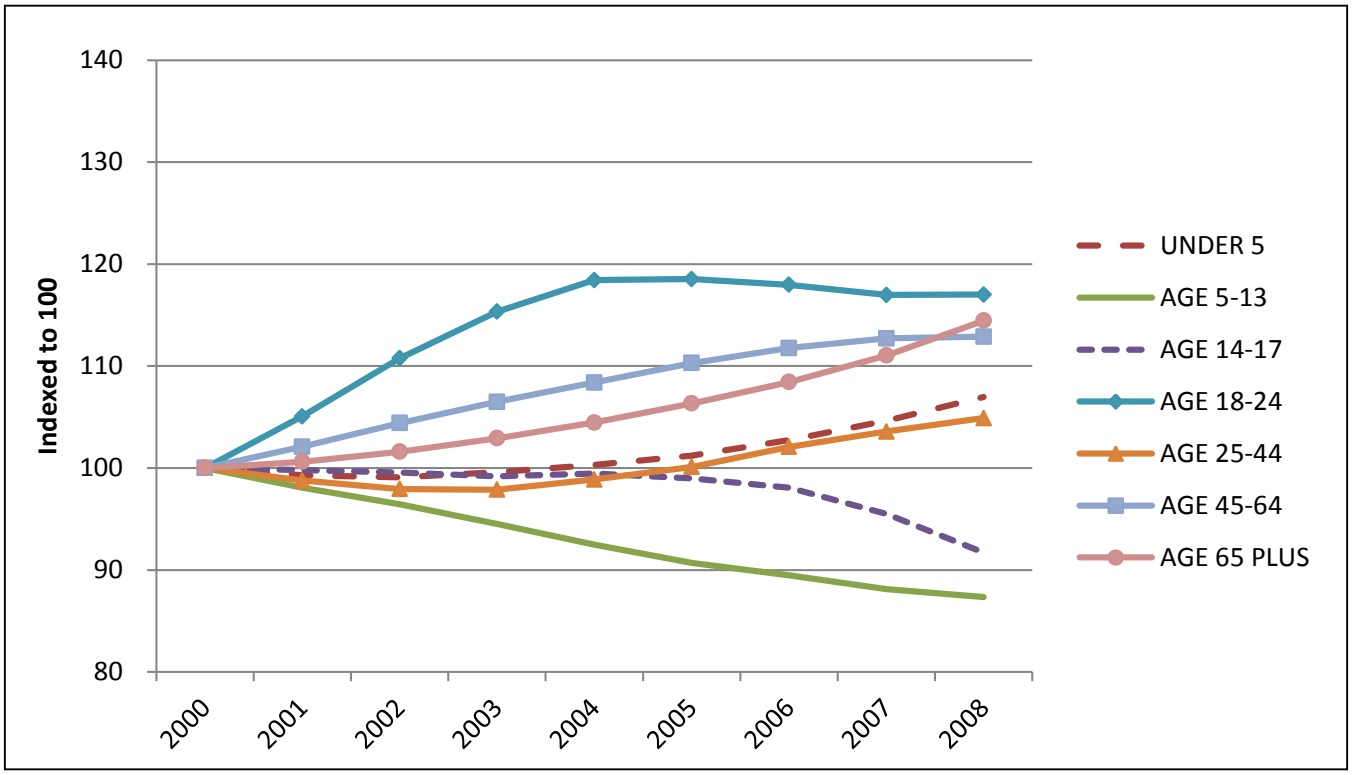


Figure 7-2: Age class growth in the NWFP area nonmetropolitan counties, 2000 – 2008

in the nonmetropolitan counties did increase rapidly in the early part of the decade, but this group has leveled off and declined slightly after 2005. The nonmetropolitan counties show about 10 percent decreases in the age 5 – 13 and 14 – 17 age classes. The metropolitan counties in comparison show increases in all age classes except the age 5 – 13 group, which declined by two percent (fig. 7-3). The metropolitan counties show the greatest increase in the age 45 – 64 class with a 30 percent gain between 2000 and 2008.

Similar population age data that is not indexed are displayed in table 7-3. The table also shows the portion of the total population represented by each age class and how that portion has change over time. The population under 45 years of age is declining and 45 years and older is increasing.

Population by Race and Origin

Although the NWFP area has increased in racial diversity between 2000 and 2008 (table 7-4), the NWFP area is generally less diverse than the nation as a whole with the white race designation making up 85 percent of the population compared to about 75 percent for the nation. Most of the increase in diversity has occurred in the metropolitan counties, and the largest percent increases are in the Asian category.

The percent of the population identified as Hispanic in origin in the NWFP area is closer to the national percentage of 15 percent (table 7-5). California exceeds the national average while Oregon and Washington are less. Generally, the nonmetropolitan counties have a lower percentage classified as Hispanic and most of the growth in the Hispanic percentage is in the metropolitan counties.

Employment and Personal Income by Industry

The relative importance of forest resource-related employment and income in the NWFP area's economy has changed over time, as has the contribution of forest products from the National Forest System and BLM lands. The 10-year report shows that between 1990 and 2000, total employment grew by 29 percent across all 72 NWFP area counties. During the same period, manufacturing grew by three percent, compared to 56 percent employment growth in the services sector. Most of the other major industries grew at rates varying between 23 and 32 percent (fig. 7-4). Other exceptions were mining (16 percent) and agriculture (4 percent). The low growth in manufacturing meant that this sector went from providing 13 percent of total employment in 1990 to 11 percent in 2000. Meanwhile, the services industry increased from 25 to 30 percent of total employment during this same period. The employment shift from manufacturing to services was consistent with nationwide shifts Charnley et al. 2006).

The decade beginning in 2000 brought notable change to the classification of employment, and wage and proprietor income by industry. Proprietor income is wages earned by business owners. Before 2001 industries were organized under the Standard Industrial Classification (SIC). Now industries are organized under the North American Industrial Classification System (NAICS). NAICS is based on a production-oriented concept meaning it groups establishments into industries according to similarity in the processes used to produce goods or services.[8] Although there is no clear consensus, SIC is thought to be primarily based on a market-oriented system.[9] This type of system aggregates establishments into industries by the type of products produced. Another major difference between the two systems is the increased classification detail especially in the services industries under NAICS. With the change in industrial classification systems it is not possible to continue industry specific trends identified using SIC during the 1990s with NAICS data for 2001 and beyond. However, it is possible to compare and contrast more aggregated data between the two time periods.

During 2001 through 2007, total employment grew at a much lower rate compared to the 1990s. The average annual growth rate for this period was about one percent compared to about three percent during the 1990s.

[8]http://www.census.gov/eos/www/naics/faqs/faqs.html, Accessed 08/19/2009

[9]Economic Concepts in SIC Industries" [PDF 47M] http://www.census.gov/eos/www/naics/history/history.html, ECPC Report 1

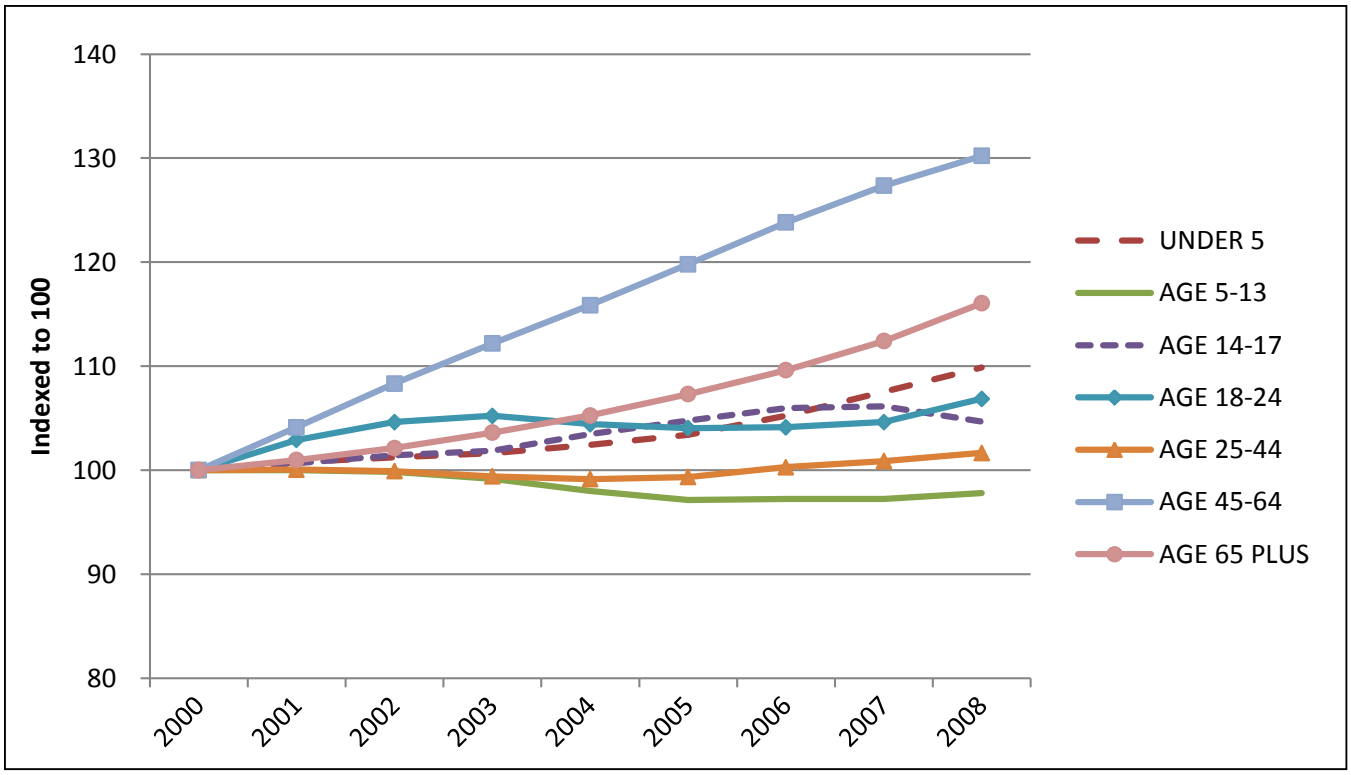


Figure 7-3: Rate of change by age class in NWFP area metropolitan counties, 2000 – 2008

Table 7-3: Population and population change by age class in metropolitan and nonmetropolitan NWFP area counties

	Total	Under 18		Age 18 - 44		Age 45 - 64		Age 65 plus	
	Number	Number	Share	Number	Share	Number	Share	Number	Share
Nonmetro									
2000	1,760,067	433,462	25%	598,047	34%	448,986	26%	279,572	16%
2008	1,875,675	403,616	22%	645,329	34%	506,780	27%	319,950	17%
Change	115,608	(29,846)		47,282		57,794		40,378	
% Change	7%	-7%		8%		13%		14%	
Metro									
2000	8,459,220	2,123,733	25%	3,427,779	41%	1,960,854	23%	946,854	11%
2008	9,356,309	2,177,350	23%	3,526,736	38%	2,553,399	27%	1,098,824	12%
Change	897,089	53,617		98,957		592,545		151,970	
% Change	11%	3%		3%		30%		16%	
Total									
2000	10,219,287	2,557,195	25%	4,025,826	39%	2,409,840	24%	1,226,426	12%
2008	11,231,984	2,580,966	23%	4,172,065	37%	3,060,179	27%	1,418,774	13%
Change	1,012,697	23,771		146,239		650,339		192,348	
% Change	10%	1%		4%		27%		16%	

Table 7-4: Percent of population by race in the NWFP area, 2000 and 2008

	2000		2008	
	Non-metropolitan	Metropolitan	Non-metropolitan	Metropolitan
California				
American Indian and Alaska Native	4%	1%	5%	1%
Asian	1%	5%	2%	6%
Black	2%	2%	2%	2%
Native Hawaiian other Pacific Islander	<0.5%	<0.5%	<0.5%	<0.5%
Two or more races	3%	2%	3%	3%
White	90%	89%	88%	87%
Oregon				
American Indian and Alaska Native	2%	1%	3%	1%
Asian	1%	4%	1%	4%
Black	<0.5%	2%	1%	2%
Native Hawaiian other Pacific Islander	<0.5%	<0.5%	<0.5%	<0.5%
Two or more races	2%	2%	2%	3%
White	94%	90%	93%	89%
Washington				
American Indian and Alaska Native	3%	1%	3%	2%
Asian	2%	7%	2%	8%
Black	1%	4%	1%	4%
Native Hawaiian other Pacific Islander	<0.5%	1%	<0.5%	1%
Two or more races	2%	3%	2%	3%
White	92%	84%	92%	82%
NWFP Area				
American Indian and Alaska Native	3%	1%	3%	1%
Asian	1%	6%	1%	7%
Black	1%	3%	1%	3%
Native Hawaiian other Pacific Islander	<0.5%	<0.5%	<0.5%	<0.5%
Two or more races	2%	3%	3%	3%
White	92%	87%	91%	85%

Table 7-5: Percent of population with Hispanic origin in the NWFP area 2000 and 2008

Area	Percent Hispanic	
CA	2000	2008
Nonmetropolitan	14%	17%
Metropolitan	17%	21%
Total	16%	20%
OR		
Nonmetropolitan	6%	8%
Metropolitan	8%	11%
Total	8%	11%
WA		
Nonmetropolitan	7%	9%
Metropolitan	7%	10%
Total	7%	10%
NWFP AREA		
Nonmetropolitan	9%	11%
Metropolitan	9%	12%
Total	9%	12%

The NWFP area gained about 140,000 jobs annually between 1990 and 2000 compared to about 50,000 jobs annually since then. Employment associated with manufacturing also declined during this latest time period (fig. 7-5). There are no similar declines identified in any of the industries in the 10-year report. In 2007 manufacturing employment dropped to about eight percent of all jobs. Services related industries made up over 40 percent of all employment. Similar to the 1990s, the greatest growth was in the services industries with average annual rates between two and three percent except for the recreation related accommodation and food services industries which grew at an average annual rate of one percent or less.

The 10-year report states that manufacturing wage income made up 20 percent of all income in 1990. Manufacturing income dropped to 15 percent of all wage income by 2000. Wage income in the services sector was 26 percent in 1990; it grew to 29 percent by 2000. In 2000, the average annual wage in manufacturing was $55,000 compared to $37,000 in services (Charnley et al. 2006). In

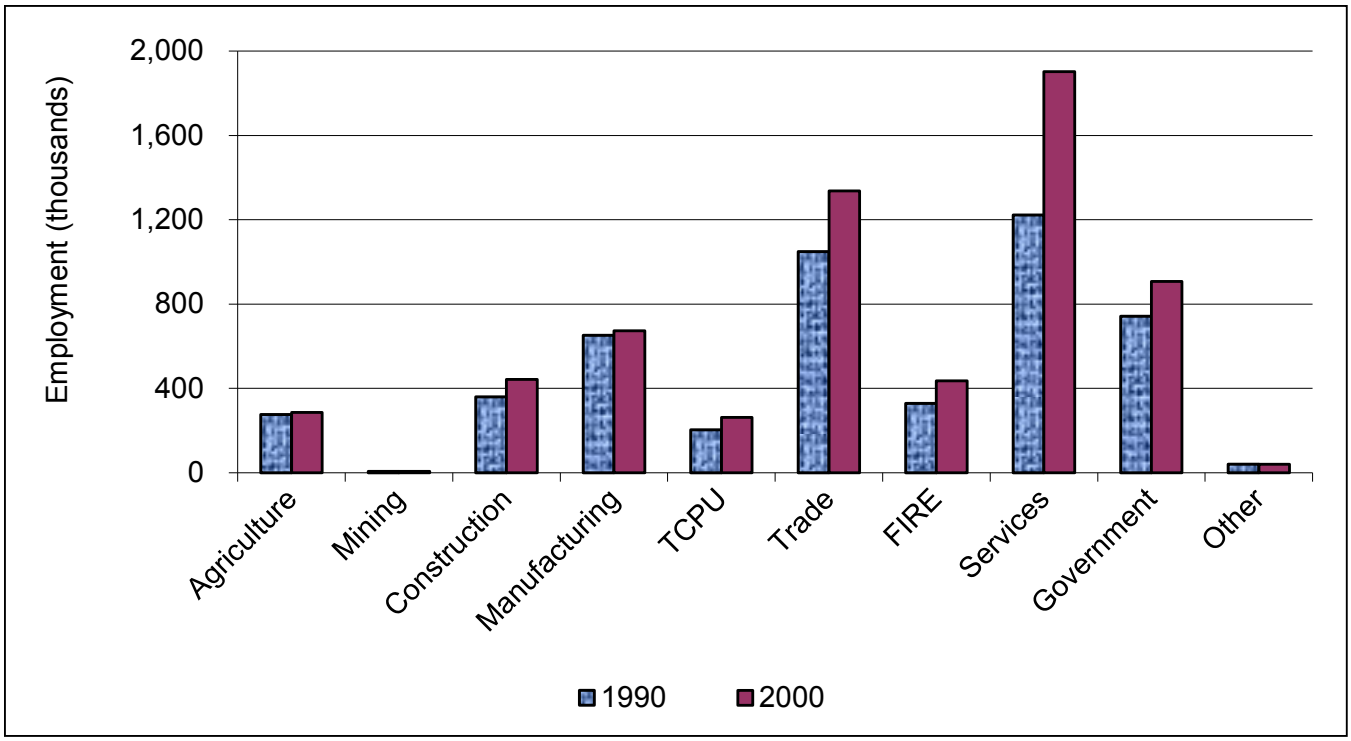


Figure 7-4: Employment by major industry (SIC), 1990 and 2000
(TCPU = transportation, communications, and public utilities; FIRE = finance, insurance, and real estate)

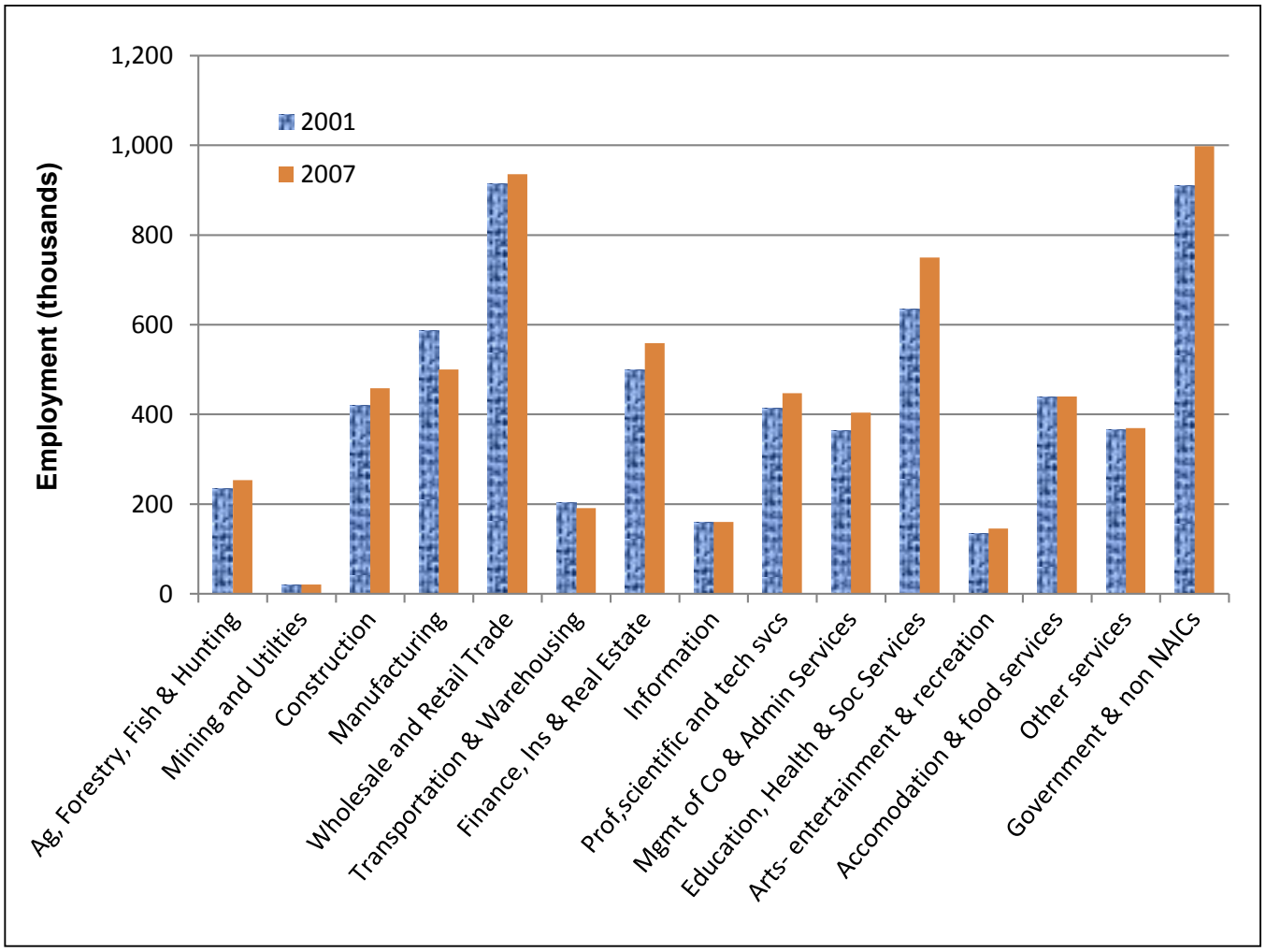


Figure 7-5: Employment by major industry (NAICS), 2001 and 2007

2007, all wage and proprietor income in the NWFP area totaled $330 billion, an increase of 22 percent from 2001. Real income increased across most industries including manufacturing, in spite of losses in employment during the same period. Manufacturing in 2007 contributed about 12 percent of the total income and the services related industries contributed about 46 percent of total wage and proprietor income (fig. 7-6). Average annual wage rates in manufacturing in 2007 were $79,000 in the manufacturing industries and about $51,000 in the services related industries.

Unemployment

The unemployment data for the last 10 years in the NWFP area and the US are presented in figure 7-7. The data are grouped into metropolitan and nonmetropolitan counties in each state. The data are annual rates and are not seasonally adjusted. Except for the California metropolitan counties, all other areas have unemployment rates higher than the rates for the US. The nonmetropolitan areas in California and Oregon have unemployment rates higher than their corresponding metropolitan areas.

All NWFP area counties and the US follow similar trends with increasing unemployment during the early part of the decade and decreasing unemployment during the middle part of the decade. The data for the NWFP area and the US as a whole reflect the major economic downturn occurring in the latter part of the decade with unemployment rates more than doubling by 2009 from lows realized in 2006 and 2007.

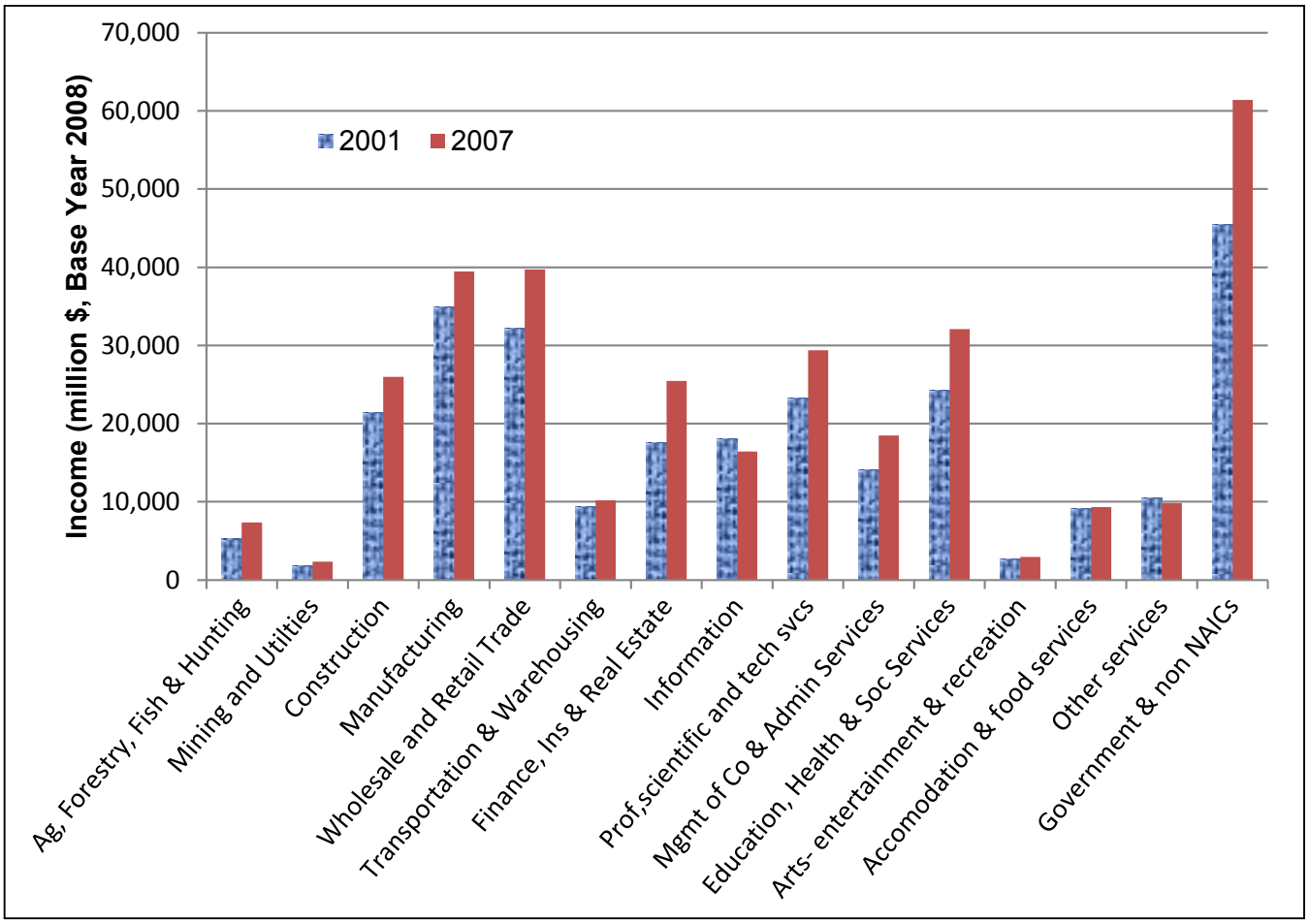


Figure 7-6: Income by major industry, 2001 and 2007

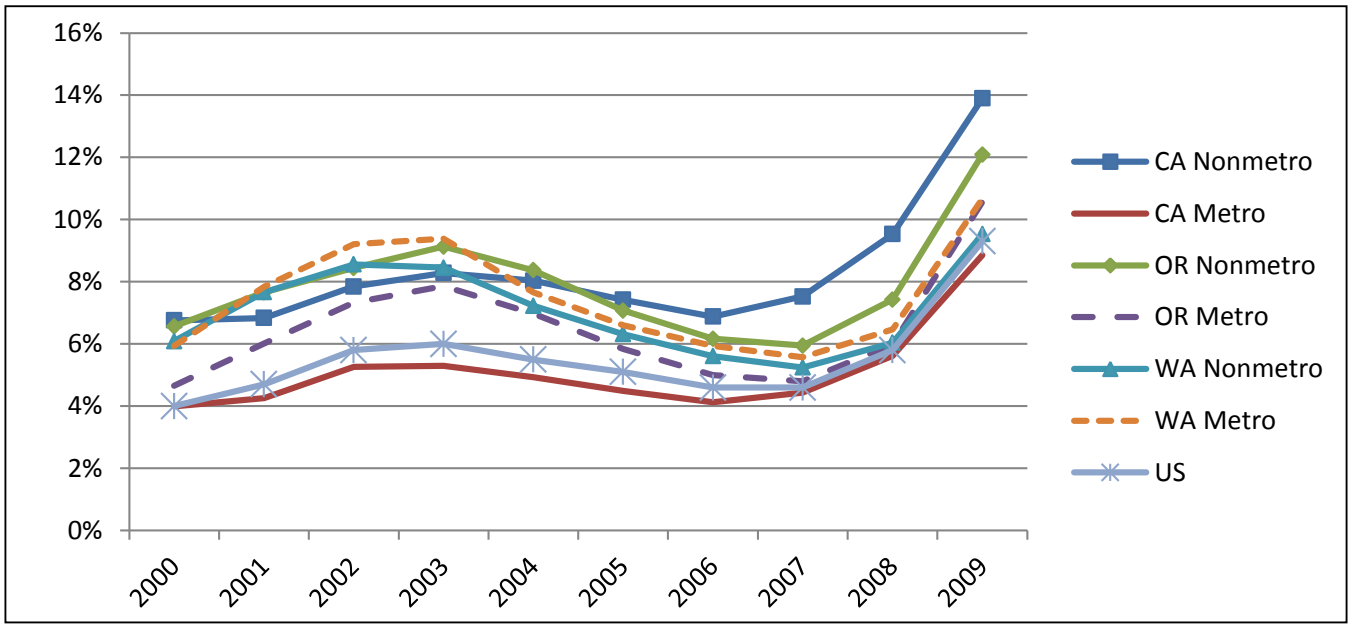


Figure 7-7: Unemployment rates in the NWFP area and US, 2000-2009

Chapter 8: Jobs and Income Associated with Resources and Recreation

Federal lands and resources contribute to socioeconomic well-being by providing consumptive, nonconsumptive, commercial and noncommercial uses and supporting employment opportunities. "Predictable levels of resource outputs and recreation opportunities from National Forest System and BLM lands were expected to provide predictable levels of employment. (Charnley et al. 2006)." This chapter of the 15-year report presents an assessment of the role that forest resources from National Forest System and BLM lands play in the economy of the NWFP area. The 10-year report focuses on changes in the role that federal lands played in the NWFP area economy between 1990 and 2000; this 15-year report focuses on the changes between the years 2001 through 2008.

Changes in industrial composition and associated rates of employment and income over time include changes in technology, industrial diversification and growth, regional competitiveness, product demand, and supply of raw materials. Federal land management agencies directly influence the supply of raw materials, including timber, recreation opportunities, forage, minerals, wildlife, fish, water, and other nontimber forest products. The production of these resources directly affects industries that consume and convert these resources, and indirectly affects the businesses and workers supporting these industries.

The economy of the Pacific Northwest was also changing. Agriculture and industries based on forest resource extraction grew little. Fewer people in the region depended on the extraction of goods and services from federal lands for their livelihoods. New businesses and employment opportunities fueled by the expanding population were primarily in the trade and services sectors. Growth in the forest products industry shifted to the U.S. South and interior Canada as relative costs changed and engineered forest products gained consumer acceptance (Haynes et al. 2007). During this same time, the forest products industry in the NWFP area became less diverse and more focused on softwood lumber production at large mills (Haynes 2008).

Data Analysis

Employment and income data are available from a variety of sources and at different levels of aggregation. The employment and income data presented in this 15-year report were developed using Implan.[10] Implan is a social accounting and economic impact analysis software and database that allows the user to develop input-output models to estimate the economic impact or contribution of various agency activities, resource flows from National Forest System and BLM lands and public uses of those lands. The Implan data are primarily based on data from the U.S. Census County Business Patterns, Bureau of Labor Statistics Covered Employment and Wages Program, and Bureau of Economic Analysis Regional Economic Information System.

The 10-year report covers the years 1990 through 2000 organized by industry or industry group using the Standard Industrial Classification (SIC) system. The more recent Implan data, 2001 and later, are organized by industry or industry group using the North American Industrial Classification System (NAICS). The Implan data sets are selected because they interpret data from a variety of published government sources to fully disclose unaggregated employment and income for individual counties. This disclosure provides the ability to identify individual industries, such as the primary and secondary wood products processing sectors, in the NWFP area's 72 counties.

The Implan data also include estimates for the self-employed, which are especially important in the logging industry. The 10-year report uses data from Christensen et al. (2000) to identify whether the counties were metropolitan or nonmetropolitan. The 15-year report uses updated 2008 metropolitan and nonmetropolitan data obtained from the Bureau of Labor Statistics (BLS) website. These 72 counties (table 7-1) constitute the area of analysis for the discussions in this chapter.[11] The quantity of resource outputs and uses for estimating employment and income associated with

[10]The Minnesota Implan Group. http://www.implan.com/

[11]http://www.bls.gov/oes/current/county_links.htm

Forest Service and BLM managed lands in this chapter are taken from Chapter 2 through Chapter 6 of this report. The timber harvest data from all ownerships used here are taken from state harvest reports that identify timber harvest by county.[12] The timber data from all ownerships incorporate other owner responses to the changing timber supply from federal lands.

Timber-industry employment and income data are from Implan data sets for the 72 counties in the NWFP area. The portion of the agencies' timber harvest compared to the total amount of logs harvested from all ownerships in the NWFP area identifies the amount of agency supported employment and income in these industries.

A change in timber industry output generates changes in purchases from supporting industries and expenditures by employees. These are known as indirect and induced effects. In order to estimate timber-related indirect and induced employment and income, Implan impact models were built for the region to produce employment and income multipliers for the timber primary processing industries over the period 2001 through 2007.

Recreation-related employment and income cannot be defined using a single tourism industry. Recreation dollars are spent on a variety of goods and services. Associated employment and income were generated by building Implan impact models to identify the direct, indirect, and induced employment and income associated with the expenditures by the recreation users. The expenditure patterns are based on data identified in the National Visitor-Use Monitoring program. The methods to derive this data are presented in the Spending Profiles of National Forest Visitors, NVUM Four Year Report, (Stynes and White 2005).

The following sections discuss results for timber, other forest products, and recreation. The timber section is the most developed because the data identifying the trends in timber flows are readily available and the relationships between timber flows and employment are generally known. Little or no comparable data are available for nontimber forest products.

Results

Timber-Related Jobs and Income

Timber-related jobs and income can be divided into two manufacturing sectors and logging. The first manufacturing sector includes industries that manufacture solid wood products. The second sector includes primary pulp and paper processing industries. These two sectors can also be subdivided into primary and secondary manufacturing industries.

The primary-processing industries in the solid-wood products sector, identified as indicators in the 15-year report, are sawmills and wood preservation; and veneer and plywood mills. In the 10-year report, additional industries are also included such as hardwood dimension and flooring mills; and special-product sawmills. These industries are not readily identifiable as primary manufacturing industries under NAICS. Secondary manufacturing in solid wood products includes industries such as millwork, reconstituted wood products and cabinetry. Under SIC system, logging was included in the solid wood products sector. Now NAICS identifies logging aligned with agriculture and forestry industries rather than manufacturing industries. The primary-processing pulp and paper industries include pulp, paper, and paperboard mills. Secondary manufacturing in pulp and paper includes industries like production of paperboard containers, paper bags and stationary.

For the period 2001 through 2007, the trends are mixed in the NWFP area. Logging employment increased modestly by five percent or about 1,100 jobs, primary solid wood products manufacturing employment decreased by 2,600 jobs or eight percent, and primary pulp and paper processing employment decreased 3,800 jobs or almost 29 percent from 2001 employment levels in these industries. Secondary solid wood manufacturing employment decreased by 3,700 jobs or 12 percent, and secondary paper processing decreased by 1,300 jobs or 15 percent from employment

[12]These reports are available from the Oregon Department of Forestry publications section (http://egov.oregon.gov/ODF/STATE_FORESTS/FRP/annual_reports.shtml), the Washington Department of Natural Resources publications section (http://www.dnr.wa.gov/), the Washington Department of Revenue (http://dor.wa.gov/content/FindTaxesAndRates/OtherTaxes/Timber/forst_stat.aspx) and the California Board of Equalization property-tax section (http://www.boe.ca.gov/proptaxes/timbertax.htm) .

levels in 2001. Between 2001 and 2007,these changes represent average annual rates of change in employment of a one percent increase for logging and one percent decrease for solid wood primary manufacturing and a four percent decrease for primary pulp and paper manufacturing. Secondary processing in both solid wood and paper declined by about two percent.

The declines in the wood products industry, between 2001 and 2007, in the NWFP area, are in part due to efficiencies gained in manufacturing processes. During this period, the value of total industrial output adjusted for inflation increased across all wood products manufacturing industries, except for secondary solid wood processing, which remained unchanged.

The value of primary solid wood output increased by 20 percent, primary pulp and paper processing increased by 14 percent and secondary paper increased by 57 percent. It is possible that part of the recent downturn in solid wood products employment between 2006 and 2007 shown in figure 8-1 is also because of the national downturn in residential and other buildings construction.

The total employment picture in the NWFP area is now also much different than it was in the 1990s. During that decade, employment grew by 1.4 million jobs at an annual

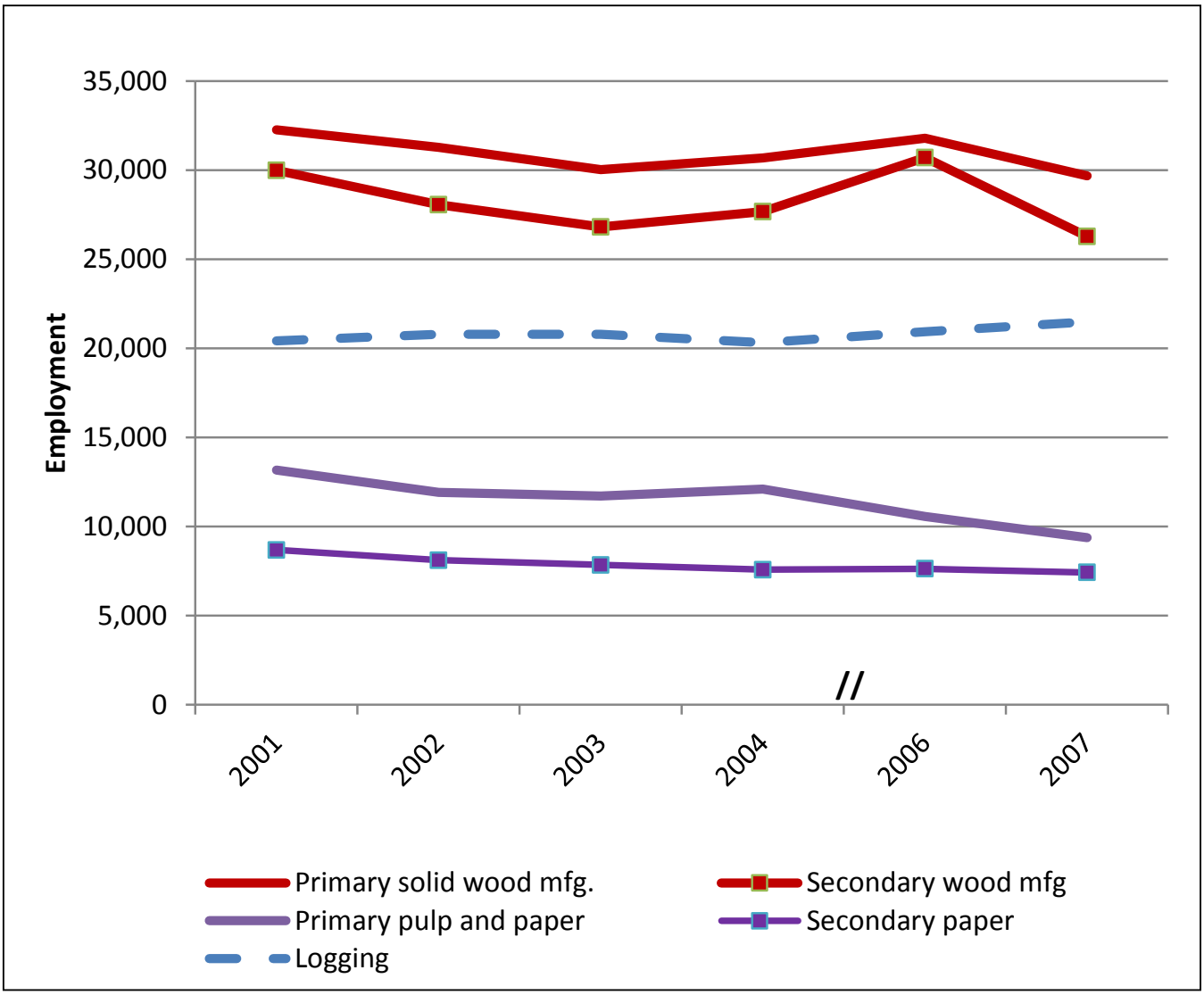


Figure 8-1: Timber industry employment, NWFP area, 2001-2007

growth rate of about three percent (Charnley et al. 2006). In the first seven years of the new millennium, total employment added 331,000 jobs at an annual growth rate of one percent. In 2007 all of solid wood and pulp and paper processing industries plus logging accounted for less than two percent of all jobs in the NWFP area, down slightly from 2000.

Income from the solid-wood-product and pulp-and-paper manufacturing sectors differs from the employment trends. The key difference is that income related to wood products increased by about 1.5 percent over the past seven years while employment declined (fig. 8-2 and fig. 8-1). All of the individual sectors for primary manufacturing in both solid wood and pulp and paper and in logging grew at average annual rates varying between one and two percent. Income in secondary paper manufacturing grew by almost six percent. Income shown in figure 8-2 includes both the effects of changing wage rates and the number of jobs.

Average wage rates adjusted for inflation (real income) have changed over time in the NWFP area and are shown in figure 8-3.

The 10-year report shows average annual growth in real wage rates was slightly over two percent across all industries during the years 1994 through 2000 in the NWFP area, and less than one percent in the wood products related industries (Charnley et al. 2006). For the period from 2001 through 2007, the wood products industry overall exceeds the average annual growth rate of slightly over two percent for all industries combined. The primary paper processing average annual growth rate of almost eight percent and the secondary paper processing average annual growth rate of nine percent greatly exceed the average for all industries.

The change in timber-related employment differed across the NWFP area by location. To examine these differences, change in metropolitan and nonmetropolitan

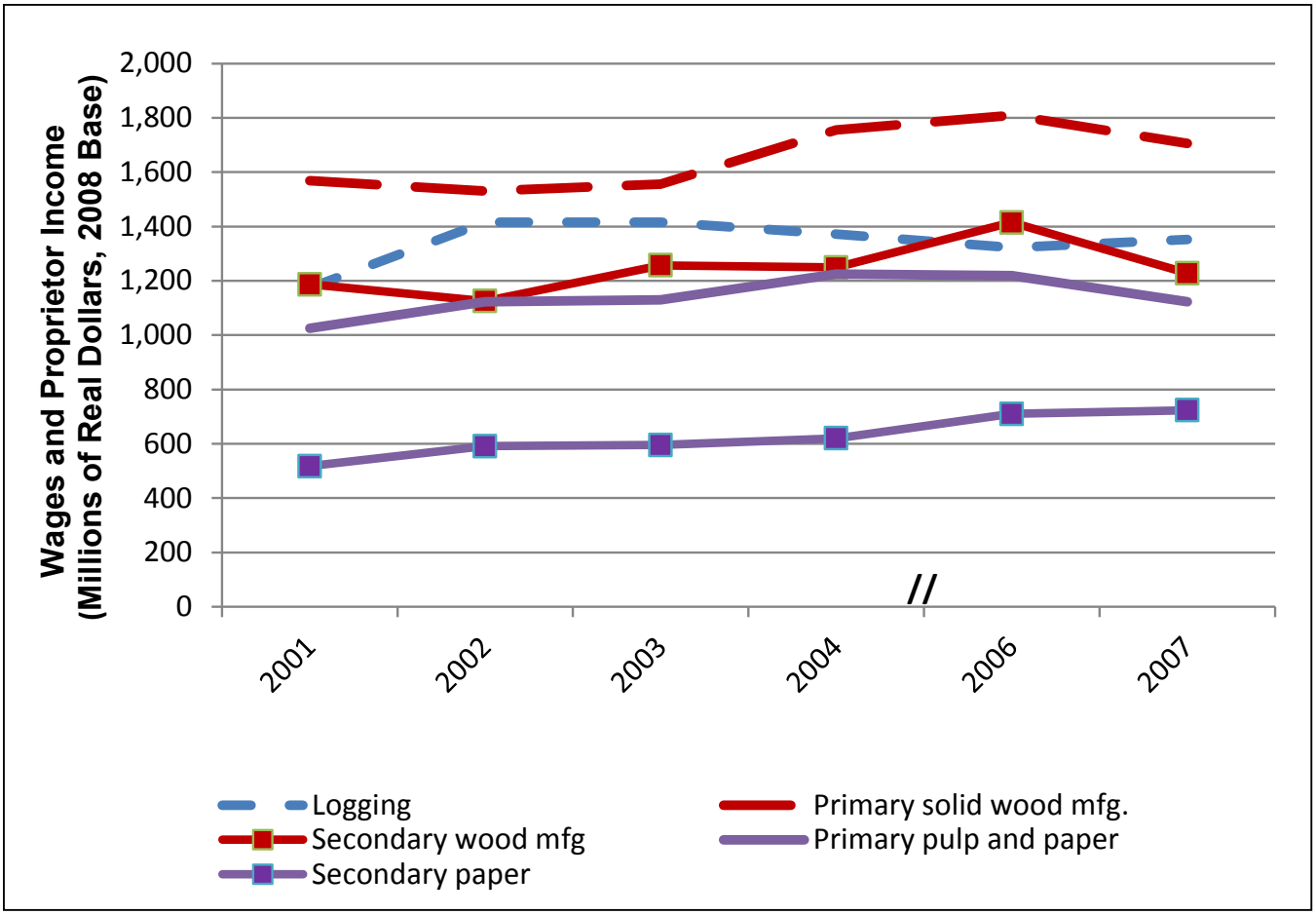


Figure 8-2: Timber industry wages and proprietor income, NWFP area, 2001-2007

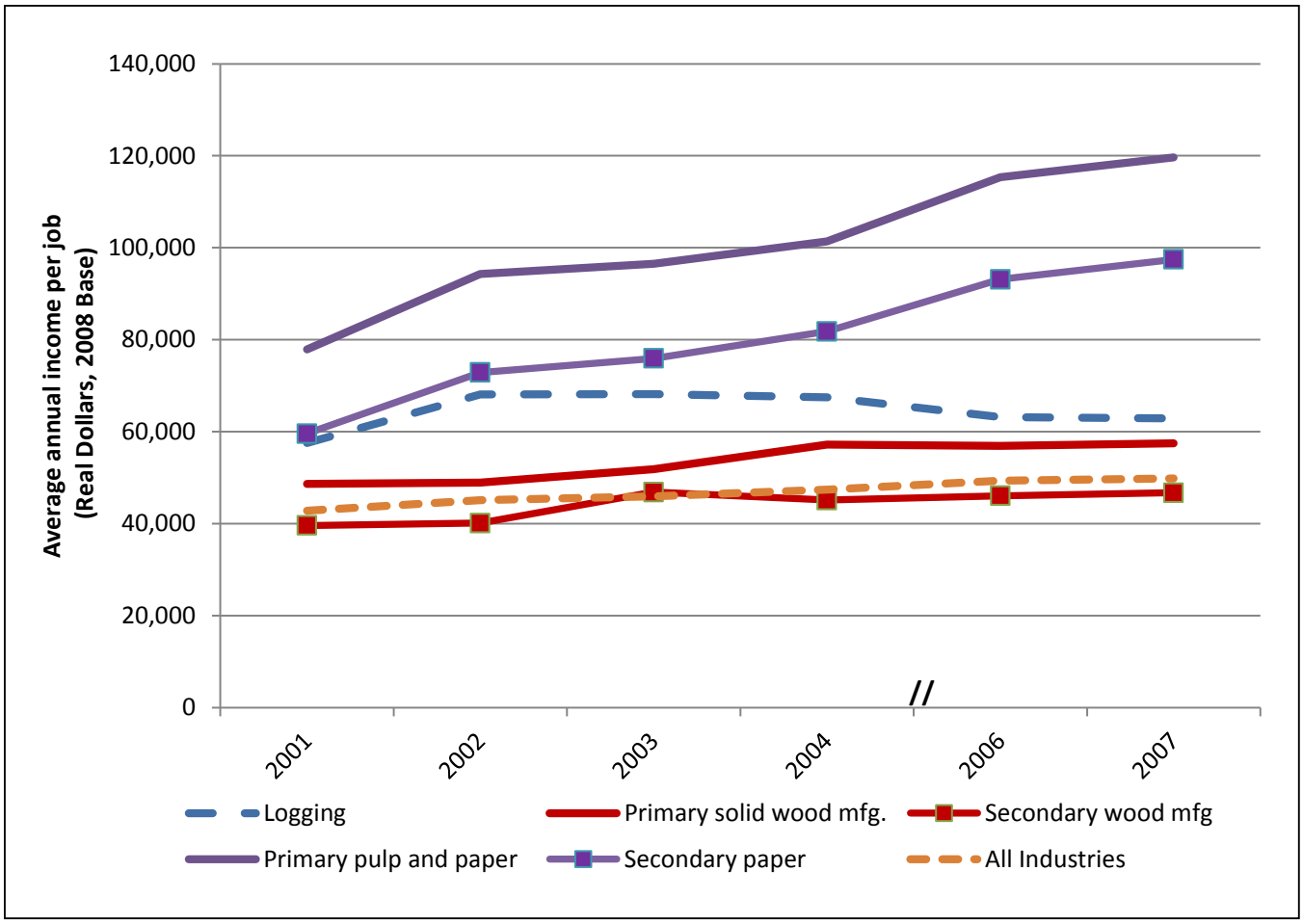


Figure 8-3: Average annual real income per job for five wood-products sectors and all industries in the NWFP area, 2001-2007 (base year is 2008)

subregions of the NWFP area (table 7-1) were analyzed. These delineations allow us to identify any urban and rural differences in the NWFP area (table 8-2). About 93 percent of all employment and about 90 percent of all wage income is from metropolitan counties in the NWFP area. This proportion remained constant from 2001 to 2007. Although most employment is in metropolitan counties, wood-related employment is split fairly evenly between metropolitan and nonmetropolitan counties in the NWFP area. While fifty-three percent of wood products employment in the NWFP area is in metropolitan counties, the wood products employment makes up only about one percent of all employment and wage and labor income in these counties. Wood related employment and income are much larger components of the economy in the nonmetropolitan counties. In 2001, wood related employment made up about 12 percent of all employment in nonmetropolitan counties. By 2007, employment in the wood products industry dropped to nine percent of all employment in nonmetropolitan counties. Wood related wage and labor real income varied between eight and nine percent of the total employment in nonmetropolitan counties across the same period.

Total employment in metropolitan counties grew by eight percent between 2001 and 2007, while wood related employment declined by about six percent (table 8-2). In nonmetropolitan counties, total employment grew by almost 10 percent while wood related employment declined by about 15 percent. Although wood related employment is relatively evenly split between the metropolitan and non-

Table 8-2: Metropolitan and nonmetropolitan job change, 2001 through 2007

Metropolitan	2001 Jobs	2007 Jobs	2001-2007 Job Change	2001-2007 Percent Change
Logging	9,914	9,787	-126	-1.3%
Primary solid wood mfg	13,001	13,263	262	2.0%
Secondary wood mfg	19,763	18,767	-996	-5.0%
Primary pulp and paper	5,567	4,185	-1,382	-24.8%
Secondary paper	7,259	6,412	-847	-11.7%
All wood related	55,503	52,414	-3,089	-5.6%
All Industries	5,387,931	5,815,543	427,612	7.9%
Nonmetropolitan				
Logging	10,498	11,693	1,195	11.4%
Primary solid wood mfg	19,244	16,422	-2,823	-14.7%
Secondary wood mfg	10,210	7,504	-2,706	-26.5%
Primary pulp and paper	7,589	5,199	-2,391	-31.5%
Secondary paper	1,428	1,013	-415	-29.1%
All wood related	48,970	41,830	-7,140	-14.6%
All Industries	410,577	449,483	38,906	9.5%

metropolitan counties, most of the loss in wood related jobs occurred in the nonmetropolitan counties. Between 2001 and 2007 in the NWFP area, over 10,200 timber related jobs were lost. Of the total, about 70 percent of these timber related jobs were lost in nonmetropolitan counties. Non-metropolitan areas continue to have proportionately more timber related job losses and therefore are likely to have greater negative economic impacts from a declining wood products industry. Logs harvested in the rural areas are now shipped to manufacturing centers near urban corridors (Haynes 2008).

Forest Service and BLM effects

The 10-year report provides the historical context for broad changes in timber supply and variability in the region by analyzing data from 1965 through 1989 for Oregon, Washington, and California. The key findings from the report show Forest Service and BLM annual timber harvest amounts, excluding federal lands in California, averaged 4.7 billion board feet from 1965 through 1989 (fig. 8-4). Harvests on other ownerships averaged 8.5 billion board feet. The Forest Service and BLM contribution was about 36 percent of total timber harvest of 13.2 billion board feet until 1990 (Charnley et al. 2006).

The 10-year report also discloses between 1990 and 1994, Forest Service and BLM harvests in the NWFP area decreased from 3.3 billion board feet to 0.8 billion board feet or a total of 2.5 billion board feet. Harvests on other ownerships in the NWFP area decreased by 1.5 billion board feet for a combined loss of 4.0 billion board feet in timber harvest across all ownerships (Charnley et al. 2006).

The data for the 15-year report show continued timber harvesting declines on all ownerships between 1995 and 2002 (fig. 8-5). Harvests on ownerships excluding Forest Service and BLM lands declined by 1.3 billion board feet (15 percent), Forest Service and BLM harvests declined by 0.3 billion board feet (61 percent) for a total decline across all ownerships totaling 1.6 billion board feet (17 percent).

Between 2002 and 2007, harvest on ownerships excluding Forest Service and BLM lands declined overall another 0.2 billion board feet. The Forest Service and BLM harvest amount increased by 0.2 billion board feet over the same period. After the short-term increase of 1.0 billion board feet between 2002 and 2004 on non-federal lands,

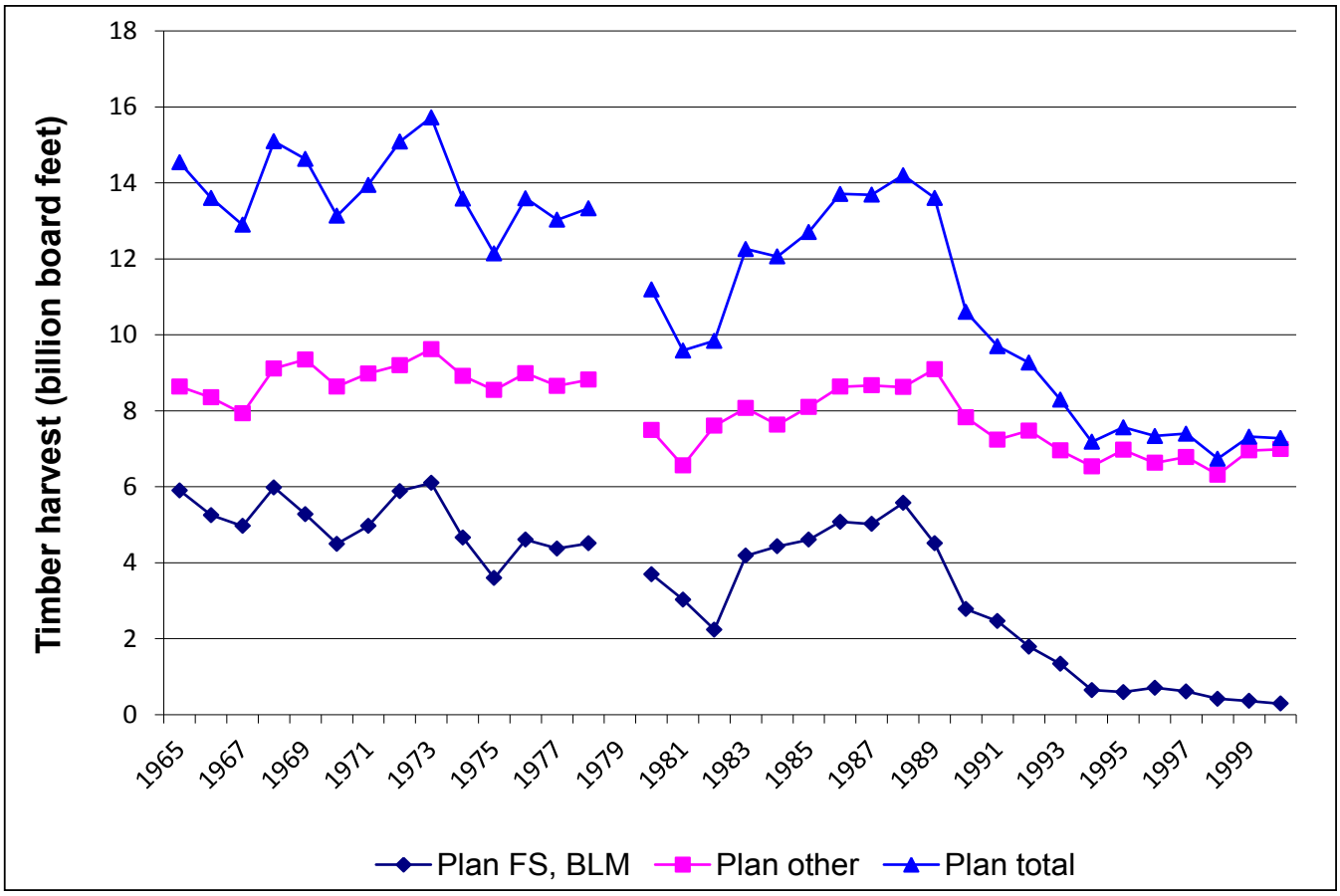


Figure 8-4: Timber harvest by general ownership-class in Oregon and Washington of the NWFP area, 1965-2000 (data for 1979 were not available)
Sources: Oregon Department of Forestry, Washington Department of Natural Resources

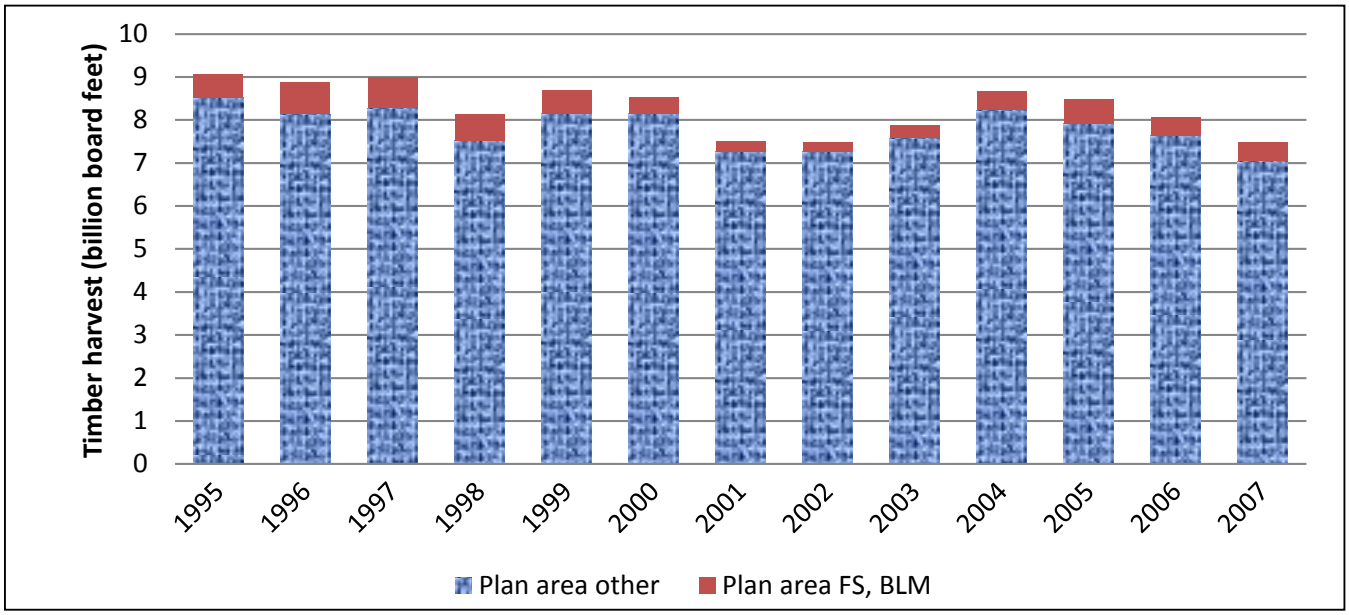


Figure 8-5: Timber harvest by general ownership-class, 1995-2007
Source: Oregon Department of Forestry, Washington Department of Natural Resources, California Board of Equalization, Forest Service and Bureau of Land Management.

the decline totaled 1.2 billion board feet between 2004 and 2007. Although there is a strong direct cause and effect relationship between timber harvest levels and the number of timber industry jobs and income, this relationship was also affected by industry restructuring that included adjusting the amount of logs exported and imported, the closure of less efficient mills that were unable to compete under new log supply market conditions, and technological change (FEMAT 2003).

Changes in the Japanese market and higher log prices led to the redirection of logs from the export market that helped timber manufacturing industries. These changes negatively impacted the timber export industry and reduced revenues for some private land owners (Haynes 2008).

These trends in import and export continued for the first part of the period covered by this 15-year report. Imports steadily increased as exports decreased until 2005 when they offset each other. However, the imports and export trends reversed beginning in 2006 lowering the amount of logs available for timber processing industries in the NWFP area. Since timber industry employment and income is based on the quantity of logs processed, the net exports are subtracted from the timber harvest amounts to approximate the volume of logs available for processing by local primary wood products industries in the NWFP area (fig. 8-6). Decreasing exports have mitigated some of the effects of the federal harvest reductions. Between 1995 and 2005, overall log supplies to timber processing industries in the NWFP area increased by about 1.4 billion board feet due to reductions in net exports.

The 10-year report shows that about two-thirds of the primary-wood-products employment was lost in the first half of the 1990s and that the rate of decline was much slower at the end of the decade. Although most of the job losses were associated with the decline in volume harvested, some of the losses were also due to technological changes in the primary wood manufacturing industries (Charnley et al. 2006).

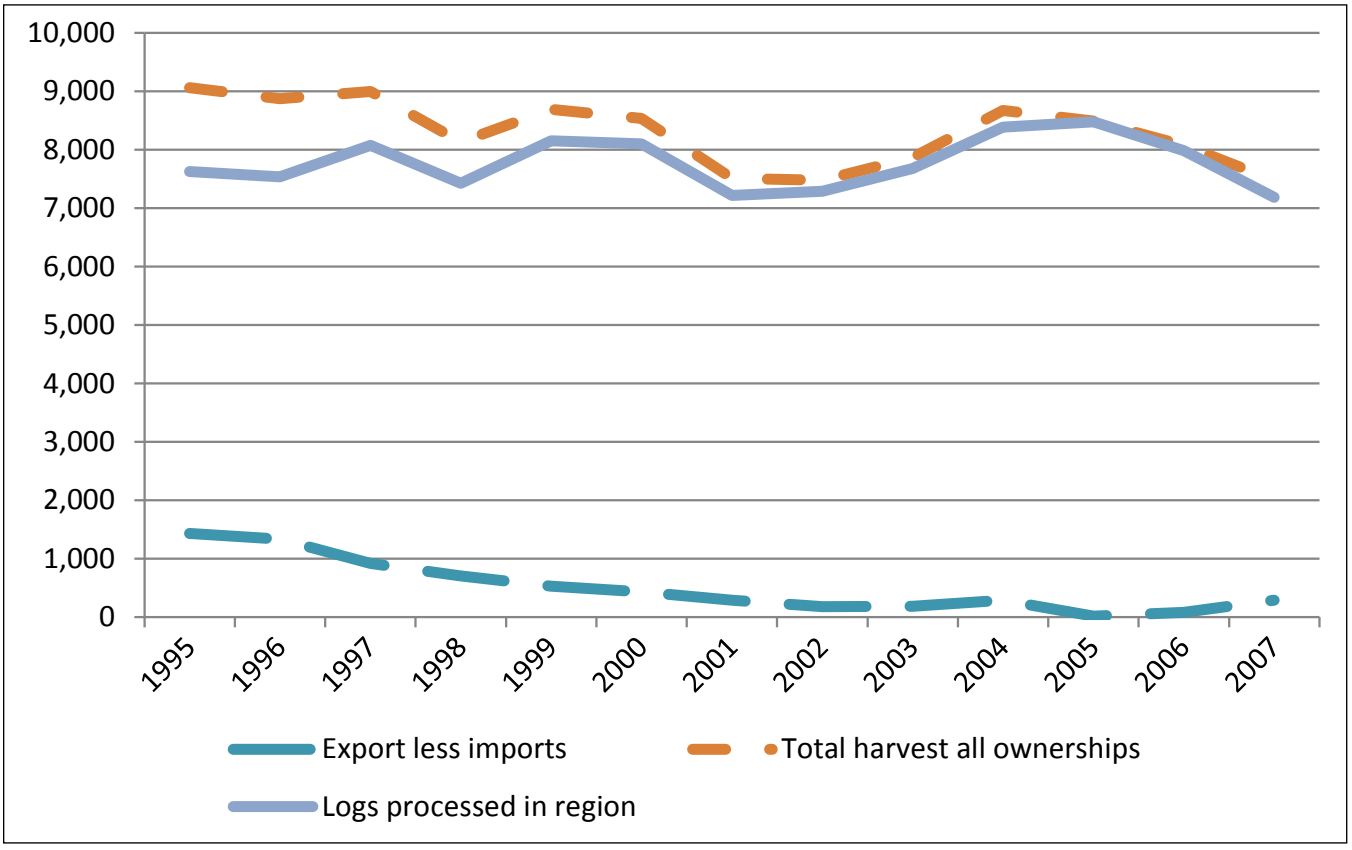


Figure 8-6: Timber harvest, net export, and volume processed in NWFP area, 1995-2007

To identify potential changes in employment opportunities related to technological advancements, employment in the primary wood products manufacturing and in logging is compared to the volume available to these industries each year from 2001 through 2007. The logging industry is identified separately because this work is done whether or not the logs are processed locally or exported out of the NWFP area. To identify direct jobs per million board feet of timber harvest, employment in the remaining primary wood products industries is compared to the volume available to these industries. These data are presented in table 8-3.

The jobs per million board feet remain fairly constant in the logging industry across the years 2001 through 2007. There was a steady decline in primary wood manufacturing jobs per million board feet between 2001 and 2004. Primary wood manufacturing shows a 19 percent decline in jobs per million board feet during this time period followed by slight increases in rate of employment per million board feet after 2004 (fig. 8-7).

In 2007, National Forest System and BLM lands provided less than six percent of the total timber supply. We therefore estimate that Forest Service and BLM timber harvests supported less than six percent of the 60,500 direct jobs in the primary wood manufacturing and logging industries in the NWFP area. Multipliers to estimate total employment associated with the direct employment in the primary wood manufacturing industries and logging were developed for the NWFP area using the 2007 Implan model for the NWFP area.

The multipliers add the indirect and induced employment effects to the direct employment. The employment multiplier for logging in 2007 was 2.1. This means that every direct logging job supported an additional 1.1 jobs. In the sawmill industry the multiplier was 2.6, and in the veneer and plywood industry it was 2.0. The pulp and paper industry had the largest multiplier of 4.9. Forest Service and BLM harvests currently support about 3,600 direct jobs which in turn support an estimated 4,400 indirect and induced jobs in the NWFP area using a weighted employment multiplier of 2.5.

The contribution of federal timber to the total timber supply dropped in the NWFP area from about 25 percent in 1990 to nine percent in 1995 to six percent by 2007. The Forest Service and BLM no longer play significant roles in the supply of timber in the NWFP area as a whole. However, this does not mean federal timber is not important to individual mills and communities which are not addressed at the NWFP area scale.

Nontimber and Recreation-Related Jobs and Income

The region's forests contribute to employment and income in several industries based on non-timber commodity and noncommodity products, uses, and services. Dispersed and developed recreation, commercial fishing, hunting,

Table 8-3: Employment rates for the logging and primary wood manufacturing, 2001-2007

	2001	2002	2003	2004	2005	2006	2007
Employment							
Logging	20,412	20,777	20,777	20,322	na	20,936	21,480
Primary wood manufacturing	45,401	43,183	41,721	42,774	na	42,357	39,068
Total employment	65,813	63,959	62,497	63,096		63,294	60,548
Harvest (million board feet)							
Total harvest	7,508	7,473	7,866	8,672	8,490	8,072	7,474
Harvest not exported	7,219	7,288	7,679	8,383	8,473	7,984	7,185
Jobs per million board feet							
Logging	2.7	2.8	2.6	2.3	na	2.6	2.9
Primary wood manufacturing	6.3	5.9	5.4	5.1	na	5.3	5.4

Figure 8-7: Jobs per million board feet, 2001-2007

special forest products, mining, and grazing all contribute to the region's economic health, and they are all affected by changes in federal forest management.

Nontimber Forest Industries

Several nontimber forest-based industries such as agriculture, commercial fishing, and mining are significant to employment in the Pacific Northwest. The 10-year report discusses these industries and their associated to identify potential trends. However, trends were not able to be identified because of differences in reporting techniques and unknown assumptions about full-time job equivalents (Charnley et al. 2006).

The 15-year report considered evaluating the same industries using Implan data for 2001 through 2007, but the analysis was not carried forward for several reasons. The switch from the SIC to the NAICs industry classification system made comparisons of industry data before 2001 to data for 2001 and later not possible; Forest Service and BLM related employment in these industries was a small contribution; and it appears there was relative employment stability within these industries.

Recreation

Forest-based recreation associated with the National Forest and BLM lands under the Plan included activities such as off-road vehicle use, sightseeing, hiking, camping, hunting, fishing, boating, rafting, bicycling, and winter sports. Measuring the number of people employed in association with these activities is not easy.

The 10-year report states that it was not possible to conduct an analysis of job and income trends associated with recreation uses (Charnley et al. 2006). We were also not able to conduct an analysis of the recreation-related

job and income trends. However, an analysis of recreation data current at this time is included to provide an indication about the importance and status of the industry in the region and to document existing data for future use.

The average annual number of visits to NWFP area National Forest System lands was about 15.1 million over the period 2005 through 2008. Annual recreation use associated with BLM lands in the NWFP area totaled about 6.0 million visits in 2008. National Forest visits were used to approximate the job and income effects of expenditures associated with recreation use (Stynes and White 2005). Recreation opportunities provided by National Forest System lands in the NWFP area supported about 4,200 direct jobs, and 11,200 total jobs. The recreation-use-associated direct jobs made up less than one percent of all employment in the NWFP area. The wage income generated from recreation expenditures was $138.9 million direct, and $481.2 million total. The jobs and income associated with recreation use on lands managed by the BLM were not estimated; BLM data were not available in a format necessary for these calculations.

Discussion

This 15-year report is similar to the 10-year report in its findings. The NWFP's effect on nontimber resources and recreation opportunities was minimal or not able to be calculated. Although National Forest System and BLM lands are an important part of the total forest base in the NWFP area, the amount of timber supporting timber-related employment and income is much less than the amounts supported in the late 1980s. As the overall population of the NWFP area increases, recreation uses of federal lands will likely increase as will recreation-related employment, but data is lacking to estimate trends.

Implementation of the NWFP is not likely to affect overall economic conditions and trends related to non-timber resources and recreation opportunities in the NWFP area. The economic contribution of Forest Service and BLM management activities to the total NWFP area regional economy is small. However, subregions, individual businesses, and individuals are not affected equally.

Chapter 9: Agency Jobs, Unit Reorganizations, and Budgets

This chapter evaluates Forest Service and BLM job, budget and office distribution data. Budgets affect the number of agency employees and offices. Offices and employees spend money affecting local businesses. Table 9-1 identifies the NWFP area units included in this analysis.

Agency Jobs

The Forest Service and BLM provide quality jobs in rural communities by offering permanent full-time and seasonal or part-time jobs. Part-time jobs can be a component of a broader livelihood strategy for people engaged in a number of pursuits. They are especially important for young people looking for summer work. Not only are federal jobs valued, the people in those jobs contribute substantial human capital that enhances the capacity of communities where they reside (Charnley et al. 2006).

Data Analysis

The 10-year report identifies the number of full time equivalents (FTE) on Forest Service and BLM NWFP area units in Oregon, Washington and California for the time period 1993-2002. The 15-year report uses similar data to extend the time series through 2008. The data are reported for the NWFP area by BLM state and National Forest region. The Winema NF is excluded from this data set since it was administratively combined with the Fremont NF.

Table 9-1: Northwest Forest Plan units included in this analysis*

Agency and state	National Forests/BLM Districts
Forest Service:	
Washington	Gifford Pinchot NF
	Mount Baker-Snoqualmie NF
	Okanogan NF
	Olympic NF
	Wenatchee NF
Oregon	Deschutes NF
	Mount Hood NF
	Rogue River NF
	Siskiyou NF
	Siuslaw NF
	Umpqua NF
	Willamette NF
California	Klamath NF
	Mendocino NF
	Shasta-Trinity NF
	Six Rivers NF
Bureau of Land Management:	
Oregon	Coos Bay District
	Eugene District
	Medford District
	Roseburg District
	Salem District

* The Winema National Forest is within the NWFP area, but it was administratively combined with the Fremont National Forest in 2002. The Winema National Forest was dropped from this analysis because data specific to the Forest is not longer readily available.

There are no trends at the unit level that provide a distinctly different picture than the one provided at the agency scale. Unit data are not included in this report. The data were provided by the Forest Service Regional Offices and the BLM Oregon State Office.

Results and Discussion

Trends in staffing differ between the Forest Service Regions and the BLM in the NWFP area (fig. 9-1). Forest Service Region 6 NWFP units experienced continued declines until 2006. Since then employment appears to have leveled off. The Forest Service Region 5 NWFP units show steady declines until 2000 when employment levels began increasing until returning to 1993 employment levels. Employment at Oregon BLM units held constant through 2003 and dropped to a new lower level in 2004.

By 2008, the Region 6 NWFP units lost over 3,000 FTEs or about 55 percent from the high of almost 5,700 FTEs in 1993. Between 2003 and 2008 the Region 6 units lost about 700 FTEs or slightly over 20 percent of the total job loss. The BLM lost over 500 FTEs between 1993 and 2008. Almost 60 percent of this loss occurred between 2003 and 2004. Region 6 and BLM Oregon State show a steady decline in FTEs since 1993. Initial 2009 FTE data for Region 5, not displayed in figure 9-1, show a decline in employment near 700 FTEs (33 percent). The trends in the data for Region 5 and Regions 6 resemble their respective budget trends discussed later. Comparisons of BLM staffing trends to their budget trends are less clear.

Unit Reorganizations

Collaboration between federal agencies and local communities requires community members have access to agency decision-makers. Decision makers include BLM district and area managers and Forest Service supervisors and district rangers. A change in the number of agency offices housing decision-makers affects the nature of the agency presence in local communities (Charnley et al. 2006).

Data Analysis

The distribution of offices housing agency line officers is used as an indicator to measure the presence of agency decision makers in NWFP area communities. The data analyzed in the 10-year report compares 1990 and 2004. The year 2010 is added to the data set for the 15-year report. The 2010 data were gathered from agency websites and agency contact lists.

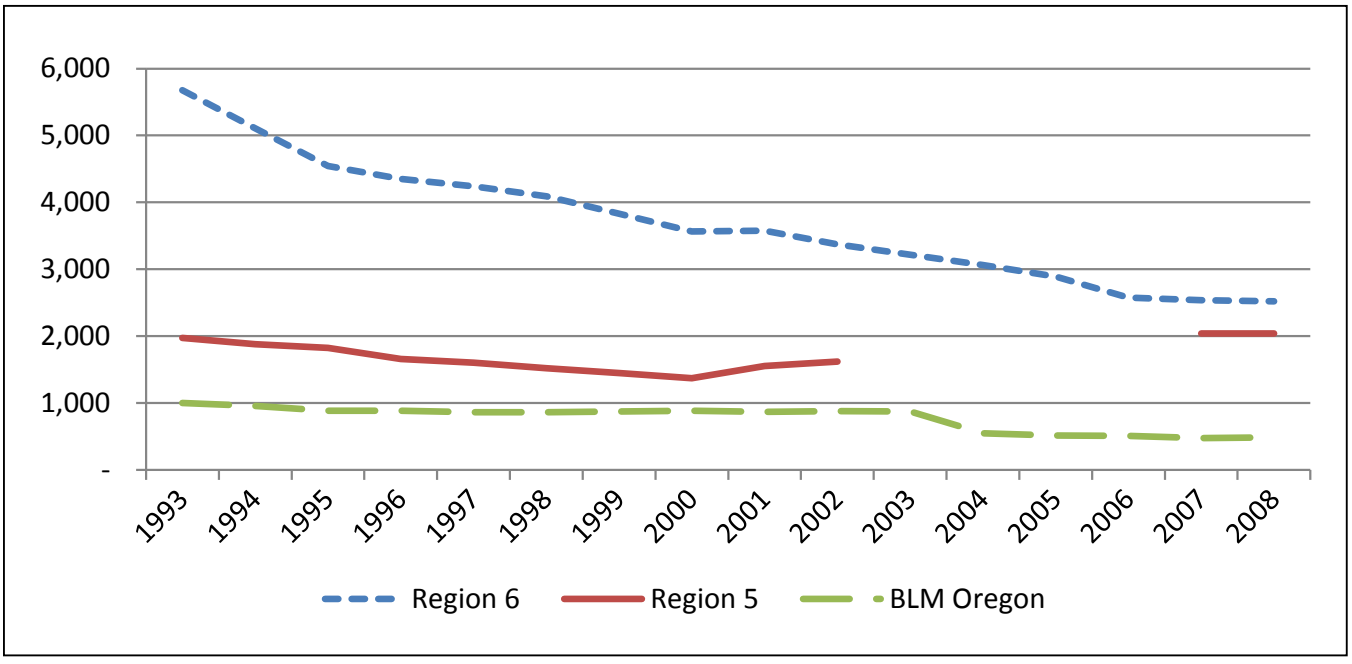


Figure 9-1: NWFP area staffing by agency, 1993-2008

Table 9-2: Locations of Forest Service and Bureau of Land Management offices with line officers, 1990, 2004 and 2010.

1990	2004	2010
Forest Service: Washington State		
Vancouver (Gifford Pinchot SO)	**Vancouver (Gifford Pinchot SO)**	**Vancouver (Gifford Pinchot SO)**
Randle	Randle (Cowlitz Valley RD)	Randle (Cowlitz Valley RD)
Trout Lake (Mount Adams RD)	Trout Lake (Mount Adams RD)	Trout Lake (Mount Adams RD)
Amboy (Mount St. Helens NM)	Amboy (Mount St. Helens NM)	Amboy (Mount St. Helens NM)
Packwood		
Carson (Wind River RD)		
Mountlake Terrace (Mt Baker-Snoqualmie SO)	**Mountlake Terrace (Mt Baker-Snoqualmie SO)**	**Mountlake Terrace (Mt Baker-Snoqualmie SO)**
Sedro Woolley (Mount Baker RD)	Sedro Woolley (Mount Baker RD)	Sedro Woolley (Mount Baker RD)
Darrington	Darrington	Darrington
Skykomish	Skykomish	Skykomish
North Bend	North Bend (Snoqualmie RD)	North Bend (Snoqualmie RD)
Enumclaw (White River RD)		
Wenatchee (Wenatchee SO)	**Wenatchee (Okanogan and Wenatchee SO)**	**Wenatchee (Okanogan and Wenatchee SO)**
Chelan	Chelan	Chelan
Cle Elum	Cle Elum	Cle Elum
Entiat	Entiat	Entiat
Lake Wenatchee		
Leavenworth	Leavenworth (Lake Wenatchee/Leavenworth RD)	Leavenworth (Wenatchee River RD)
Naches	Naches	Naches
Okanogan (Okanogan SO)		
Winthrop	Winthrop (Methow Valley RD)	Winthrop (Methow Valley RD)
Twisp		
Tonasket	Tonasket	Tonasket
Olympia (Olympic SO)	**Olympia (Olympic SO)**	**Olympia (Olympic SO)**
Hoodsport (Hood Canal RD)	Hoodsport (Hood Canal RD)	Hoodsport (Hood Canal RD)
Quilcene		
Quinault		
Forks (Soleduck RD)	Forks (Soleduck RD)	Forks (Pacific RD)
Forest Service: Oregon State		
Bend (Deschutes SO)	**Bend (Deschutes SO)**	**Bend (Deschutes SO)**
Bend	Bend	Bend (Bend-Ft. Rock RD)
Crescent	Crescent	Crescent
Sisters	Sisters	Sisters
Medford (Rogue River SO)	**Medford (Rogue River and Siskiyou SO)**	**Medford (Rogue River and Siskiyou SO)**
Jacksonville (Applegate RD)	Jacksonville (Applegate RD)	
Ashland	Ashland	Ashland (Siskiyou Mtns, RD)

Butte Falls	Butte Falls	
Prospect	Prospect	Prospect (High Cascades RD)
Grants Pass (Siskiyou SO)		
Brookings (Chetco RD)	Brookings (Chetco RD)	
Grants Pass (Galice RD)	Grants Pass (Galice RD)	Grants Pass (Wild Rivers RD)
Gold Beach	Gold Beach	Gold Beach
Cave Junction (Illinois Valley RD)	Cave Junction (Illinois Valley RD)	
Powers	Powers	Powers
Corvallis (Siuslaw SO)	**Corvallis (Siuslaw SO)**	**Corvallis (Siuslaw SO)**
Alsea		
Waldport (Alsea/Waldport RD)		Waldport (Central Coast RD)
Hebo	Hebo	Hebo
Mapleton	Florence (South Zone RD)	
Reedsport (Oregon Dunes NRA)	Reedsport (Oregon Dunes NRA)	
Roseburg (Umpqua SO)	**Roseburg (Umpqua SO)**	**Roseburg (Umpqua SO)**
Cottage Grove	Cottage Grove	Cottage Grove
Tiller	Tiller	Tiller
Toketee (Diamond Lake RD)	Toketee (Diamond Lake RD)	Toketee (Diamond Lake RD)
Glide (North Umpqua RD)	Glide (North Umpqua RD)	Glide (North Umpqua RD)
Eugene (Willamette SO)	**Eugene (Willamette SO)**	**Eugene (Willamette SO)**
Westfir (Oak Ridge RD)	Westfir (Middle Fork RD)	Westfir (Middle Fork RD)
Oakridge (Rigdon RD)		
Lowell		
Blue River		
McKenzie Bridge (McKenzie RD)	McKenzie Bridge (McKenzie River RD)	McKenzie Bridge (McKenzie River RD)
Sweet Home	Sweet Home	Sweet Home
Mill City/Detroit (Detroit RD)	Mill City/Detroit (Detroit RD)	Mill City/Detroit (Detroit RD)
Sandy (Mount Hood SO)	**Sandy (Mount Hood SO)**	**Sandy (Mount Hood SO)**
Dufur (Barlow RD)	Dufur (Barlow RD)	Dufur (Barlow RD)
Maupin (Bear Springs RD)		
Estacada (Clackamas RD)	Estacada (Clackamas RD)	Estacada (Clackamas RD)
Troutdale (Columbia Gorge RD)		
Mount Hood-Parkdale (Hood River RD)	Mount Hood-Parkdale (Hood River RD)	Mount Hood-Parkdale (Hood River RD)
Zigzag	Zigzag	Zigzag
Klamath Falls (Winema SO)	**Klamath Falls (Winema SO)**	
Chemult	Chemult	Chemult
Chiloquin	Chiloquin	Chiloquin
Klamath Falls (Klamath RD)	Klamath Falls (Klamath RD)	Klamath Falls (Klamath RD)
Forest Service: California State		
Yreka (Klamath SO)	**Yreka (Klamath SO)**	
Klamath River (Oak Knoll RD)		

Happy Camp	Happy Camp	Happy Camp (Happy Camp/Oak Knoll RD)
Etna (Salmon River RD)		
Mount Hebron (Goosenest RD)	Mount Hebron (Goosenest RD)	Mount Hebron (Goosenest RD)
Orleans (Ukonom RD)d		
Fort Jones (Scott River RD)	Fort Jones (Salmon River and Scott River RDs)	Fort Jones (Salmon River and Scott River RDs)
Willows (Mendocino SO)	**Willows (Mendocino SO)**	**Willows (Mendocino SO)**
Covelo		Covelo (Covelo RD)
Upper Lake	Upper Lake (Covelo and Upper Lake RDs)	Upper Lake (Upper Lake RD)
Stonyford	Willows (Grindstone RD)	Willows (Grindstone RD)
Corning		
Redding (Shasta-Trinity SO)	**Redding (Shasta-Trinity SO)**	**Redding (Shasta-Trinity SO)**
Big Bar		
Hayfork (Yolla Bolla and Hayfork RDs)	Hayfork (Hayfork and Yolla Bolly RDs)	Hayfork (Hayfork and Yolla Bolly RDs)
Weaverville (Weaverville and Redding RDs)	Weaverville (Big Bar and Weaverville RDs)	Weaverville (Big Bar and Weaverville RDs)
Mountain Gate/Redding (Shasta Lake RD)	Mountain Gate/Redding (Shasta Lake RD)	Mountain Gate/Redding (Shasta Lake RD)
Mount Shasta (Mount Shasta and McCloud RDs)	McCloud (Mount Shasta and McCloud RDs)	McCloud (Mount Shasta and McCloud RDs)
Eureka (Six Rivers SO)	**Eureka (Six Rivers SO)**	**Eureka (Six Rivers SO)**
Orleans (Orleans RD)	Orleans (Orleans RD)	Orleans (Orleans RD)
Willow Creek (Lower Trinity RD)	Willow Creek (Lower Trinity RD)	Willow Creek (Lower Trinity RD)
Bridgeville (Mad River RD)	Bridgeville (Mad River RD)	Bridgeville (Mad River RD)
Gasquet (Smith River NRA)	Gasquet (Smith River NRA)	Gasquet (Gasquet RD and Smith River NRA)
Bureau of Land Management: Oregon State		
North Bend (Coos Bay District Manager and 3 resource area managers)	**North Bend (Coos Bay District Manage**r and 2 field managers)	**North Bend (Coos Bay District Manager** and 1 field manager)
Eugene (District Manager and 3 resource area managers)	**Eugene (District Manager** and 2 field managers)	**Eugene (District Manager** and 2 field managers)
Salem (District Manager and 4 resource area managers)	**Salem (District Manage**r and 1 field manager)	**Salem (District Manager** and 2 field managers)
Tillamook (resource area manager)	Tillamook (field manager)	Tillamook (field manager)
Medford (District Manager and 4 resource area managers)	**Medford (District Manager** and 4 field managers)	**Medford (District Manager** and 4 field managers)
Roseburg (District Manager and 4 field managers)	**Roseburg (District Manager** and 2 field managers)	**Roseburg (District Manager** and 2 field managers)

Notes: SO = supervisor's office, RD = ranger district office, NM = national monument office, NRA = national recreation area office.
Locations of Forest Service supervisors' offices and Bureau of Land Management district offices are distinguished by boldface.
Forest Service data omit deputy forest supervisors and assistant district rangers.
Place names are shown. Where place name and ranger district name differ, both are provided.
Administration of the Ukonom RD moved from the Klamath NF to the Six Rivers NF in 1999.

Results

The Forest Service in the NWFP area had 17 supervisor offices and 79 district ranger offices in 1990 (table 9-2). In 2004, these numbers had decreased to 15 forest supervisor offices and 59 district ranger offices, and by 2010, there was a further net reduction of four district ranger offices. The reduction included six closures and two openings. This reduction in offices represents a 27 percent decrease by 2010 in the number of Pacific Northwest communities with Forest Service line officers.

In 1990, 24 line officers led local BLM NWFP area units. The total includes five district managers and 19 field managers. By 2004, seven line officers positions (almost 30 percent) were lost (table 9-2). All of these positions were field managers. The number of district managers and the locations of offices housing line officers remained unchanged. There are no differences in the total number of line officers and locations of offices in 2010. However, the number of field managers in offices has changed.

Budgets

Budgets are evaluated as a potential reason for the staffing reductions and office consolidations identified in the previous sections. Budget levels determine the funding for employees and offices.

Data Analysis

The 10-year report compares NWFP area budget allocations to agency allocations at the national scale, among local units, and among programs (Charnley et al. 2006). In the 15-year report, the scales chosen for the budget evaluation are Forest Service regional and BLM state offices, and agency units. This reduces the complexity of the analysis to focus on the important social and economic consequences related to changing budgets in the NWFP area. Agency national perspectives were not addressed since they do little to identify social and economic trends in the NWFP area. A program level analysis was also not undertaken since we believe the trends in total budget provide a reliable indicator of how dollar spending affects staffing and office management. Program expenditures tend to vary based on management emphasis during a particular year, and it does not matter which program pays for staffing and facilities. The sources of data for the 15-year report budget analysis are the total annual budget allocations to NWFP area units from agency regional and state offices. The data are generally available for 2004 through 2009.

The 2003 through 2005 Forest Service budget data for Region 6 were increased by 20 percent. During those years, cost pools to pay for items such as overhead were managed off the top so the dollars were not included as part of the individual unit budgets. Without this adjustment, the Forest Service budgets during the three years would not be comparable to the other years. The 20 percent factor is based on an average cost pool amount identified in the 2006 through 2008 budgets.

All budget data presented here were adjusted to constant dollars using 2008 as the base year. Gross domestic product (GDP) price deflators from the Bureau of Economic Analysis were used to convert annual budget amounts to real 2008 dollars.

The 2004 through 2009 data are added to similar 10-year report data. However, the data presented here will not be directly comparable to the earlier published report for two reasons. The base year for the budget data was 2003 in the 10-year report, and secondly, the Winema NF data are removed. The Winema is now administratively combined with the Fremont NF so that budget data for the Winema NF after 2001 are no longer available.

Results

The agency and unit data are presented by Forest Service Region and by the BLM Oregon State Office. In Region 6, the total budget for NWFP area national forests decreased by about 56 percent between 1993 and 2005, the lowest point (fig. 9-2). Outside of a big budget bubble in 2002, the trend was a steady decline. During 2006 and 2007, the budget increased. It now remains fairly stable around 50 percent of the 1993 levels or about $210 to $220 million annually. It appears that the changes resulting from implementation of the Northwest Forest Plan and changes such as national shifts in Forest Service funding priorities took over 10 years to be fully integrated into Region 6 budgets.

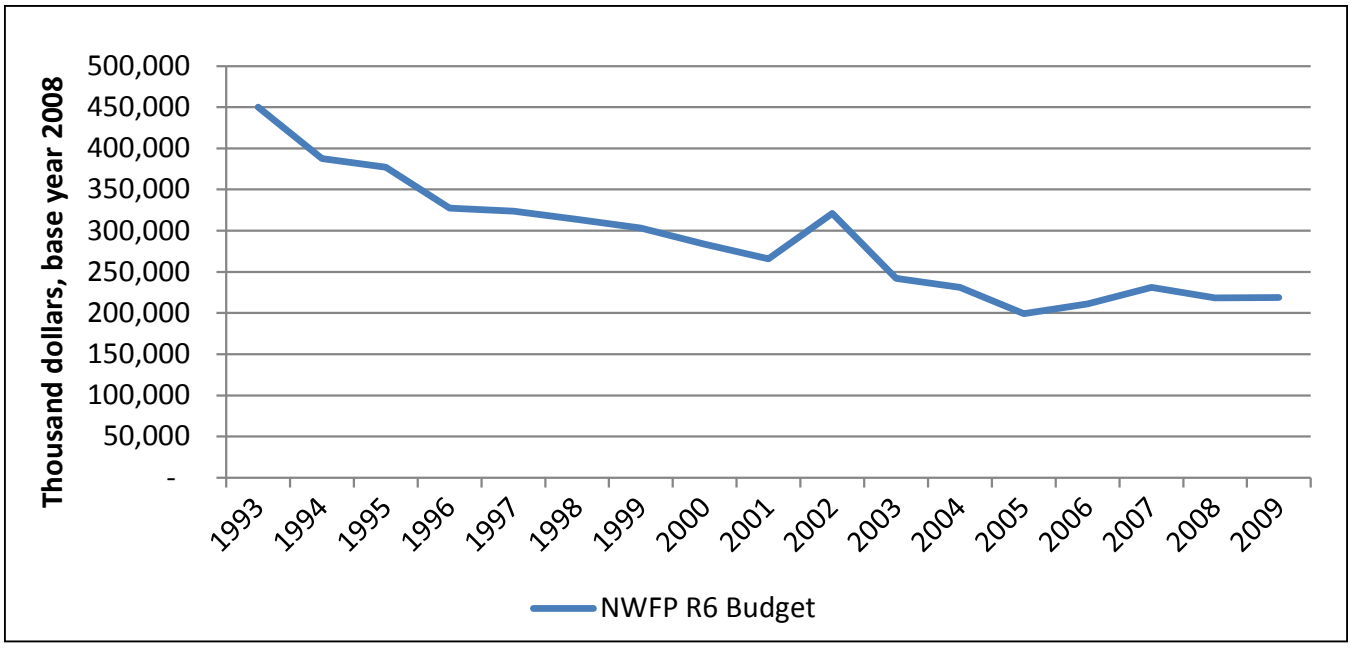


Figure 9-2: Total budget for all R6 national forests in the NWFP area, 1993-2009

Note: Budget data for 2003 through 2005 were inflated by 20 percent. Cost pools (overhead) were not allocated as part of the forest's budgets during the three years.

The Region 6 individual unit budgets for 2003 through 2010 are displayed in figure 9-3. The individual unit data show a similar pattern to the sum of all units displayed in figure 9-2. Low budgets occurred in 2005, a high in 2007, a slight decline 2008, and a leveling off.

The Region 5 data follow a similar pattern to the data observed in Region 6 with a steady decline from 1993 until 2005 resulting in an overall loss in budget of 50 percent from 2003. Following this low, there was an increase in budget of approximately 44 percent by 2008 from the low in 2005. The aggregated budget appears to be stabilizing at levels seen a decade ago.

The trends for data by national forest in Region 5 (fig. 9-5) are similar to the overall aggregated trend shown in figure 9-4 with budget lows occurring in 2005, followed by increases and then leveling off. Like Region 6, it has taken more than a decade for the effects of the Plan and changes such as national shifts in Forest Service funding priorities to become fully recognized in forest budgets.

Data for the BLM Oregon districts are distinctly different from the data on the national forests. The aggregated BLM district data show budgets varying plus or minus about 20 percent around an average of about $116 million (fig. 9-6). The shift in funding over two to three years can result in a budget change of approximating $45 million. The implementation of the Northwest Forest Plan appears to have little direct consequence on total BLM budgets.

The Oregon BLM district budgets show that the highs and lows of the total budget are driven by two districts (fig. 9-7). The Salem District received emergency appropriations affecting their budgets during 1996 through 1998 to repair flood damage. Salem has since returned to the trends followed by the majority of the districts. The Medford District budget steadily increased during the first decade of the Plan, but declined between 2003 and 2006. The rest of the districts had small budget increases through 2003, declined until 2006 and regained somewhat in 2007. Overall, the data do not show a direct effect due to the implementation of the Plan on Oregon BLM districts.

Discussion

Region 6 national forest budgets and employment measured in FTEs declined about 50 percent since the Plan was adopted. The Region 5 national forests also showed similar declines in budget and staffing through 2005, but budgets and staffing for Region 5 have since recovered to levels

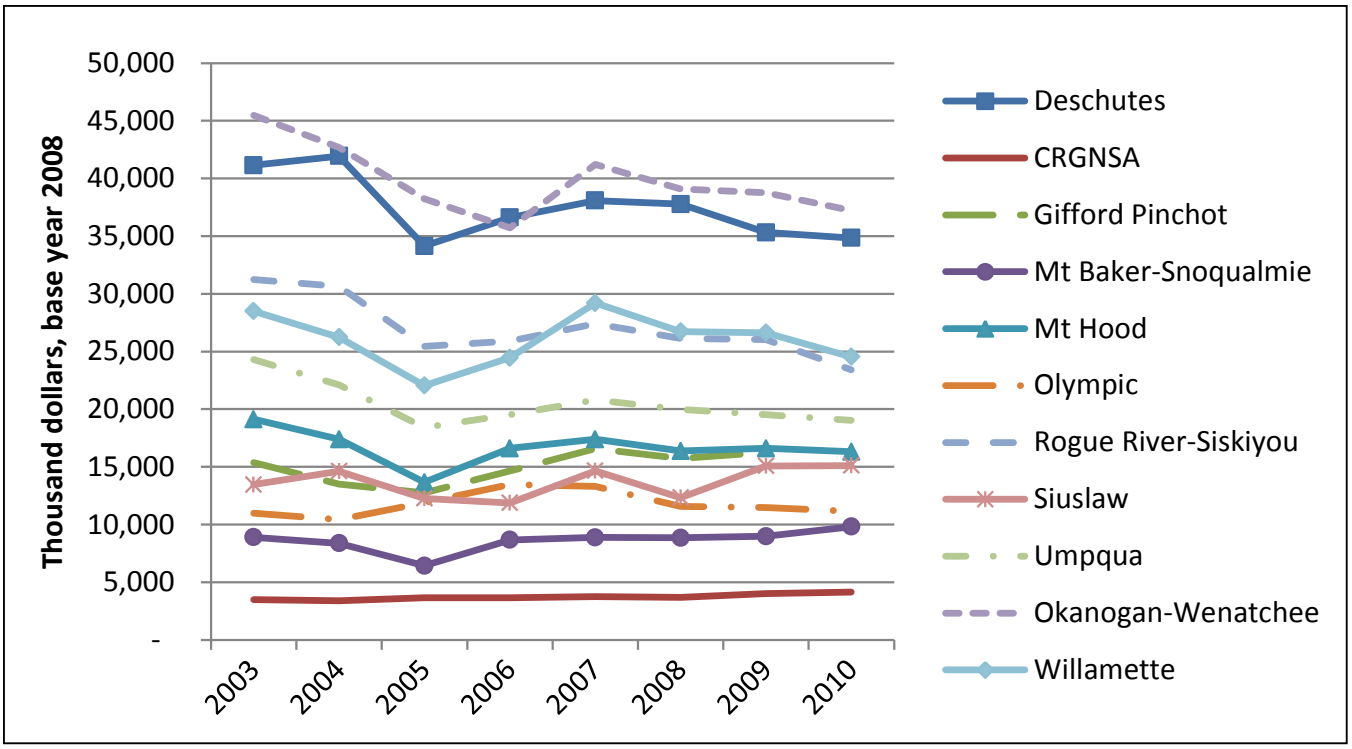


Figure 9-3: Budgets for R6 national forests in the NWFP area, 2003-2009

Note: Budget data for 2003 through 2005 were inflated by 20 percent. During the three years, cost pools (overhead) were not allocated as part of the forests' budgets

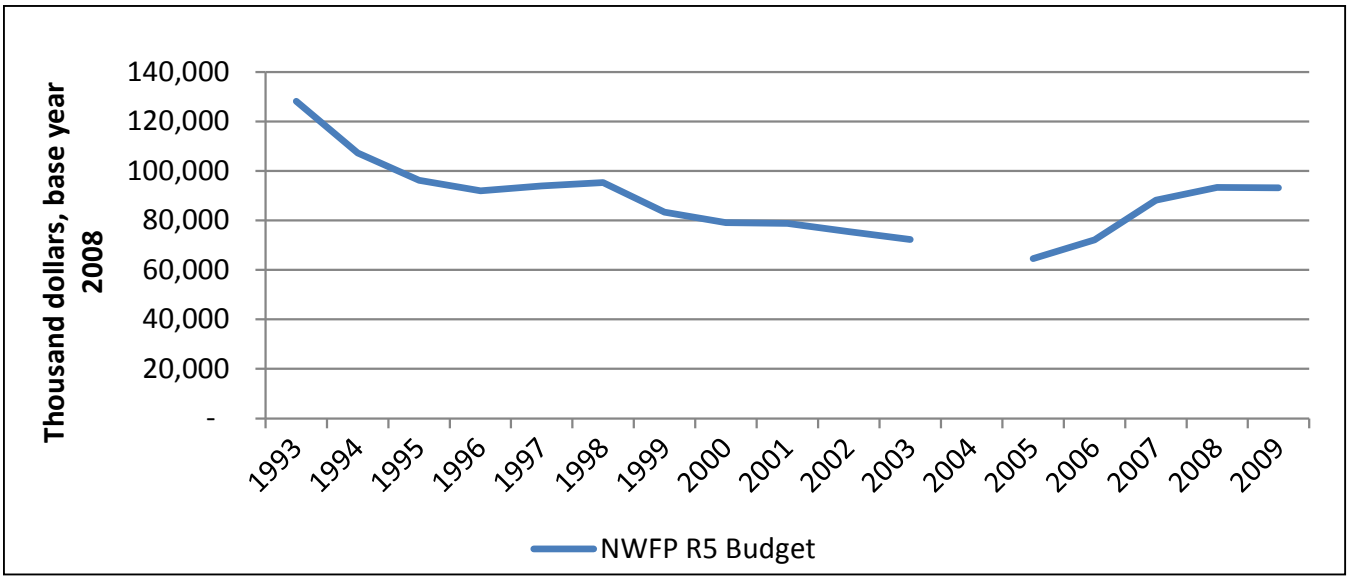


Figure 9-4: Total budget for all R5 national forests in the NWFP area, 1993-2009

Notes: The 1993-2003 data are reconstructed from the 10-year report Figure 10-13, Forest Service individual NWFP area unit budget allocations, 1993-2003. The original data are not available.

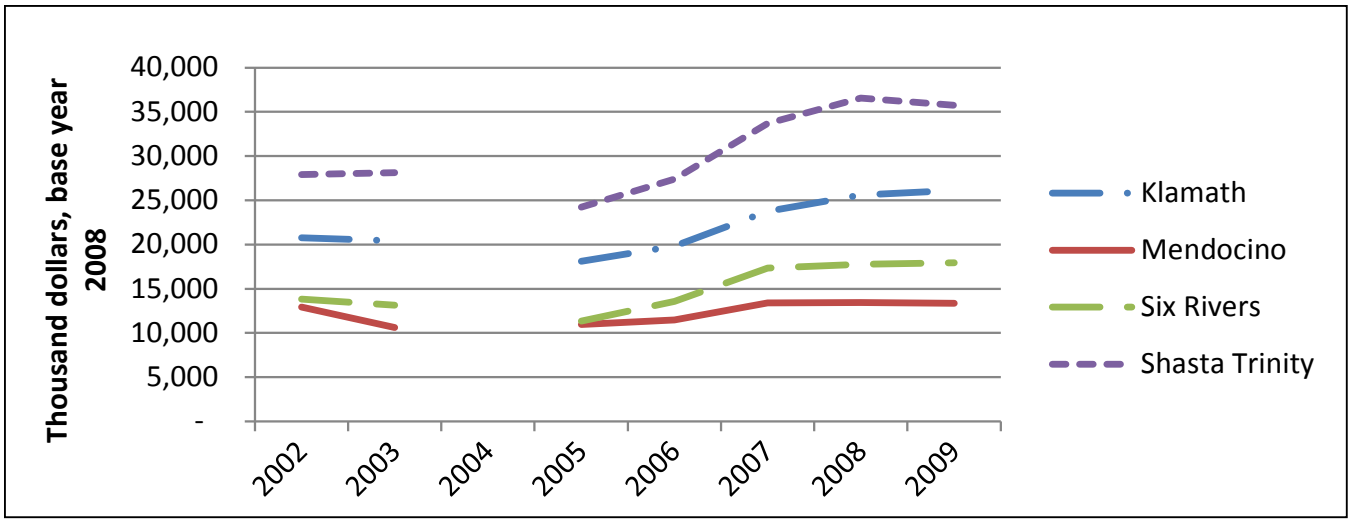


Figure 9-5: Budgets for R5 national forests in the NWFP area, 2002-2009

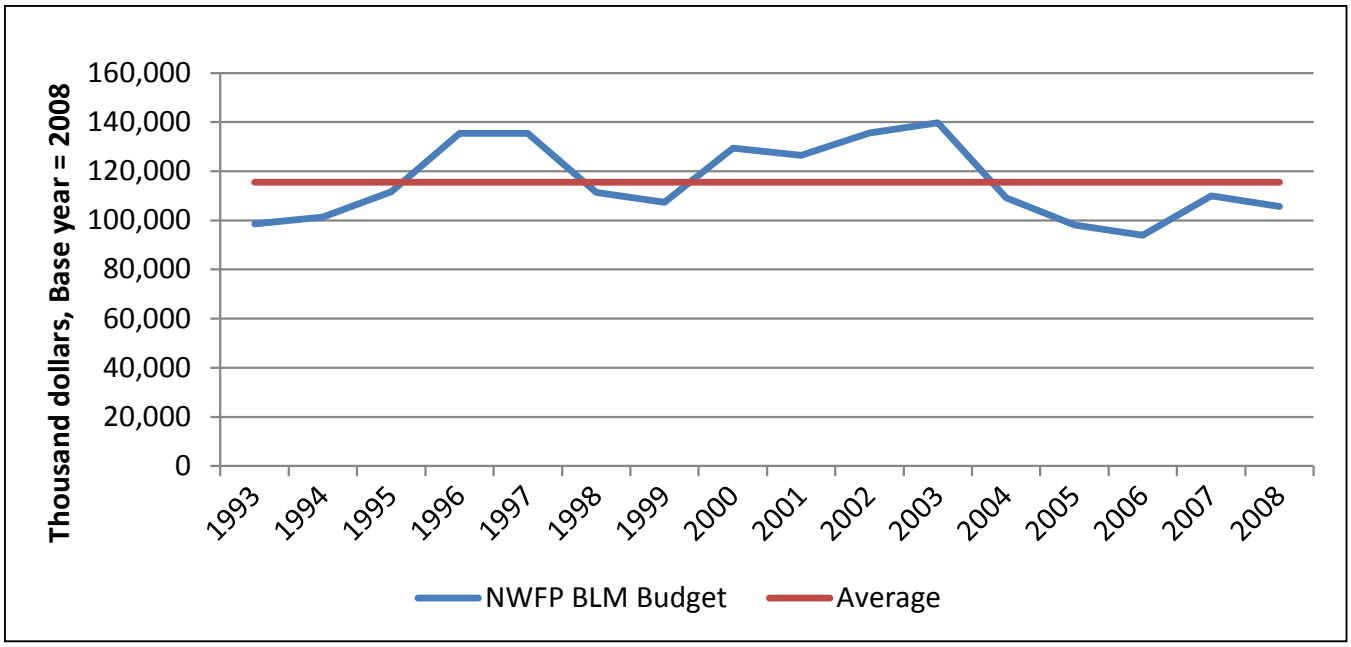


Figure 9-6: Total budget for all Oregon BLM districts in the NWFP area, 1993-2008

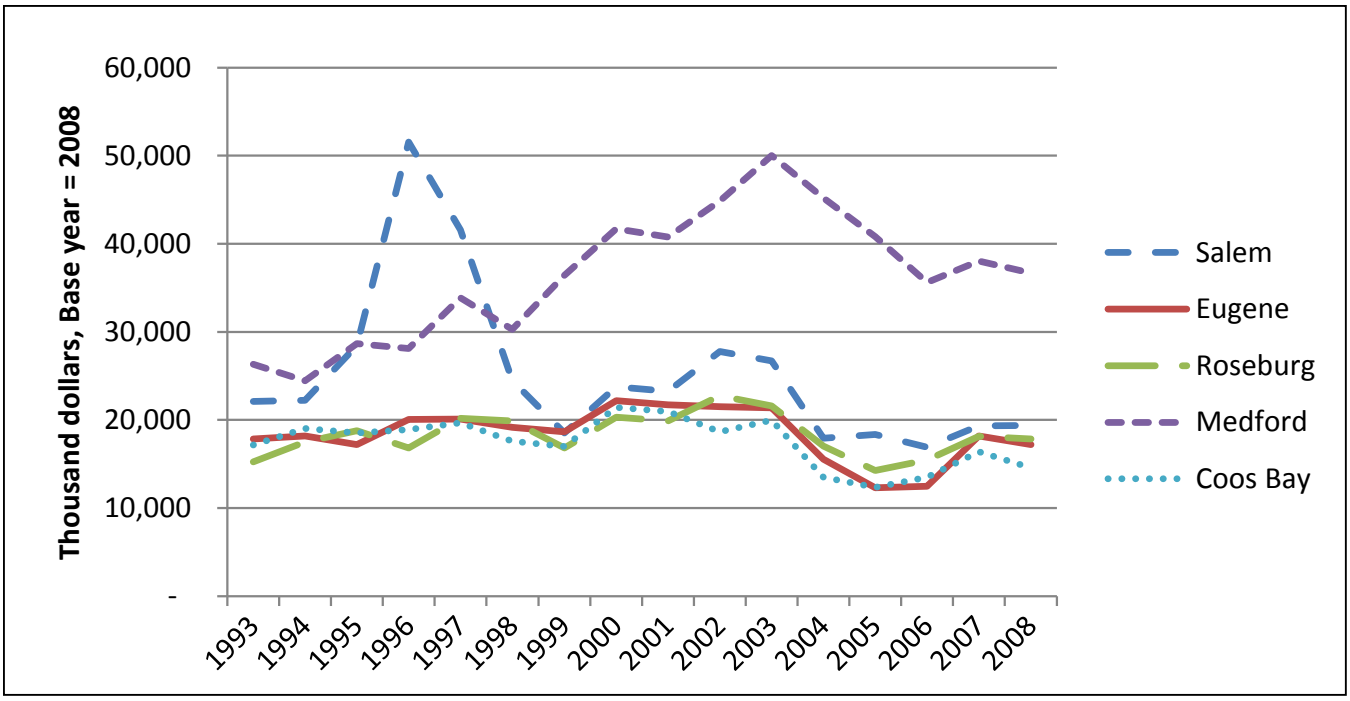


Figure 9-7: Budgets for Oregon BLM districts in the NWFP area, 1993-2008

observed in the mid-1990s. BLM budgets though variable did not exhibit a major downward trend until 2004 when budgets declined sharply. BLM staffing followed a similar pattern with FTEs fairly level until a sharp decline in 2004.

Agency staffing and budgets determine how effectively forests are managed and policies are implemented. The declines in both budgets and staffing affect the amount of resource management work that can be accomplished and the amount and quality of services such as recreation opportunities available on federal lands. The economic support to local businesses by agencies and employees has decreased. The reduction is especially important to rural communities where the contribution by the agencies and their employees is a major economic factor.

The number of local line officers shrank by roughly 30 percent for both agencies. The number of communities with Forest Service line officers also decreased by about 30 percent. In some cases, Forest Service offices still operate in the communities with employees living and working there, but without the line officer. Otherwise, offices have closed. BLM offices in the NWFP area are generally in larger cities, with several line officers at each office. Although some resource areas were consolidated or eliminated, there was no change in the number of communities with BLM line officers.

Chapter 10: Payments to County Governments

The federal lands managed by the Forest Service and BLM total approximately 22.1 million acres in the NWFP area.[13] Congress has long recognized the loss of tax revenue as compared to what would be received by local governments if the land were retained in private ownership. As compensation, Congress initiated the Twenty-five Percent Fund Act in 1908. The Act allocates 25 percent of revenue generated from timber sales or use of National Forest System land to the states for distribution to the counties. In 1937, Congress passed the Oregon and California Revested Railroad Lands Act (O & C Act). The O & C Act placed management jurisdiction of revested Oregon and California Railroad lands and Coos Bay Wagon Road (Wagon Road) lands under the Department of Interior. The O & C Act allocated 50 percent of timber receipts generated from revested lands to the counties.

The revenue sharing between federal and local governments based on the Twenty-five Percent Fund Act and the O & C Act resulted primarily from the sale of timber from public lands. Up to 1991, because the amount of payment is based on timber markets, and these markets rose and fell, federal revenue sharing was not a dependable source of funds for local governments. In the early 1990s, payments from the Twenty-five Percent Fund began a sharp decline as timber receipts from Forest Service timber sales fell dramatically. The decline in payments impacted rural communities in the West, particularly in the range of the northern spotted owl (Washington, Oregon, and northern California).

Recognizing the loss of timber revenue and the necessity to support county schools and infrastructure, Congress, in 1991, began making payments as stop-gap measures to mitigate the reduction in revenue to 48 counties in western Oregon, Washington, and northern California.[14] In 1993, Congress passed the Omnibus Budget Reconciliation Act of 1993 to provide more long-term alternative payments. The payments, known as the Spotted Owl Safety Net payments, began in 1994 at 85 percent of the average of payments made based on timber receipts from fiscal years 1986-1990, and then declined annually by three percent through 2003. In 2004 the payments would terminate.

In 2000, to increase support to timber-dependent counties as well as to other counties containing public land, Congress enacted the Secure Rural Schools and Community Self-Determination Act.[15] The Secure Rural Schools Act provided payments, which replaced Spotted Owl Safety Net payments. The size of the payment was set equal to the average three highest receipt years, by county, under the Twenty-five Percent Fund Act from 1986-1999. The Secure Rural Schools payments to counties associated with National Forest System lands primarily allocated funds to benefit public education and county road systems.

The Secure Rural Schools payments are also part of BLM revenue sharing associated with O & C and Wagon Road lands. Eighteen counties in western Oregon receive these payments. The funds are allocated to county general purposes.

With the Forest Service portion of the Secure Rural Schools Act, counties are allowed to set aside up to 15 to 20 percent of the full payment amount for use on projects, such as resources improvement projects on, or near, federal lands. Or, the counties can use the 15 to 20 percent of funds to support services including search, rescue, and emergency services on federal lands; community service work camps; easements for conservation or recreational purposes; forestry-related education activities; fire prevention; and county planning.

The last payment under the original Secure Rural Schools Act was planned for Fiscal Year 2006. An extension of the SRS Payments was signed into law in 2007 with the Iraq Accountability Appropriations Act. The next year, the Emergency Stabilization Act of 2008 was signed into law reauthorizing the Secure Rural Schools Act payments through 2011.

Another federal program designed to compensate local governments for the presence of tax-exempt federal lands

[13]NWFP Overview, http://www.reo.gov/general/aboutnwfp.htm, Accessed 9/9/2010.

[14]Congress also made payments, as part of the stop-gap measures, to Lake County, Oregon, which is not in the NWFP area.

[15]The following counties in the Northwest Forest Plan area do not receive SRS Act payments: Marin, Napa, Sonoma, Sutter, and Yolo in California, Clatsop, Columbia, Sherman, Washington in Oregon, and Adams, Benton, Franklin, Grant, Island, Kitsap, Pacific, San Juan, Wahkiakum in Washington.

within their jurisdictions is called Payments in Lieu of Taxes (PILT). PILT legislation was passed in 1976. Seventy-one of the seventy-two NWFP counties receive PILT payments.[16] Payments are tied to other federal revenue-sharing programs, including the Twenty-five Percent Fund, the O & C Act and Wagon Road. The size of PILT-based payments to local governments depends on the number of acres of federal land in the county,[17] the amount of non-PILT revenue-sharing payments received the previous year, and a payment "formula" involving population levels (USDI 2010).

Data Analysis

The primary sources of Forest Service Secure Rural Schools payment data are the annual Forest Service All Service Receipts reports (Forest Service 2010b). Forest Service data before 2004 are from the 10-year report (Charnley et al. 2006). The BLM Secure Rural Schools payment data are from the BLM Oregon State website providing official payments made to counties data (BLM 2009d). The PILT data source is the U.S. Department of the Interior payments in lieu of taxes website (USDI 2010).

Results

Figur 10-1 shows data in Forest Service payments under Secure Rural Schools from 2000 to 2011. The last two data points on the data line, 2010 and 2011, are projected payments. As the graph shows, payments peaked in 2006. The extensions to the Secure Rural Schools Act set in motion declines in the payments at a rate of approximately 10 percent annually. In 2011, the final year of the Act, a new formula will be used to calculate the payment

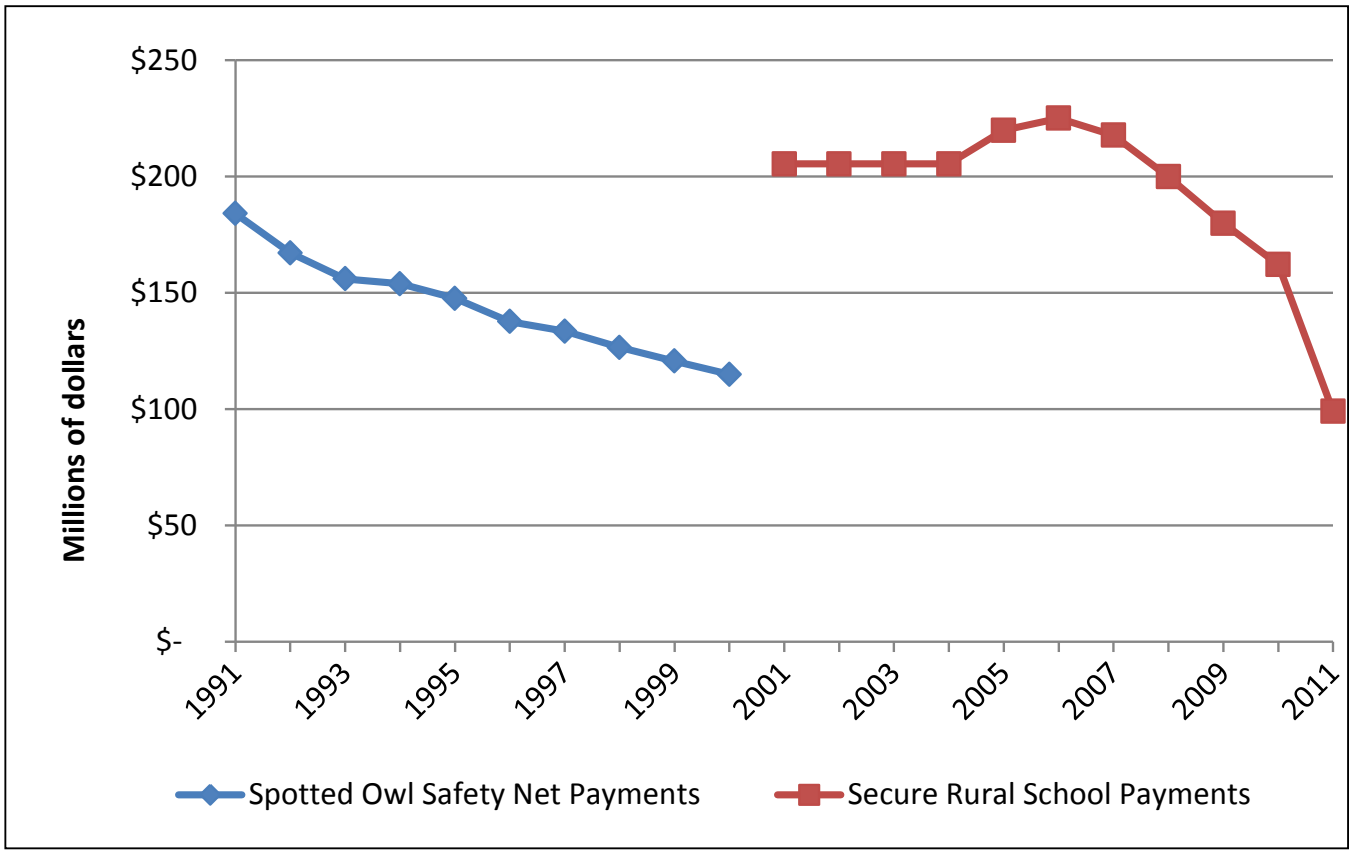


Figure 10-1: National Forest payments to counties in NWFP area

[16]Kitsap is the only county in the NWFP area that does not receive PILT payments.

[17]Federal lands are generally those administered by natural resource management agencies. Military lands are mostly excluded.

so that the rate will decline overall by 39 percent for the NWFP area from the levels received in 2010. There will also be large payment variations among counties primarily because a per capita personal income index is included in the formula giving less money to counties with high per capita income and more money to counties with low per capita incomes. For example in 2011, the payment to King County, WA will drop by about 80 percent and the payment to Okanogan County, WA will increase by 37 percent from the level of payments received in 2010. All Secure Rural School adjusted payments for the Forest Service and BLM are expected to stop after 2011.

Because Secure Rural Schools Act payments are scheduled to stop after 2011, it is important to know the revenue sharing amount without the Secure Rural Schools adjustment. Data for this comparison was estimated for 2007. In that year, Oregon and Washington counties associated with National Forest System lands in the NWFP area received a total of approximately $182 million in Secure Rural School payments. Without the Secure Rural Schools adjustment, the Oregon and Washington would have received approximately $8 million from Twenty-five Percent Fund payments. The difference between these two amounts is approximately $174 million. The Secure Rural Schools adjustment resulted in payments to counties over 20 times higher than under Twenty-five Percent Fund revenue sharing alone.

Figure 10-2 shows the data for the BLM's O & C Act and the Wagon Road payments which are also called Secure Rural Schools payments. Similar to the Forest Service payments, the BLM payments including the Secure Rural Schools adjustments peaked in 2006 and then declined by less than one percent by 2007. With the Secure Rural Schools extensions, payments began to decline annually by about 10 percent in 2008 and 2009.

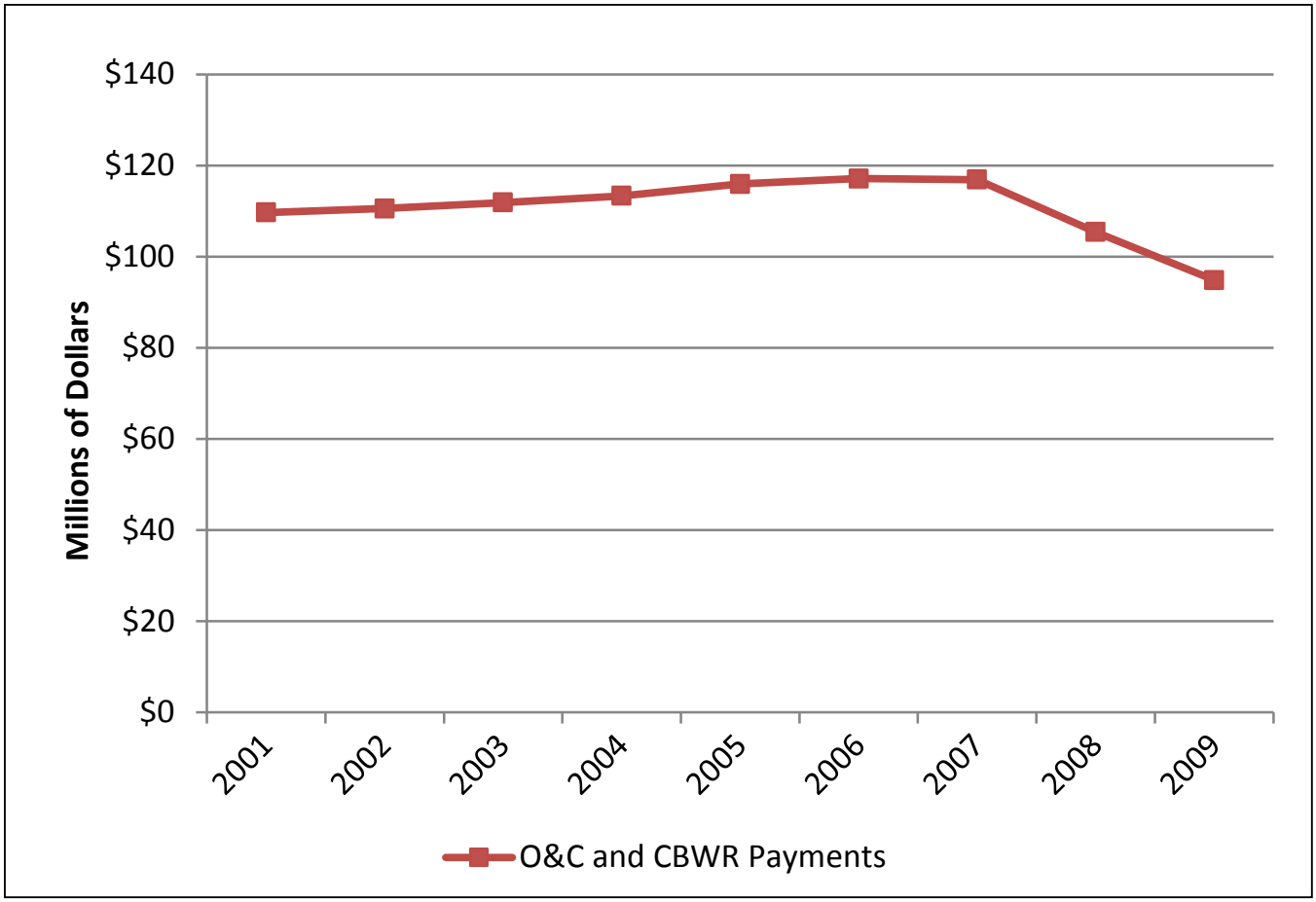


Figure 10-2: Oregon and California Railroad and Coos Bay Wagon Road Payments to counties in NWFP area

Figure 10-3 shows the data for PILT-based payments from 1996 to 2008. The graph shows a distinct decline in PILT payment in 2001 and marked increase in payments beginning in 2007. These changes in payments are inversely related to increases and decreases in the Secure Rural Schools Act and Twenty-five Percent Fund payments.

Discussion

The 48 counties in the NWFP area that qualify for Secure Rural Schools payments received more than $205 million annually from 2001 to 2004. In 2005, payments rose to $219 million. The next year, the payments peaked at $225 million. By 2009, payments had declined to less than $180 million. In the last year of the scheduled payments, 2011, the counties will receive less than $100 million. After the Secure Rural Schools payments sunset, the counties will receive payments under the Twenty-five Percent Fund. However, the Twenty-five Percent Fund payments, will be a small fraction of the money that was paid under the Secure Rural Schools Act.

As stated in the NWFP 10-year report, the initial payments to counties legislation generally mitigated the effects of declining timber receipts for the 48 counties covered by the legislation. The intent behind the Omnibus Budget Reconciliation Act of 1993 was to provide a transition to a lower rate of assistance though declining Spotted Owl Safety Net payments (Charnley et al. 2006). Figure 10-1 shows that the transition path downward was replaced by a higher rate of revenue support by the Secure Rural Schools Act. Before the Secure Rural Schools Act payments sunset in 2011, the rate of revenue support will decline to levels below what counties once received from Spotted Owl Safety Net payments.

The Omnibus Budget Reconciliation Act of 1993 and the Secure Rural Schools Act met their goals of replacing past dependence on timber harvest revenues and mitigated the loss of revenues associated with the declines in federal timber harvest in the region. It is still not known how these payments affected overall county financing. As stated in the 10-year report, a guaranteed amount would likely have a stabilizing effect. Because the Secure Rural Schools legislation is set to sunset again in 2011, the long-term stability of the payments is uncertain. Without new congressional action, counties in the NWFP area will need to address a short fall of several hundred million dollars.

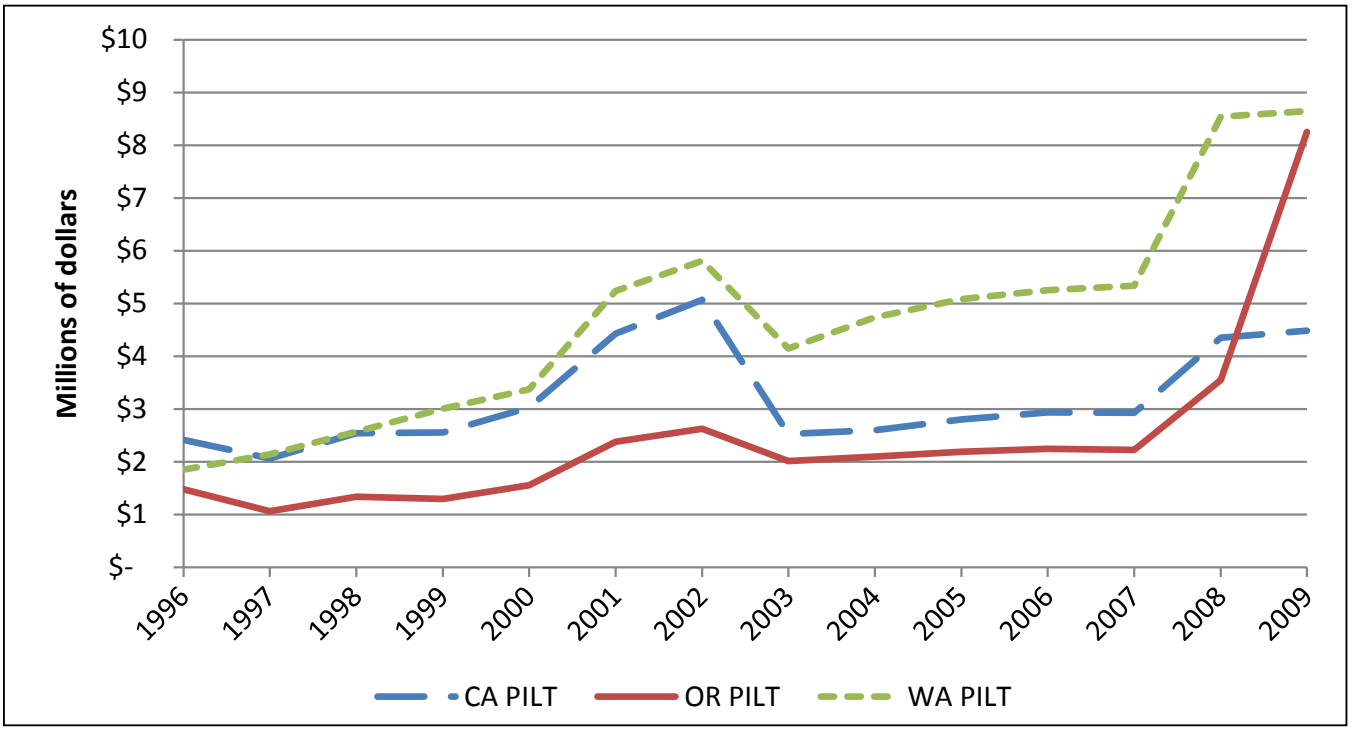


Figure 10-3: NWFP area payments in lieu of taxes

Chapter 11: Summary

Employment associated with Forest Service and BLM programs contribute to socioeconomic well-being in the NWFP area. Agency employment, and jobs supported by agency timber harvest and recreational activities are the largest components of these contributions. Between 2001 and 2007, overall agency employment declined, while agency timber harvest-related employment increased (fig. 11-1). Data show that recreation-related employment was substantial during the same period; however, no trend data are available for recreation use.

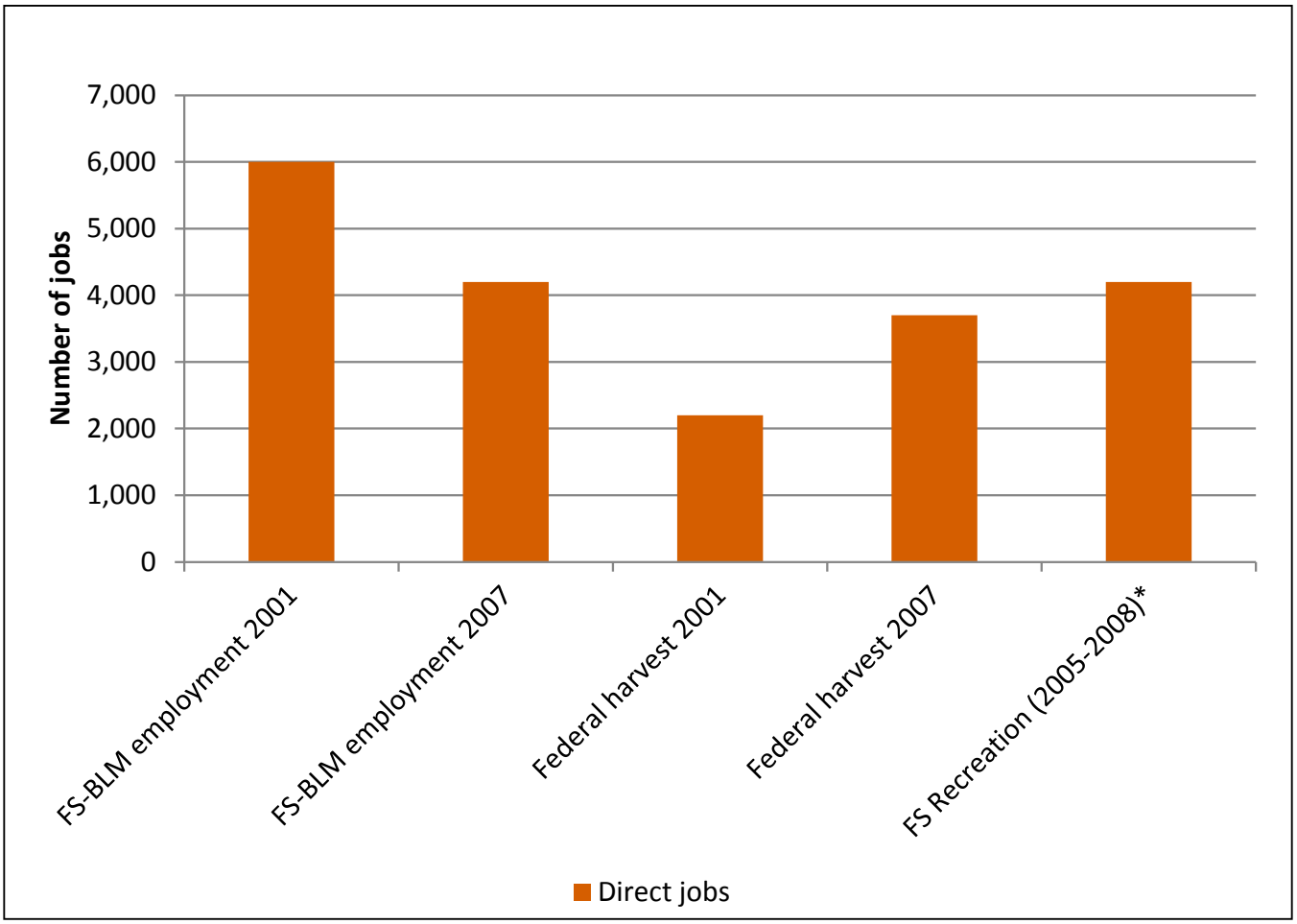
Timber harvest and related employment have been key issues in forest policy discussions since the early 1970s. Total employment in the wood products processing industries, including secondary wood manufacturing and logging, has a history of increasing and decreasing in the NWFP area. Between 2001 and 2007, total employment in the wood processing industries declined overall by nine percent (fig. 11-2). Timber employment is closely related to timber harvest. From 2001 to 2004, timber harvest levels from all ownerships rose. By 2007, timber harvest declined back to 2001 levels. This decline in harvest can be attributed mostly to reductions in timber harvest on nonfederal lands. On these ownerships, harvest decreased by 16 percent since 2004 compared to a one percent decline in timber harvest from federal lands.

Between 2001 and 2008, timber offered for sale on federal lands more than doubled, and timber harvest in 2008 was nearly double that of 2001 (fig. 11-3). In 2008, timber offered for sale was slightly over 75 percent of probable sale quantity (PSQ); timber harvest was slightly below 50 percent of PSQ. Between 2001 and 2007, the percentage of timber harvested on federal lands compared to total harvest on all ownerships increased from two to six percent.

Population size is often an indicator of economic diversity. Most people in the NWFP area live in counties that the U.S. Department of Labor describes as metropolitan. These counties contain core urban areas of 50,000 or more population. In the past decade, the population of counties that fall into the nonmetropolitan category has increased more slowly than those that fall into the metropolitan category (fig. 11-4).

Nonmetropolitan counties are less diverse economically and more strongly tied to the wood products industry. Most of the timber harvested in the NWFP area comes from nonmetropolitan counties. Although forest products manufacturing employment is about equally split between metropolitan and nonmetropolitan counties, it accounts for roughly 10 percent of total employment in nonmetropolitan counties and only one percent in metropolitan counties. The effects of changes in timber harvest and wood-products-related employment on well-being are likely more pronounced in nonmetropolitan counties.

A discussion of social and economic well-being is not complete without mention of the recent economic downturn and associated trends in unemployment. The trends in national and world economic conditions influence well-being in the NWFP area and may mask the socioeconomic effects of federal land management actions. In three states with land in the NWFP area, unemployment increased during the latter part of the first 10-year reporting period (fig. 11-5). Unemployment then decreased during next 5 years, the time period reviewed in this 15-year report. Looking toward the 20-year monitoring report, unemployment rates are changing. Since the end of the 15-year reporting period (2007), average unemployment rates in the three NWFP area states rose from about six percent to about 11 percent (fig. 11-5). The large unemployment increase will likely result in declining socioeconomic well-being in the NWFP area and affect the ability to interpret the socioeconomic effects of NWFP implementation in the 20-year report.



* Survey data were collected on National Forests during 2005-2008. No comparable data are available for the BLM.

Figure 11-1: Employment supported by agency programs in the NWFP area.

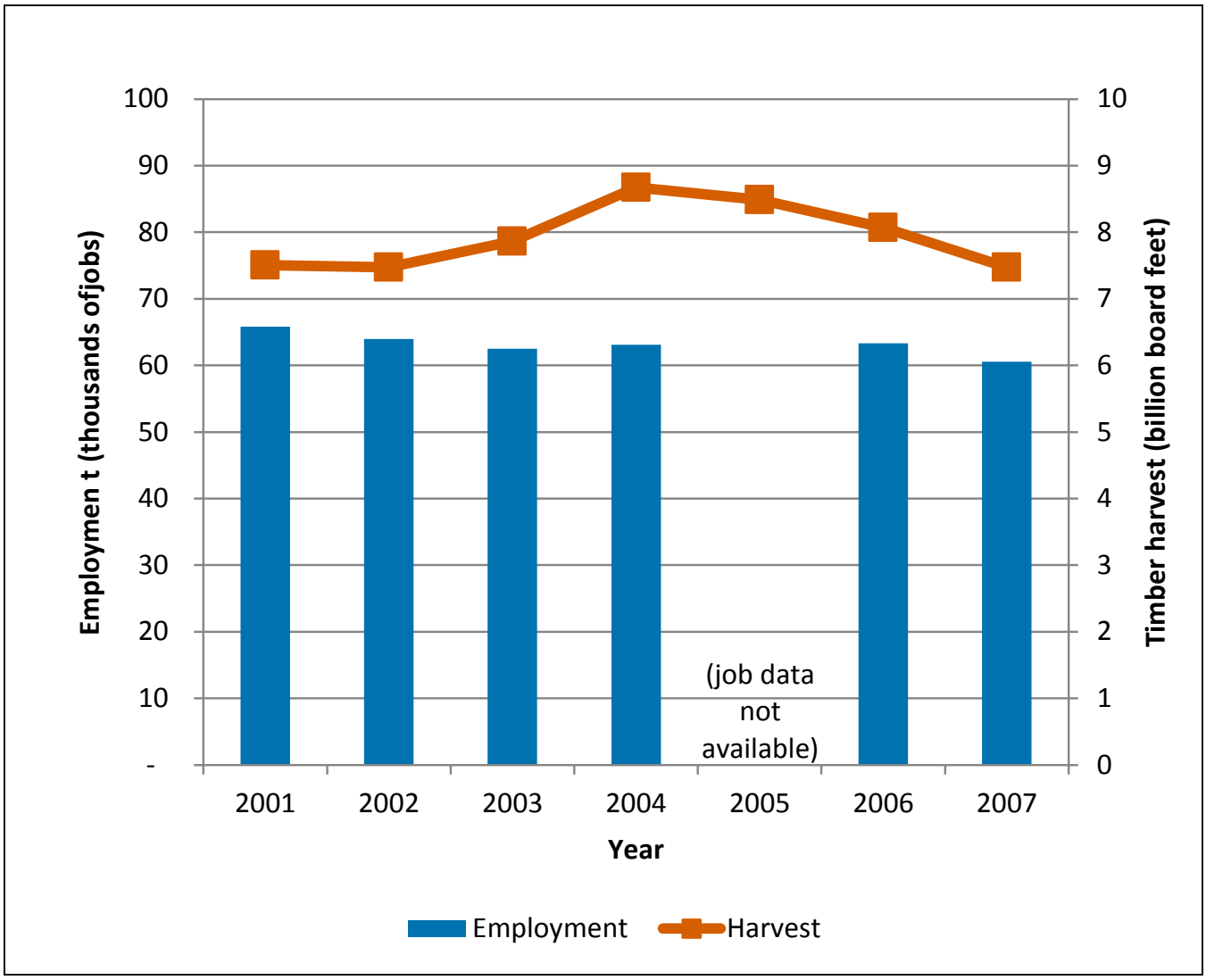


Figure 11-2: Timber-related employment and timber harvest on all ownerships in the NWFP area, 2001-2007

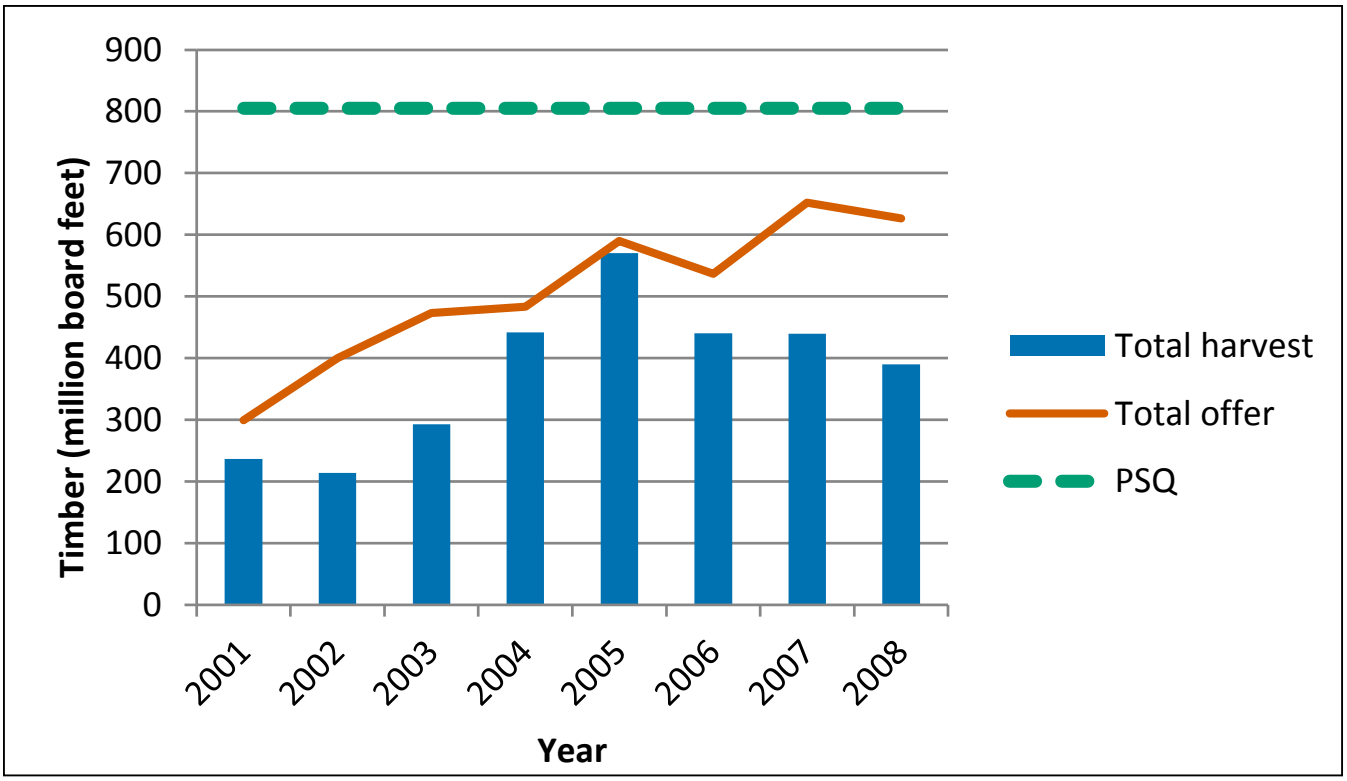


Figure 11-3: Total timber offered for sale, timber harvest and probable sale quantity (PSQ) on federal lands, 2001-2008

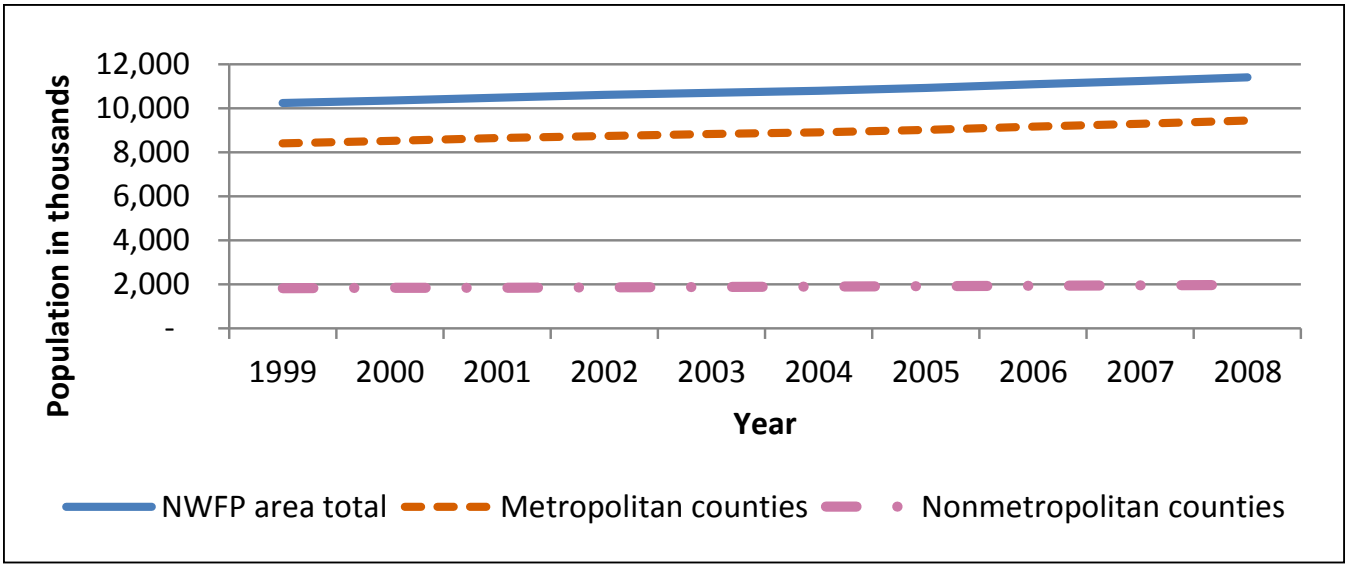


Figure 11-4: Population change in NWFP area counties, 1999-2008

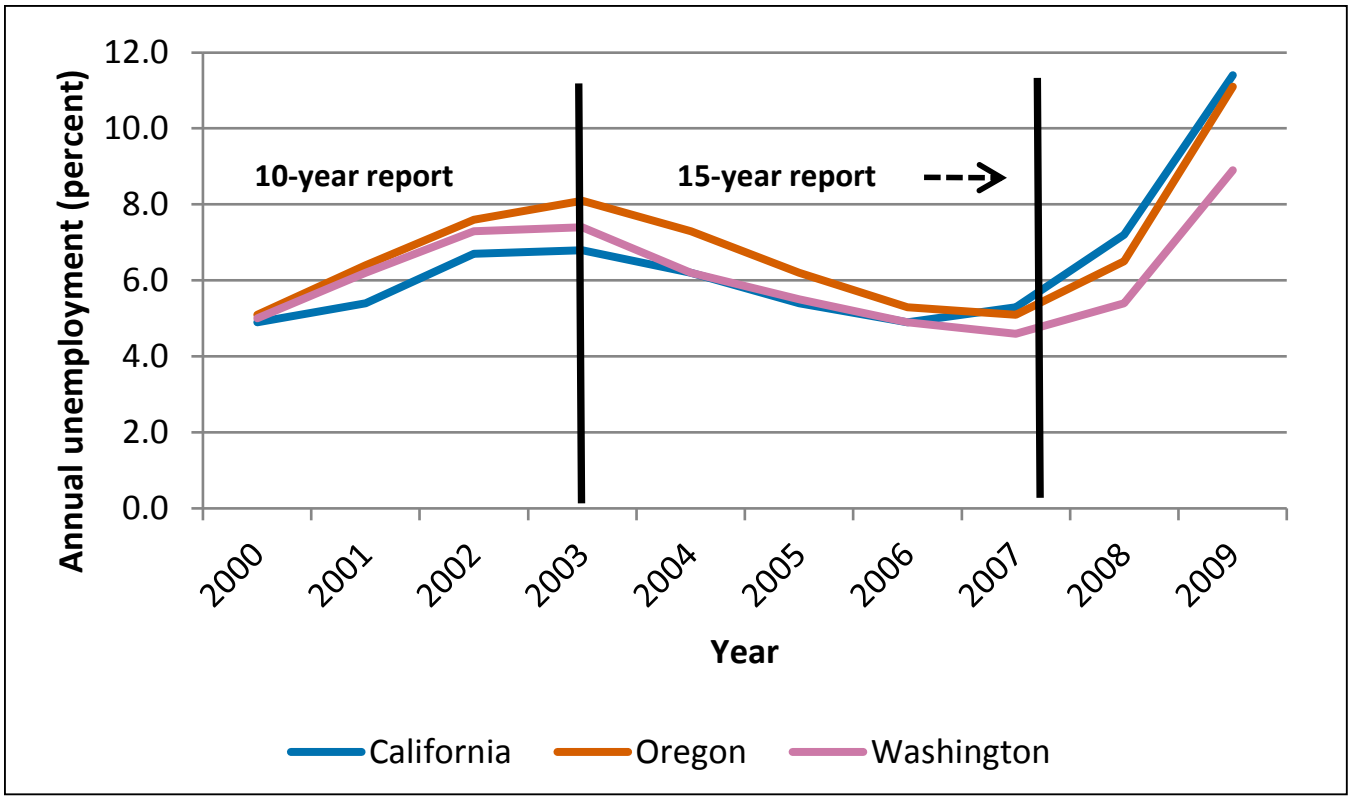


Figure 11-5: Unemployment in California, Oregon, and Washington (2000-2009)

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