## Forests, Farms \& People



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# Land Use Change on Non-Federal Land in Oregon 1974-2009 



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## CONTENTS

Key Findings .....  4
Introduction ..... 6
Approach .....  6
Land Use Status and Change on Private Land Between 1974 and 2009 ..... 11
Change in Private Development Rates and Patterns After 1984 ..... 16
Area Change in Private Land Use by Region ..... 18
Development on Private Land Remaining in Resource and Low-Density Residential Uses ..... 24
Non-Federal Land in Wildland Forest Use by Owner Class. ..... 32
Directing Growth with Comprehensive Land Use Planning ..... 34
Benchmarks ..... 40
Summary ..... 45
References ..... 45
Glossary ..... 46
Appendix - Detailed Information ..... 49

## KEY FINDINGS

- Ninety-eight percent of all non-Federal land and 98 percent of private land that was in forest, agricultural, and range land uses in Oregon in 1974 remained in these uses in 2009.
- There was a significant shift in land uses on private land toward more developed uses; between 1974 and 2009, 586,000 acres changed from forest, agricultural, and range uses to low-density residential or urban uses.
- On Oregon's private land that changed land use between 1974 and 2009, shifts from forest, agricultural, and range uses to low-density residential or urban uses accounted for 73 percent of all net change in uses. The next largest net change, 9 percent, was the conversion of 75,000 acres from wildland range use to intensive agricultural use in eastern Oregon. Also significant statewide was a 61,000 acre net shift of private land from lowdensity residential use to urban use.
- Private land in western Oregon developed faster than in eastern Oregon, apart from the Bend Area, between 1974 and 2009. High rates of land use change occurred on private land in the rapidly growing Bend and Portland Areas and in Josephine County, although the rate of increase in shifts to more developed uses slowed in these 3 areas as the study period progressed.
- Average annual rates of conversion of private land in forest, agricultural, and range uses to low-density residential and urban uses declined dramatically in Oregon, western Oregon, and eastern Oregon during the ten years after 1984 and remained low between 1994 and 2005 despite rapidly increasing population.
- Between 2005 and 2009 as the economy entered recession, average annual rates of conversion of private land in wildland forest and wildland range uses to more developed uses declined to rates that were one-half of those occurring between 2000 and 2005. The average annual rates of conversion of land in intensive agriculture use to more developed uses remained constant.
- On private land between 1974 and 2005, the change in total area, in percent, among all land uses that was attributed only to the shift in lowdensity residential use to urban use tripled. In the latest period, 2005-2009, this percentage declined but was still 29 percent higher than in the period between 1974 and 1984 before county-level land use plans were adopted.
- The rate at which private land shifted from resource and low-density residential land uses to urban use declined in the period between 2005 and 2009 from the 2000-2005 period. However, the rates at which private land shifted from resource land uses to low-density residential use between 2005 and 2009 remained similar to comparable rates in the previous periods that occurred after the implementation of county-level land use plans in the mid-1980s.
- The rate at which private land in forest, agricultural, and range land uses shifted to low-density residential or urban land uses is related to the distance between land in these resource uses and land in more developed uses. Throughout the 35 -year study period, the average distance between private land in resource land uses and private land in more developed land uses diminished.
- Change in the area of land in wildland forest use varied by owner class between 1974 and 2009. The area of land in wildland forest use owned by forest industry and by other public (non-Federal) owners remained nearly constant. However, land in wildland forest use owned by other private owners declined 6 percent in Oregon, 8 percent in western Oregon, and 3 percent in eastern Oregon.
- Conversion of private land in forest, agricultural, and range uses to more developed uses slowed dramatically after the 1974-1984 period. Nearly all private land designated as non-developable zones in county land use plans has remained in forest, agricultural, and range uses in the years following the implementation of these plans in the mid-1980s. Conversion of land in resource uses to low-density residential or urban uses has occurred mostly on other private (non-industrial private) land zoned for development in these plans.
- Private land in low-density residential land use shifted to urban land use at a high rate in the 2000-2005 period, but this rate of conversion declined in the 2005-2009 period as the economy entered recession.
- The average number of structures per square mile on private land in each resource land use class and on private land in low-density residential use increased in each study period between 1974 and 2009.
- The average number of structures per square mile on private land in all non-urban uses statewide increased at relatively high average annual rates between 1974 and 1984. These rates for non-urban uses slowed between 1984 and 2000.
- Large increases in the average rate at which structures were added annually occurred between 2000 and 2005 on land in wildland forest and wildland range uses but not on other non-urban uses. This rate on private land in wildland forest use, for the same period, was greater than that between 1974
and 1984 before comprehensive land use plans were adopted. With the start of the recession in 2007, these rates of increase in the number of structures on private land in wildland forest and wildland range uses declined in the 2005-2009 period to their lowest levels in the 35 -year study period.
- The 2010 target for the retention of non-Federal land in wildland forest use, which was set by Oregon Benchmarks and by the Oregon Board of Forestry's Indicator of Sustainable Forest Management, is being met. The target is that 97.4 percent or more of non-Federal land in wildland forest use in 1974 should still be in wildland forest use in 2010.
- The Oregon Benchmark for retention of private land in agricultural use does not have a 2010 target, but the 2005 target is still being achieved in 2010. Shifts of land from intensive agricultural use to low-density residential or urban uses have been minimal since 1984.




## INTRODUCTION

This report examines changes in land use on non-Federal land in Oregon between 1974 and 2009.

We collected consistent, sample-based data to address two key topics: 1) changes in the distribution of private and public non-Federal land by land use class and 2) development patterns on private land by land use class and by planned, county-level land use zone. Data collected for this report may also be used to analyze the effects that land use change has on forest resources and forest management practices on non-Federal ownerships in a later report. Highlighted in this report are trends in land use before and after the implementation of comprehensive land use plans in the mid-1980s. An Appendix provides detailed statistics in tabular formats for Oregon and by region and county.

The report updates 3 previous publications: Forests, Farms and People: Land Use Change on Non-Federal Land in Western Oregon 1973-2000 (Lettman and others 2002), Forests, Farms and People: Land Use Change on NonFederal Land in Eastern Oregon 1975-2001 (Lettman and others 2004), and Forests, Farms and People: Land Use Change on Non-Federal Land in Oregon 1974-2005 (Lettman and others 2009).

The Oregon Progress Board and the Oregon Board of Forestry requested this information and will use it to evaluate several Oregon Benchmarks and Indicators of Sustainable Forest Management.

## APPROACH

Using 2009 digital imagery with one-meter resolution, we updated previously collected land use information on a sample of 37,003 points distributed across nonFederal land in Oregon. We interpreted each sample point for land use class, number of structures, and nearest distances to adjacent land use classes. These attributes had been evaluated in earlier inventories with aerial imagery using the same sample points; for eastern

Oregon, the images were taken in 1975, 1986, 1994, 2001, 2005, and 2009 and for western Oregon, in 1973, 1982, 1994, 2000, 2005, and 2009. Definitions associated with these attributes are the same for 2009 and these earlier years. We also determined owner class and land use zone at each sample point.

A major strength of this report is that it is based on data that are sampled and defined consistently back to 1973.

Land use class: We interpreted the land use present at each sample point. Eight land use classes are recognized:

Wildland forest - A polygon of land in forest use of at least 640 acres. The polygon has fewer than 5 structures per 640 acres, and these structures are scattered generally across the polygon. Forest land occupies more than 80 -percent of the polygon and the remainder is agricultural or "other" land except for the structures. In eastern Oregon, the remainder can also include range land.

Wildland range - A polygon of undeveloped land in range use (non-forest or non-agricultural land) of at least 640 acres. The polygon has fewer than 5 structures per 640 acres, and these structures are scattered generally across the polygon. Forest land comprises less than 51 percent of the polygon, and agricultural land less than 20 percent. This class may include grassland, non-irrigated pastures or hayfields, marshes or sagebrush land. This land use classification is used only in eastern Oregon.

Intensive agriculture - A polygon of land in agricultural use of at least 640 acres. The polygon has fewer than 9 non-farm-related structures per 640 acres, and these structures are scattered generally across the polygon. Agricultural land occupies more than 80 -percent of the polygon. Agricultural land is land used for growing row crops, seed crops, orchards, vineyards, hay fields, nursery stock, Christmas trees, and for improved pasture and grazing land.

- Mixed forest or range - A polygon of land intermixed with forest, agricultural, and range uses. The polygon is of at least 640 acres and has fewer than 9 non-farm-related structures per 640 acres that are scattered generally across the polygon.

Mixed forest or range is divided into 2 land use classes: mixed forest/agriculture, in which forest land constitutes at least 50 percent of its non-agricultural area, and mixed range/agriculture in which range land constitutes more than 50 percent of its nonagricultural area. The mixed rangelagriculture land use clasification is used only in eastern Oregon.

Figure 2


Over 37,000 sample points were evaluated from six dates of aerial photography and were assigned into one of eight land uses (mixed range/agriculture not shown above). These uses, interpreted from the imagery, were defined by general land use, size, and the degree of development.

Low-density residential - A polygon of land of any size in rural residential or low-density commercial uses. The polygon has 9 or more structures per 640 acres, and these structures are scattered generally across the polygon. The dominant land uses within the polygon are residential or low-density commercial. Examples are rural subdivisions not attached to a town or city and forests or agricultural land containing many structures that are not used for forest or farm management.

Urban - A polygon of land of at least 40 acres that is comprised of commercial, service, or subdivided residential uses with city street patterns and closelyspaced buildings. If less than 40 acres, the polygon is classified as low-density residential use. Examples are city centers, industrial areas, patterns of dense residential housing, and subdivisions attached to a city.

Other - A polygon of naturally non-vegetated land of at least 640 acres. Examples include beaches and dunes, lava fields, mountaintop rock and snow, and large bodies of water including reservoirs or lakes.

Figure 1 displays these land uses spatially across Oregon after aggregation into 5 generalized classes: 1 ) wildland forest use, 2) wildland range use, 3 ) intensive agriculture, mixed forest/agriculture, and mixed range/agriculture uses, 4) urban and low-density residential uses, and 5) other uses. Figure 2 shows examples of these classes.

## Figure 3



Number of structures is a count of the number of individual buildings or clusters of buildings present within 80 - and 640 -acre circles centered on each sample point. The attribute is a measure of development which provides a more precise assessment of change toward urbanization than is possible merely by examining area changes among the 8 land use classes. We did not collect number of structures on sample points classified as urban use.

Nearest distances to adjacent land uses are the nearest distances between a sample point and the boundaries of all adjacent land uses within 1 mile of the point. The attribute was interpreted on all sample points on non-Federal land. This attribute enabled us to understand how proximity to more developed areas affects rates and patterns of land use change.

Owner class is a broad classification of ownership. It was determined for all sample points on non-Federal land. Three owner classes were recognized: forest industry, other private, and other public (State, county, local public, and Native American owners). Area change among non-Federal (and Federal) owner classes is not estimated in this report. This information was derived from a 1986 forest inventory in eastern Oregon and a 1997 forest inventory in western Oregon; both inventories were of non-Federal land.

Land use zone is the zoning present at a sample point. It was obtained from county and municipal maps of comprehensive land use plans compiled by the Oregon Department of Land Conservation and Development. Zone was determined for all sample points on non-Federal land.

To examine how actual land use and change in land use correlate with the zones specified in county comprehensive plans, we divided non-Federal land into two broad categories based on zoning. Developable land is designated as rural residential, urban, or other developable zones in county land use plans. Non-developable land is area zoned for forest, farm, or range uses. We compared area changes among our 8 land use classes (examples: wildland forest, intensive agriculture, and low-density residential land uses) with these

## Figure 4



Table 1 - Area of private land in Oregon, by land use class and year a

| Land use class | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Thousand acres |  |  |  |  |
| Wildland forest | 9,210 | 9,098 | 9,052 | 9,041 | 9,025 | 9,018 |
| Wildland range $^{\text {b }}$ | 8,281 | 8,184 | 8,138 | 8,111 | 8,096 | 8,090 |
| Mixed forest/ agriculture | 889 | 841 | 818 | 817 | 810 | 803 |
| Mixed range/ agriculture ${ }^{\text {b }}$ | 625 | 624 | 626 | 638 | 641 | 641 |
| Intensive agriculture | 5,588 | 5,512 | 5,499 | 5,476 | 5,466 | 5,456 |
| Low-density residential | 725 | 989 | 1,078 | 1,103 | 1,121 | 1,144 |
| Urban | 315 | 385 | 421 | 449 | 474 | 483 |
| Other | 29 | 29 | 29 | 29 | 29 | 29 |
| Total area | $\mathbf{2 5 , 6 6 3}$ | $\mathbf{2 5 , 6 6 3}$ | $\mathbf{2 5 , 6 6 3}$ | $\mathbf{2 5 , 6 6 3}$ | $\mathbf{2 5 , 6 6 3}$ | $\mathbf{2 5 , 6 6 3}$ |

a Does not include land that shifted to or from private ownership between 1974 and 2009.
${ }^{\text {b }}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

Table 2 - Area of private land in Oregon, by land use class and year a

| Land use class | Percent of all privately-owned land |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
| Wildland forest | $35.9 \%$ | $35.5 \%$ | $35.3 \%$ | $35.2 \%$ | $35.2 \%$ | $35.1 \%$ |
| Wildland range $^{\text {b }}$ | $32.3 \%$ | $31.9 \%$ | $31.7 \%$ | $31.6 \%$ | $31.5 \%$ | $31.5 \%$ |
| Mixed forest/agriculture $^{\text {Mixed range/agriculture }}$ b | $3.5 \%$ | $3.3 \%$ | $3.2 \%$ | $3.2 \%$ | $3.2 \%$ | $3.1 \%$ |
| Intensive agriculture | $2.4 \%$ | $2.4 \%$ | $2.4 \%$ | $2.5 \%$ | $2.5 \%$ | $2.5 \%$ |
| Low-density residential | $21.8 \%$ | $21.5 \%$ | $21.4 \%$ | $21.3 \%$ | $21.3 \%$ | $21.3 \%$ |
| Urban | $2.8 \%$ | $3.9 \%$ | $4.2 \%$ | $4.3 \%$ | $4.4 \%$ | $4.5 \%$ |
| Other | $1.2 \%$ | $1.5 \%$ | $1.6 \%$ | $1.7 \%$ | $1.8 \%$ | $1.9 \%$ |
|  | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ |

a Does not include land that shifted to or from private ownership between 1974 and 2009.
${ }^{\text {b }}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

Table 3 - Average annual and total percent change in area, on private land in Oregon, by land use class and period a

|  | Average annual percent change in area |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | \(\left.\begin{array}{c}Change in <br>

percent\end{array}\right]\)

[^0]developable and non-developable zones defined in the county comprehensive plans to analyze the effectiveness of comprehensive planning over time.

We partitioned Oregon into geographic regions based on demographic, ecological, and economic characteristics, recognizing 5 regions in western Oregon (Portland Area, North Willamette Valley, South Willamette Valley, North Coast, and Southwest Oregon) and 3 regions in eastern Oregon, (the Bend Area, Klamath County outside of the Bend Area, and the remainder of eastern Oregon); these regions are displayed in Figure 3. The regions are delineated by county boundaries, except for the Bend Area.

We used nominal years in this report; for example, 1975 data from eastern Oregon is combined with 1973 data from western Oregon and is dated nominally to 1974 . Five nominal periods are defined. The first period, 1974 to 1984, covers the decade before land use planning was fully adopted; the second period, 1984 to 1994 , spans the decade immediately after land use planning was implemented; the third period, 1994 to 2000 , was an era of relatively rapid population and economic growth; the fourth period, 2000 to 2005, encompasses years of rapid economic expansion just before passage of Ballot Measures 37 and 49, which altered some of the policies and processes governing land use planning; and the most recent period, 2005 to 2009, was an interval in which residential and nonresidential development plummeted after the economy entered recession in 2007.

## LAND USE STATUS AND CHANGE ON PRIVATE LAND BETWEEN 1974 AND 2009

Non-Federal land is owned by forest industry, other private, and other public owners. Forest industry and other private owners account for 89 percent of nonFederal land, and virtually all land use change between 1974 and 2009 occurred on this private land. (See the Appendix for detailed statistics about land use and land use change on land owned by other public owners).

The area of private land in low-density residential and urban uses increased statewide between 1974 and 2009 (Tables 1, 2, and 3, and Figure 4). This increase of 586,000 acres came from the conversion of land from wildland forest, wildland range, and agricultural land uses to these more developed uses. However, in 2009, 94 percent of all private land still remained in forest, agricultural, or range uses. And, the percent of the area

of private land in low-density residential and urban uses in Oregon has increased little since 1994 (Table 4).

On private land in Oregon that changed land use during the 35 -year study period, shifts from forest, agricultural, and range uses to low-density residential or urban uses accounted for 73 percent of all net change in uses. The next largest net change in land use, 9 percent of all net change in uses, was a 75,000 acre shift from land in wildland range use to agricultural use. Another notable change in private land uses between 1974 and 2009 was a 61,000 -acre net shift from low-density residential use to urban use. Statewide, the largest periodic change in area of land in a forest, range, or farm use on private land was the loss of 141,000 acres from intensive agriculture use between 1974 and 1984, and of this loss, 100,000 acres shifted to low-density residential use.

The largest declines in area, by land use, on private land between 1974 and 2009 were approximately 190,000 acre reductions each in wildland forest and in wildland range use and the largest gain in area was a 418,000 acre increase in low-density residential use. Measured by percent between 1974 and 2009, a 10 percent decline in mixed forest/agriculture use-an 86,000 acre
decrease- from Oregon's private land, was the largest loss from any one land use. The largest increases on private land, in percent, were a 58 percent gain in land in low-density residential use-a 418,000 acre increase -and a 53 percent increase in land in urban use, a 168,000 acre increase.

Almost the entire decline in the area of private land in resource land uses during the 35 -year study period was due to shifts from land in resource uses to low-density residential use and from land in intensive agricultural use to urban use (Figure 5). The largest area of resource land that shifted to low-density residential use came from land in wildland forest use. A small amount of private land in wildland forest, wildland range, mixed
forest/agricultural, and mixed range/agricultural uses changed to urban use.

Rates of conversion of private resource land to more developed land uses declined through the 35 -year study period. The percentage of total land use change in Oregon attributed to changes from resource land uses to developed uses also declined from 1974 to 2005 before rebounding in the 2005-2009 period (Figure 6). With the recession which began in 2007, the percentage of total land use change in Oregon attributed to conversion of land in low-density residential use to land in urban use declined (Figure 7) and the percentage of development of resource land into low-density residential uses increased.

Table 4a - The area of private land in the low-density residential land use class, by region and year

| Region | Low-density residential land use class |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | Change in area, 1974 to 2009 |
|  | The amount of privately-owned land classified "low-density residential use" |  |  |  |  |  |  |
|  | Percent |  |  |  |  |  |  |
| Oregon | 3\% | 4\% | 4\% | 4\% | 4\% | 4\% | 58\% |
| Bend Area | 10\% | 14\% | 17\% | 18\% | 18\% | 19\% | 97\% |
| Portland Area | 9\% | 14\% | 14\% | 14\% | 15\% | 15\% | 55\% |
| Washington County | 3\% | 4\% | 5\% | 6\% | 5\% | 5\% | 100\% |
| Clackamas County | 14\% | 21\% | 21\% | 21\% | 21\% | 22\% | 55\% |
| Multnomah County | 10\% | 12\% | 13\% | 13\% | 12\% | 12\% | 20\% |
| Deschutes County | 17\% | 26\% | 30\% | 31\% | 31\% | 31\% | 79\% |

Table 4b - The area of private land in the urban land use class, by region and year

| Region | Urban land use class |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ | Change in <br> area, 1974 <br> to 2009 |  |  |
|  | The amount of privately-owned land classified "urban use" |  |  |  |  |  |  |  | Percent |
| Oregon | $1 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $53 \%$ |  |  |
| Bend Area | $1 \%$ | $2 \%$ | $3 \%$ | $3 \%$ | $4 \%$ | $4 \%$ | $159 \%$ |  |  |
| Portland Area | $10 \%$ | $12 \%$ | $14 \%$ | $15 \%$ | $15 \%$ | $16 \%$ | $56 \%$ |  |  |
| Washington County | $8 \%$ | $11 \%$ | $14 \%$ | $16 \%$ | $16 \%$ | $17 \%$ | $97 \%$ |  |  |
| Clackamas County | $5 \%$ | $6 \%$ | $7 \%$ | $7 \%$ | $8 \%$ | $8 \%$ | $67 \%$ |  |  |
| Multnomah County | $36 \%$ | $39 \%$ | $40 \%$ | $43 \%$ | $44 \%$ | $44 \%$ | $23 \%$ |  |  |
| Deschutes County | $2 \%$ | $3 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $7 \%$ | $233 \%$ |  |  |



Throughout the 35-year study period, land in resource uses closest to low-density residential use was much more likely to be converted to low-density residential or urban uses than was land in these uses more distant from land in low-density residential use (Figure 8). For example, private land in forest and agricultural uses that was less than one-fourth of a mile from lowdensity residential use was 25 times more likely to be developed than land farther than 1 mile away between 1974 and 2009.

Overall, private land in intensive agriculture and mixed agricultural uses is closer to more developed uses than is land in wildland forest or wildland range uses (Table 5). Being closer to urban and low-density residential areas, conversion of land in intensive agriculture and mixed forest/agricultural uses to more developed uses has outpaced the conversion of land in wildland forest or wildland range uses to more developed uses (Table 6). Private land in low-density residential and urban land uses has spread closer to a larger percentage of the land in resource uses during the 35 -year study period (Figure 9).

Table 5 - Area and percent of private forest, farm, and range land in Oregon within 1 mile of more developed land, 2009

| Resource land use class | Area within $\mathbf{1}$ mile of a more developed <br> land use class |  |
| :--- | :---: | :---: |
|  | Thousand acres | Percent |
| Wildland forest | 1,890 | $21 \%$ |
| Wildland range | 441 | $5 \%$ |
| Intensive agricultural <br> Mixed forest/agricultural and <br> mixed range/agricultural 1,725 | $32 \%$ |  |

Figure 5 - Area of private land in Oregon that changed from resource land uses to developed land uses between 1974 and 2009 a

${ }^{a}$ Resource land use classes include wildland forest, wildland range (eastern Oregon), mixed forest/agriculture, mixed range/agriculture (eastern Oregon), and intensive agriculture land use classes. Developed land use classes include low-density residential and urban land use classes.

Figure 6 - Percentage of total area change on private land in Oregon attributed to changes from resource land uses to developed land uses ${ }^{\text {a }}$


[^1]Figure 7 - Percentage of total area change on private land in Oregon attributed to changes from low-density residential land use to urban land use


Figure 8 - Average annual area of private land in Oregon changing from resource land uses to developed land uses, by distance to nearest low-density residential land use and period a


[^2]

## CHANGE IN PRIVATE DEVELOPMENT RATES AND PATTERNS AFTER 1984

Average annual rates of change in land use on private land statewide declined after 1984 (Table 6). The greatest average annual rates of change from resource land uses to more developed uses, mostly private land shifting from resource land uses to low-density residential use, occurred in the decade prior to 1984 before the implementation of comprehensive county land use plans.

Between 1984 and 1994, these average annual rates dropped precipitously; in this period, the greatest declines in these conversions to more developed uses, in percent, occurred on land in intensive agriculture and mixed forest/agriculture uses which are often located near land in low-density residential and urban uses. Between 1994 and 2005 despite greater rates of growth in population and personal income, these rates of loss of land in forest, agricultural, and range uses to more developed uses remained well below the rates that occurred prior to 1984 (Figure 10). With the start of the economic recession in 2007, the average annual
conversion of land in resource uses to more developed uses declined again to very small losses. Overall, the area and the percentage of private land within each resource land use class remained relatively stable since 1984 in Oregon (Table 2).

Accompanying these declining annual rates of development after 1984 was a change in the percentages of the more developed uses to which land in intensive agricultural use was converted (Table 6). Between 1974 and 1984, 76 percent of land in intensive agricultural use that changed to more developed uses changed to lowdensity residential use and 24 percent was converted to urban use. In the 3 periods between 1984 and 2005, the percentage converted to low-density residential use declined from the preceding period. In the latest period, 2005-2009, the percentage of conversion of intensive agricultural land to low-density residential use was 57 percent and the percentage shifting to urban use was 43 percent.

Also after 1984, the percentage of total private land use change attributed to shifts of land from forest, agricultural, and range uses to urban and low-density

Table 6 - Change in the area of private resource land use classes in Oregon, by period abc

| Resource land use class |  | 1974-1984 | 1984-1994 | 1994-2000 | 2000-2005 | 2005-2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wildland forest: |  |  |  |  |  |  |
| Change to other land uses |  | 114,700 acres | 48,200 acres | 11,800 acres | 15,800 acres | 7,400 acres |
| Average annual change to other land uses |  | 11,700 acres | 4,300 acres | 1,900 acres | 3,300 acres | 1,900 acres |
| Percent of wildland forest area that changed to: |  |  |  |  |  |  |
| Wildland range |  | 0\% | 0\% | 0\% | 0\% | 0\% |
| Intensive agriculture |  | 4\% | 8\% | 4\% | 3\% | 0\% |
| Mixed forest or range/agriculture |  | 13\% | 16\% | 0\% | 9\% | 6\% |
| Low-density residential |  | 82\% | 72\% | 80\% | 85\% | 94\% |
| Urban |  | 2\% | 4\% | 16\% | 3\% | 0\% |
|  | Total | 100\% | 100\% | 100\% | 100\% | 100\% |
| Wildland range: |  |  |  |  |  |  |
| Change to other land uses |  | 97,700 acres | 47,600 acres | 26,600 acres | 15,200 acres | 5,600 acres |
| Average annual change to other land uses |  | 9,900 acres | 5,700 acres | 3,700 acres | 3,700 acres | 1,400 acres |
| Percent of wildland range that changed to: |  |  |  |  |  |  |
| Wildland forest |  | 0\% | 0\% | 0\% | 0\% | 0\% |
| Intensive agriculture |  | 54\% | 31\% | 0\% | 56\% | 0\% |
| Mixed forest or range/agriculture |  | 7\% | 5\% | 46\% | 17\% | 0\% |
| Low-density residential |  | 35\% | 63\% | 52\% | 27\% | 92\% |
| Urban |  | 4\% | 1\% | 2\% | 0\% | 8\% |
|  | Total | 100\% | 100\% | 100\% | 100\% | 100\% |

## Intensive agriculture:

| Change to other land uses | 141,200 acres | 32,900 acres | 24,100 acres | 19,500 acres | 9,700 acres |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average annual change to other land uses | 12,300 acres | 3,800 acres | 3,600 acres | 4,300 acres | 2,500 acres |
| Percent of intensive agriculture that changed to: |  |  |  |  |  |
| Wildland forest | 2\% | 1\% | 0\% | 0\% | 0\% |
| Wildland range | 0\% | 0\% | 0\% | 0\% | 0\% |
| Mixed forest or range/agriculture | 5\% | 3\% | 0\% | 0\% | 0\% |
| Low-density residential | 71\% | 59\% | 37\% | 50\% | 57\% |
| Urban | 22\% | 37\% | 63\% | 50\% | 43\% |
| Total | 100\% | 100\% | 100\% | 100\% | 100\% |

Mixed forest or range/agriculture:

| Change to other uses | 77,900 acres | 31,500 acres | 1,900 acres | 7,400 acres | 8,300 acres |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average annual change to other land uses | 8,000 acres | 2,700 acres | 300 acres | 1,500 acres | 2,100 acres |
| Percent of mixed forest or range/agriculture that changed to: |  |  |  |  |  |
| Wildland forest | 1\% | 6\% | 0\% | 0\% | 0\% |
| Wildland range | 1\% | 4\% | 0\% | 0\% | 0\% |
| Intensive agriculture | 10\% | 4\% | 0\% | 6\% | 0\% |
| Low-density residential | 86\% | 69\% | 100\% | 87\% | 94\% |
| Urban | 3\% | 16\% | 0\% | 6\% | 6\% |
| Total | 100\% | 100\% | 100\% | 100\% | 100\% |

[^3]residential uses decreased steadily until the 2005-2009 period. The percentage of total land use change attributed to the development of land in resource land uses dropped from 92 percent in the 1974-1984 period to 88 percent in the 1984-1994 period, and to 84 percent between 1994 and 2000. This decline continued in 2000-2005 period with 75 percent of all change in land uses coming from the conversion of land in resource land uses to urban and low-density residential uses. The percentage of private land use change attributable to development of resource land increased in the latest period, 2005-2009, to 89 percent, but was still lower than in the 1974-1984 period (Figure 6).

Change in land use on private land increasingly has resulted in the loss of land in low-density residential use to urban use (Figure 7). Between 1974 and 2005, the percentage of total private area change that shifted from low-density residential use to urban use tripled. In the latest period, 2005-2009, this percentage of private land changing from low-density residential use to urban use declined but was still 29 percent higher than occurred between 1974 and 1984, the period just prior to the implementation of county-level land use plans.

The average annual rate at which private land shifted from resource and low-density residential uses to urban use declined in the 2005-2009 period relative to the 2000-2005 period; this was due primarily to a 50 percent decline in the average annual rate of land in intensive agriculture use shifting to urban use. However, the average annual rate at which private land shifted from resource land uses to low-density residential use remained similar in these two periods.


## AREA CHANGE IN PRIVATE LAND USE BY REGION

Private land generally has developed faster in western Oregon than in eastern Oregon, apart from the Bend Area. High rates of land use change occurred on private land in the rapidly growing Bend and Portland Areas and in Josephine County (Figure 4), although the rate of conversion of land in resource uses to more developed uses generally slowed over the study period throughout Oregon (Figure 10).

Key findings are: 1) average annual rates of conversion of private land in resource land uses to low-density residential and urban uses declined for Oregon, western Oregon, and eastern Oregon after 1984 (Figures 11, 12, and 13); and 2) western Oregon lost 170,600 acres of private land in intensive agricultural land use ( -9 percent) between 1974 and 2009, but eastern Oregon, in the same period, gained 38,000 acres ( +1 percent), mostly from land formerly in wildland range use.

## Area change in western Oregon

Between 1974 and 2009, the greatest rates of change in the conversion of private land in resource land uses to low-density residential and urban uses occurred in the Portland Area, followed by the North Willamette Valley region, and then by the Southwest region (Table 7). The Portland Area lost 13 percent of its land in resource land uses to developed uses. Josephine County, with 67 percent of its land in Federal ownership, had a high rate of conversion of private land to developed uses; 14 percent of the County's 237,000 acres of private land in forest and agricultural uses in 1974 was converted to low-density residential or urban uses by 2009, and most of this change occurred between 1974 and 1984. The North Coast region had the lowest rates of conversion of private land from resource land uses.

## Area change in eastern Oregon

On private land in eastern Oregon, excluding the Bend Area and Klamath County, the rates of conversion of land from resource land uses to more developed uses were modest between 1974 and 2009 and were lower than comparable rates in western Oregon. In eastern Oregon outside of the Bend Area and Klamath County, the area of private land in low-density residential use increased 24 percent and land in urban use increased 26 percent (Tables 7 and 8), but the acreage converted was very small during the study period.

Between 1974 and 2009, the Bend Area lost 13 percent of its land in resource land uses to more developed uses. During this period, this region led the state in the percentage loss of private land in mixed forest/agricultural use ( -42 percent), wildland range use ( -16 percent), and wildland forest use ( -7 percent) (Table 7 ). Approximately 19 percent of all private land in Oregon shifting from these resource land uses to low-density residential or urban uses occurred in the Bend Area, where the area of private land in low-density residential and urban uses increased 97 percent and 159 percent respectively between 1974 and 2009. However, after 2000, the conversion of private land from forest, agricultural, and range uses to low-density residential use in the Bend Area slowed to about 1,000 acres per year.

## Selected county-level area changes

The average annual rate of conversion of private land from forest, agricultural, or range uses to more developed uses declined between 1974 and 2009 in counties which had the highest rates prior to 1984 (Tables $9,10,11$, and 12). The declines in conversion rates in the counties listed in Tables 9, 10, 11 and 12 were dramatic and occurred in every county and for each listed forest, agricultural, and range land use. Annual average rates of conversion of land in resource land uses to low-density or urban uses in the Portland Area and in Deschutes County were 89 and 88 percent less, respectively, in the 2005-2009 period when compared to 1974-1984 period.

Relatively high rates of change occurred in the three Portland area counties and in Josephine County. These counties and the Bend Area contain 9 percent of the state's private land but accounted for 44 percent of the net change in area of private land from forest, agricultural, and range uses to more developed uses between 1974 and 2009. The lowest rates of conversion from land in these resource land uses to land in more developed uses occurred in the North Coast Region and eastern Oregon counties exclusive of the Bend Area and Klamath County (Figures 4 and 10 and Table 7).

In Klamath County outside of the Bend Area, the area of private land in low-density residential and urban uses increased, respectively, 247 percent and 50 percent between 1974 and 2009 (Table 7). The percent increase of private land in low-density residential use was greater in Klamath County than even in the Bend Area, and, in contrast to the Bend Area, the rate remained high between 1974 and 2000, before declining to an average of 300 acres per year thereafter. These high rates of change before


2000 are somewhat misleading; the total amount of private land in low-density residential and urban uses was less than 1 percent of Klamath County's total land area in 1974 and was only about 2 percent in 2009.

Within the Portland Area, the highest rate of increase in low-density residential and urban uses took place in Washington County, followed by Clackamas County; both counties experienced much higher rates of conversion to low-density residential and urban uses than was the case in highly urbanized Multnomah County (Table 8). However, Multnomah County-already highly urbanized with a modest percentage of private land remaining in forest and agricultural uses in 1974-was second only to Deschutes County in the percentage loss of this private land in resource land uses to other uses between 1974 and 2009.

Washington County led western Oregon in the percentage increase of the area of private land in low-density residential use between 1974 and 2009. Private land in forest and agricultural uses in Washington County was converted to low-density residential use at a greater rate, in percent, than the rate in the burgeoning Bend Area (Table 8). However, this rate of conversion in Washington County declined dramatically after 1984.

Deschutes, Josephine, Clackamas, Multnomah, Washington, and Marion Counties had the lowest percentage of private land remaining in resource land uses in 2009 relative to the area in these uses in 1974 (Table 13). The rates of conversion of private land in resource land uses to low-density residential or urban uses in these counties declined between 1974 and 2000 and conversion of land in resource uses almost stopped between 2000 and 2009.

Figure 10


Figure 10 Continued


Figure 11 - Average annual change in land uses on private land in Oregon, by period

${ }^{\text {a }}$ Agriculture includes intensive agriculture mixed forest/agriculture and mixed range/agriculture land use classes.

Figure 12 - Average annual change in land uses on private land in western Oregon, by period


Figure 13 - Average annual change in land uses on private land in eastern Oregon, by period

${ }^{a}$ Agriculture includes intensive agriculture, mixed forest/agriculture, and mixed range/agriculture land use classes.

Figure 14 - Average number of structures per square mile in 2009 on private land in Oregon, by land use class and distance to low-density residential or urban land uses


Between 1974 and 2009, very little loss in the area of private land in forest, agricultural, and range uses occurred in the following eastern Oregon counties: Grant, Wasco, Malheur, Harney, Gilliam, Lake, Sherman, and Wheeler. A notable change did occur in Morrow County, where private owners converted an estimated 33,000 acres of land in wildland range use to agricultural use between 1974 and 1984.

## DEVELOPMENT ON PRIVATE LAND REMAINING IN RESOURCE AND LOW-DENSITY RESIDENTIAL USES

The definitions for the 8 land use classes used in this study are not always sensitive enough to fully monitor urbanization. That is, the number of structures in an area can increase over time but not be enough to shift the area to a different, often more developed classification of land use. Therefore, we recorded the number of
structures present within 80 -acre and 640 -acre circular plots at each sample observation having a non-urban land use. We did this for $1974,1984,1994,2000$, 2005 , and 2009. This allowed us to track changes in the number of structures within each non-urban land use class. We did not estimate the number of structures on observations classified as being in urban land use.

The number of structures added on private land statewide varied by non-urban land use and time period (Table 14). These numbers increased on private land in all resource and low-density residential land use classes between 1974 and 2009; the percentage increase was relatively large on private land in resource uses-more than doubling during the 35 -year study period. An exception was a relatively low increase, in percent, in the number of structures on land in intensive agriculture use. The greatest increase in the number of structures per square mile occurred on land classified as mixed forest/agricultural or intensive agriculture land

Table 7 - Net change, in percent, in the area of private land between 1974 and 2009, by region and land use class ${ }^{\text {a }}$

| Region | Wildland forest | Wildland range ${ }^{\text {a }}$ | Mixed forest/ agriculture | Mixed range/ agriculture ${ }^{\text {a }}$ | Intensive agriculture | Low-density residential | Urban |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net change, in percent, between 1974 and 2009 |  |  |  |  |  |  |
| Oregon | -2\% | -2\% | -10\% | 3\% | -2\% | 58\% | 53\% |
| Eastern Oregon | -1\% | -2\% | -12\% | 3\% | 1\% | 67\% | 64\% |
| Western Oregon | -2\% | NA | -9\% | NA | -9\% | 53\% | 51\% |
| Bend Area | -7\% | -16\% | -42\% | 0\% | -8\% | 97\% | 159\% |
| Klamath County outside of the Bend Area | -3\% | -10\% | 0\% | 0\% | 1\% | 247\% | 50\% |
| Eastern Oregon, outside of the Bend Area and Klamath County | 0\% | -1\% | 0\% | 3\% | 1\% | 24\% | 26\% |
| North Coast | -1\% | NA | -13\% | NA | 0\% | 13\% | 19\% |
| North Willamette | -1\% | NA | -8\% | NA | -7\% | 77\% | 81\% |
| Portland Area | -5\% | NA | -27\% | NA | -20\% | 55\% | 56\% |
| South Willamette | -2\% | NA | -1\% | NA | -7\% | 41\% | 42\% |
| Southwest | -3\% | NA | -5\% | NA | -6\% | 65\% | 38\% |

NA = Not applicable
${ }^{\text {a Wildland range }}$ and mixed range/agriculture classes are not recognized in western Oregon.
uses, even though the percentage increase on land in intensive agriculture use was relatively small.

The number of structures on private land in all nonurban use classes statewide increased at relatively high rates between 1974 and 1984. These rates slowed in the next two periods, 1984-1994 and 1994-2000, with few exceptions. One notable exception was an increase in the average annual rate at which structures were added on private land in low-density residential use between 1994 and 2000; this rate during these years was similar to the average annual rate that occurred between 1974 and 1984. The rates at which structures were added on land in non-urban uses between 2005 and 2009 were the lowest in the 35-year study period.

Large increases in the average rate at which structures were added annually occurred between 2000 and 2005 on private land in wildland forest and wildland range uses. This rate on private land in wildland forest use, for the same period, was greater than that between 1974 and 1984 before comprehensive land use plans were implemented. The rate at which structures were built on private land in wildland forest use plummeted in the 2005-2009 period.

The closer land in resource land uses is to land in low-density or urban land uses, the higher is the average number of structures per square mile on this resource land (Figure 14). The conversion of land in resource uses to low-density residential or urban uses

Table 8a - Area, in percent, of all private land classified as low-density residential use, by selected area or county, and year

| Region | Low-density residential |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent of all privately-owned acres classified as low-density residential use |  |  |  |  |  | Change between 1974 and 2009 |
|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  |
| Oregon | 2.8\% | 3.9\% | 4.2\% | 4.3\% | 4.4\% | 4.5\% | 58\% |
| Portland Area | 9.4\% | 13.8\% | 14.3\% | 14.4\% | 14.5\% | 14.6\% | 55\% |
| Washington County | 2.7\% | 4.5\% | 5.4\% | 5.6\% | 5.4\% | 5.4\% | 100\% |
| Clackamas County | 13.9\% | 20.7\% | 21.0\% | 21.0\% | 21.5\% | 21.6\% | 55\% |
| Multnomah County | 10.1\% | 11.8\% | 12.5\% | 12.8\% | 12.2\% | 12.2\% | 20\% |
| Josephine County | 15.7\% | 24.0\% | 25.2\% | 25.2\% | 26.1\% | 26.4\% | 68\% |
| Bend Area | 9.6\% | 14.3\% | 17.4\% | 18.2\% | 18.3\% | 18.8\% | 97\% |
| Eastern Oregon ${ }^{\text {a }}$ | 1.0\% | 1.1\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 24\% |

a Does not include the Bend Area and Klamath County.

Table 8b - Area, in percent, of all private land classified as urban use, by selected area or county, and year

| Region | Urban |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Percent of all privately-owned acres classified as urban use |  |  |  |  |  |  | \(\left.\begin{array}{c}Change between <br>

1974 and 2009\end{array}\right\}\)

[^4]Table 9 - Average annual change in the area of private land that shifted from resource land uses to low-density residential or urban land uses, by selected counties and period a

| County ${ }^{\text {b }}$ | 1974-1984 | 1984-1994 | 1994-2000 | 2000-2005 | 2005-2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average annual change, in acres ${ }^{\text {c }}$ |  |  |  |  |
| Clackamas | -4,800 | -400 | -200 | -1,200 | -800 |
| Deschutes | -4,000 | -2,200 | -1,500 | -500 | -500 |
| Lane | -3,600 | -500 | -500 | -1,400 | -400 |
| Josephine | -2,600 | -400 | 0 | -600 | -400 |
| Marion | -2,400 | -500 | -200 | -600 | -700 |
| Washington | -2,300 | -1,300 | -1,000 | -600 | -100 |
| Klamath | -1,700 | -1,800 | -2,100 | 0 | -600 |
| Multnomah | -800 | -100 | -800 | -200 | 0 |

${ }^{\text {a }}$ Resource land use classes include wildland forest, wildland range (eastern Oregon only), mixed forest/agriculture, mixed range/agriculture (eastern Oregon only), and intensive agriculture.
${ }^{\text {b }}$ The counties selected had greatest average annual loss in private area classified as resource land uses between 1974 and 1984.
${ }^{\text {c Rounded to }}$ nearest 100 acres.

Table 10 - Average annual change in the area of private land that shifted from wildland forest land use to low-density residential or urban land uses, by selected counties and period

|  | $\mathbf{1 9 7 4 - 1 9 8 4}$ | $\mathbf{1 9 8 4 - 1 9 9 4}$ | $\mathbf{1 9 9 4 - 2 0 0 0}$ | $\mathbf{2 0 0 0} \mathbf{- 2 0 0 5}$ | $\mathbf{2 0 0 5 - 2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| County ${ }^{\text {a }}$ | Average annual change, in acres $^{\text {b }}$ |  |  |  |  |
| Josephine | $-1,400$ | -400 | 0 | -600 | -200 |
| Lane | $-1,200$ | -200 | -200 | -500 | -200 |
| Curry | $-1,100$ | -100 | 0 | -100 | 0 |
| Douglas | -900 | -400 | 0 | -200 | -200 |
| Deschutes | -800 | -300 | -300 | 0 | -200 |

a The counties selected had greatest average annual loss in private area classified as wildland forest land use between 1974 and 1984.
${ }^{\mathrm{b}}$ Rounded to nearest 100 acres.

Table 11 - Average annual change in the area of private land that shifted from intensive agriculture, mixed forest/agriculture, or mixed range/agriculture land uses to lowdensity residential or urban land uses, by selected counties and period

| County ${ }^{\text {a }}$ | $\mathbf{1 9 7 4 - 1 9 8 4}$ | $\mathbf{1 9 8 4 - 1 9 9 4}$ | $\mathbf{1 9 9 4 - 2 0 0 0}$ | $\mathbf{2 0 0 0 - 2 0 0 5}$ | $\mathbf{2 0 0 5 - 2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $-4,100$ | -300 | -200 | -800 | -800 |
|  | $-2,500$ | -400 | -300 | -900 | -100 |
|  | $-2,400$ | -400 | -200 | -600 | -700 |
|  | $-1,800$ | $-1,200$ | $-1,000$ | -600 | -100 |
|  | $-1,300$ | -700 | -400 | -100 | 0 |

${ }^{\text {a }}$ The counties selected had greatest average annual loss in private area classified as intensive agriculture, mixed forest/agriculture, or mixed range/agriculture (eastern Oregon only) land uses between 1974 and 1984.
${ }^{\mathrm{b}}$ Rounded to nearest 100 acres.
has decreased the average distance of the remaining land in resource uses to these more developed land uses between 1974 and 2009. And, the average number of structures on private land in each resource land use class increased in this 35 -year period as the distance between this land and land in low-density residential or urban uses decreased.

## Regional change in the number of structures

The number of structures and the average annual rates at which structures were added on private land has differed between western and eastern Oregon since 1974 (Tables 14 and 15). Western Oregon has had more structures per square mile on private land in each nonurban land use than has eastern Oregon throughout the study period.

In western Oregon, the number of structures increased on private land in resource land uses between 1974 and 2009, but the rates at which they were added varied by period and land use class (Table 15). For example, the average annual rate at which structures were added on private land in wildland forest use more than doubled in the 2000-2005 period compared to the period between 1994 and 2000 and was 22 percent greater than the comparable rate between 1974 and 1984 before declining to negligible levels after 2005. For private land in mixed forest/agriculture and intensive agriculture uses, the average annual rates of increase in the number of structures were also greater in the period between 2000 and 2005 than between 1994 and 2000 before they declined dramatically in the 2005-2009 period. Between 1974 and 2009, the greatest change in the number

Table 12 - Average annual change in the area of private land that shifted from wildland range land use to low-density residential or urban land uses, by selected counties in eastern Oregon and period

| County ${ }^{\text {a }}$ | 1974-1984 | 1984-1994 | 1994-2000 | 2000-2005 | 2005-2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average annual change, in acres ${ }^{\text {b }}$ |  |  |  |  |
| Deschutes | -1,900 | -1,200 | -900 | -400 | -200 |
| Klamath | -700 | -800 | -1,100 | 0 | -400 |
| Crook | -500 | -1,300 | 0 | -200 | -800 |
| Jefferson | -300 | -200 | -100 | -200 | 0 |
| Grant | -100 | -100 | 0 | 0 | 0 |

a The counties selected had greatest average annual loss in private area classified as wildland range land use between 1974 and 1984.
${ }^{\mathrm{b}}$ Rounded to nearest 100 acres.

Table 13 - Area, in percent, of private land in Oregon classified to a resource land use class in 1974 that remained in a resource land use class in later years, by selected counties and year ${ }^{\text {a }}$

| County $^{\text {b }}$ | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of 1974 acres |  |  |  |  |
| Deschutes | $100.0 \%$ | $87.2 \%$ | $81.3 \%$ | $78.3 \%$ | $77.6 \%$ | $77.0 \%$ |
| Josephine | $100.0 \%$ | $89.3 \%$ | $87.3 \%$ | $87.3 \%$ | $86.1 \%$ | $85.5 \%$ |
| Clackamas | $100.0 \%$ | $90.1 \%$ | $89.0 \%$ | $88.7 \%$ | $87.3 \%$ | $86.6 \%$ |
| Multnomah | $100.0 \%$ | $91.3 \%$ | $88.8 \%$ | $82.5 \%$ | $81.3 \%$ | $81.3 \%$ |
| Washington | $100.0 \%$ | $94.8 \%$ | $90.4 \%$ | $88.7 \%$ | $87.9 \%$ | $87.8 \%$ |
| Marion | $100.0 \%$ | $94.8 \%$ | $93.6 \%$ | $93.3 \%$ | $92.5 \%$ | $91.9 \%$ |

[^5]of structures on private land in resource land uses occurred on land in wildland forest (+132 percent) and mixed forest/agriculture ( +120 percent) uses.

In the Portland Area, the number of structures per square mile on private land in resource land uses remained well above the comparable number statewide between 1974 and 2009. In 2005 on private land in wildland forest use, the number of structures per square mile in the Portland Area was twice that in western Oregon and 7 times more than in eastern Oregon. Private land in low-density residential use also had a much greater number of structures per square mile than the statewide average for land in this use between 1974 and 2009, and this land in low-density residential use added structures at greater average annual rates than occurred on land in this classification statewide. The Portland Area, during the period between 1974 and 1984, had only 8 percent more structures per square mile on private land in low-density residential use than did all of western Oregon. But, by 2005 because of rapid development in the Portland Area, this difference had increased to 20 percent (Tables 14 and 16).

The average number of structures per square mile on private land in wildland forest use declined in the Portland Area between 2005 and 2009. This occurred because the land in wildland forest use that was converted during this period to more developed uses had more structures per square mile, than did the land that remained in wildland forest use, thus lowering the average number of structures per square mile on the remaining area in wildland forest use.

In eastern Oregon, structures were also added on private land in resource land uses during each of the time periods in this study (Table 14). On private land in eastern Oregon, the greatest change in the number of structures between 1974 and 2009 occurred on land in wildland forest ( +210 percent) and mixed range/ agriculture ( +187 percent) uses (Table 15). Notable are a relatively minor increase in the number of structures on private land in intensive agricultural use ( +43 percent) and a 16 percent decrease in the number of structures on private land in mixed forest/agriculture
use. This decrease is caused mostly by the conversion, in the Bend Area, of private land in mixed forest/agriculture use with many structures present to low-density residential use, thus lowering the average number of structures per square mile on the remaining area in mixed forest/agricultural use.

In eastern Oregon, the average annual rates at which structures were built on private land in each resource land use were less between 1994 and 2000 than between 1984 and 1994. However, between 2000 and 2005, the rates at which buildings were added annually doubled from that between 1994 and 2000 on private land in wildland forest and wildland range uses. Comparing the same periods, the average annual rate of increase in the number of structures on private land in intensive agricultural use declined to negligible levels after 2000. During these two periods, structures were added on private land in low-density residential use at an annual rate much higher than between 1974 and 1984.

Between 2000 and 2005, average annual increases, in percent, in the number of structures on private land in forest and range uses were relatively high in eastern Oregon. This rate of increase declined for land in wildland forest and wildland range uses in the 2005-2009 period.

Eastern Oregon in 2009 had one-third as many structures per square mile on private land in resource land uses as did western Oregon. An exception was the Bend Area, where the number of structures on private land in intensive agricultural use was similar
to that for the same classification in western Oregon. Structures have been added on private land in intensive agricultural use in the Bend Area at a greater annual rate than on land in intensive agricultural use in western Oregon.

Additionally in the Bend Area, structures were added on private land in low-density residential use at an average annual rate of 4 percent between 2000 and 2005 (Table 17). This rate was much greater than for other regions in the state, including the Portland Area which had comparable rates of about 1 percent in this
period. This rate of increase fell to 1 percent between 2005 and 2009 but was still higher than other regions of the state, including the Portland area.

Between 2000 and 2009 in Klamath County outside of the Bend Area, the average annual rate, in percent, at which structures were added on private land in wildland forest use exceeded the rate of increase on land in this classification in the Bend Area, in the rest of eastern Oregon, and in western Oregon. This was the result of structures being built in rural areas of Klamath County that previously had few structures present.

Table 14 - Number of structures on private land, by region, land use class, and year

| Region | Average number of structures per square mile |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |  |
|  | Average number |  |  |  |  |  |  |
| Oregon Land use class: | 0.7 | 1.0 | 1.3 | 1.4 | 1.7 | 1.8 |  |
| Wildland forest | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 |  |
| Wildland range | 7.7 | 10.5 | 13.2 | 14.6 | 16.0 | 16.2 |  |
| Mixed forest/agriculture | 0.6 | 0.7 | 1.0 | 1.5 | 1.5 | 1.7 |  |
| Mixed range/agriculture | 6.1 | 7.1 | 7.9 | 8.4 | 8.8 | 8.9 |  |
| Intensive agriculture | 61.3 | 72.6 | 85.2 | 95.5 | 103.8 | 106.6 |  |

## Western Oregon ${ }^{\text {a }}$

| Wildland forest | 1.0 | 1.4 | 1.7 | 1.9 | 2.3 | 2.3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Mixed forest/agriculture | 8.4 | 11.4 | 14.4 | 15.9 | 17.4 | 17.9 |
| Intensive agriculture | 11.6 | 13.6 | 15.1 | 15.9 | 17.1 | 17.4 |
| Low-density residential | 67.5 | 79.1 | 95.7 | 105.5 | 111.9 | 114.3 |

Eastern Oregon

| Wildland forest | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 |
| Mixed forest/agriculture | 3.5 | 4.2 | 6.2 | 6.6 | 7.3 | 6.1 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.5 | 1.5 | 1.7 |
| Intensive agriculture | 3.7 | 4.4 | 4.8 | 5.2 | 5.3 | 5.3 |
| Low-density residential | 49.1 | 59.0 | 65.3 | 77.7 | 89.3 | 92.8 |

${ }^{a}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

Table 15 - Changes, in percent, in the number of structures on private land, by region, land use class, and period

| Region | Average annual change in the average number of structures per square mile |  |  |  |  | Change in the number of structures ${ }^{\text {a }}$1974-2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1974- \\ 1984 \end{gathered}$ | $\begin{gathered} 1984- \\ 1994 \end{gathered}$ | $\begin{aligned} & 1994- \\ & 2000 \end{aligned}$ | $\begin{aligned} & 2000- \\ & 2005 \end{aligned}$ | $\begin{aligned} & 2005- \\ & 2009 \end{aligned}$ |  |
|  | Percent |  |  |  |  |  |
| Oregon Land use class: |  |  |  |  |  |  |
| Wildland forest | 3.4\% | 2.1\% | 1.6\% | 4.2\% | 0.5\% | 140\% |
| Wildland range | 3.1\% | 2.5\% | 1.0\% | 2.0\% | 1.7\% | 107\% |
| Mixed forest/agriculture | 3.4\% | 2.0\% | 1.6\% | 1.9\% | 0.5\% | 111\% |
| Mixed range/agriculture | 1.1\% | 5.7\% | 4.8\% | 1.5\% | 3.2\% | 187\% |
| Intensive agriculture | 1.4\% | 1.1\% | 1.1\% | 0.9\% | 0.5\% | 46\% |
| Low-density residential | 1.9\% | 1.5\% | 1.8\% | 1.8\% | 0.8\% | 74\% |
| Western Oregon ${ }^{\text {b }}$ |  |  |  |  |  |  |
| Wildland forest | 3.5\% | 1.7\% | 1.7\% | 4.3\% | 0.3\% | 132\% |
| Mixed forest/agriculture | 3.5\% | 1.8\% | 1.6\% | 1.8\% | 0.8\% | 120\% |
| Intensive agriculture | 1.8\% | 0.8\% | 0.9\% | 1.4\% | 0.8\% | 50\% |
| Low-density residential | 1.8\% | 1.6\% | 1.6\% | 1.2\% | 0.6\% | 69\% |
| Eastern Oregon |  |  |  |  |  |  |
| Wildland forest | 3.6\% | 5.1\% | 1.3\% | 2.6\% | 2.2\% | 210\% |
| Wildland range | 3.1\% | 2.5\% | 1.0\% | 2.0\% | 1.7\% | 107\% |
| Mixed forest/agriculture | 1.6\% | 4.4\% | 1.1\% | 2.2\% | -4.5\% | 72\% |
| Mixed range/agriculture | 1.1\% | 5.7\% | 4.8\% | 1.5\% | 3.2\% | 187\% |
| Intensive agriculture | 1.3\% | 1.4\% | 1.3\% | 0.0\% | 0.3\% | 43\% |
| Low-density residential | 1.9\% | 1.1\% | 2.7\% | 3.1\% | 1.0\% | 89\% |

${ }^{\text {a }}$ Average number of structures per square mile.
${ }^{\mathrm{b}}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

Table 16 - Number of structures on private land, by region, land use class, and year

| Region | Average number of structures per square mile |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
|  | Average number |  |  |  |  |  |
| Bend Area |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 0.0 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 |
| Wildland range | 0.6 | 0.8 | 1.2 | 1.7 | 2.2 | 2.4 |
| Mixed forest/agriculture | 7.8 | 8.6 | 12.0 | 14.8 | 17.0 | 12.0 |
| Mixed range/agriculture | 8.0 | 13.0 | 14.0 | 18.0 | 18.0 | 18.0 |
| Intensive agriculture | 9.0 | 10.4 | 11.6 | 13.0 | 14.0 | 14.3 |
| Low-density residential | 52.7 | 61.9 | 69.7 | 88.3 | 107.6 | 111.6 |
| Portland Area ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 2.4 | 3.3 | 3.8 | 4.4 | 5.0 | 4.6 |
| Mixed forest/agriculture | 16.2 | 21.8 | 26.5 | 29.7 | 31.6 | 32.4 |
| Intensive agriculture | 18.9 | 22.1 | 24.6 | 25.7 | 26.8 | 27.4 |
| Low-density residential | 72.7 | 93.2 | 109.3 | 125.9 | 133.6 | 137.7 |
| Eastern Oregon ${ }^{\text {b }}$ |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.7 |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 |
| Mixed forest/agriculture | 3.0 | 3.5 | 5.7 | 5.7 | 6.2 | 5.7 |
| Mixed range/agriculture | 0.6 | 0.6 | 1.0 | 1.4 | 1.5 | 1.7 |
| Intensive agriculture | 3.6 | 4.2 | 4.6 | 5.0 | 4.9 | 5.0 |
| Low-density residential | 48.0 | 60.4 | 66.4 | 76.1 | 80.1 | 83.0 |

${ }^{\text {a }}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.
${ }^{\mathrm{b}}$ Excludes area within the Bend Area and Klamath County.

Table 17 - Changes, in percent, in the number of structures on private land, by region, land use class, and period

| Region | Average annual change in the average number of structures per square mile |  |  |  |  | Change in the number of structures1974-2009a |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1974- \\ 1984 \end{gathered}$ | $\begin{gathered} 1984- \\ 1994 \end{gathered}$ | $\begin{aligned} & 1994- \\ & 2000 \end{aligned}$ | $\begin{aligned} & 2000- \\ & 2005 \end{aligned}$ | $\begin{gathered} 2005- \\ 2009 \end{gathered}$ |  |
|  | Percent |  |  |  |  |  |
| Bend Area |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 4.7\% | 8.0\% | 6.9\% | 11.8\% | 1.1\% | 807\% |
| Wildland range | 3.3\% | 4.1\% | 6.1\% | 5.6\% | 3.4\% | 297\% |
| Mixed forest/agriculture | 1.4\% | 3.7\% | 3.5\% | 2.8\% | -8.4\% | 54\% |
| Mixed range/agriculture | 4.6\% | 0.8\% | 4.2\% | 0.0\% | 0.0\% | 125\% |
| Intensive agriculture | 2.2\% | 1.2\% | 1.8\% | 1.4\% | 0.6\% | 59\% |
| Low-density residential | 1.8\% | 1.3\% | 3.9\% | 4.1\% | 1.1\% | 112\% |
| Portland Area ${ }^{\text {b }}$ |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 3.4\% | 1.3\% | 2.2\% | 2.9\% | -2.2\% | 90\% |
| Mixed forest/agriculture | 3.5\% | 1.6\% | 1.8\% | 1.3\% | 0.6\% | 100\% |
| Intensive agriculture | 1.9\% | 0.8\% | 0.7\% | 0.8\% | 0.6\% | 45\% |
| Low-density residential | 2.7\% | 1.3\% | 2.3\% | 1.3\% | 0.6\% | 89\% |
| Eastern Oregon ${ }^{\text {c }}$ |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |
| Wildland forest | 3.2\% | 5.2\% | 0.5\% | 1.4\% | 1.9\% | 166\% |
| Wildland range | 2.9\% | 2.4\% | 0.6\% | 1.4\% | 1.6\% | 90\% |
| Mixed forest/agriculture | 1.6\% | 5.3\% | 0.0\% | 2.1\% | -2.3\% | 89\% |
| Mixed range/agriculture | 0.8\% | 6.2\% | 4.9\% | 1.7\% | 3.4\% | 193\% |
| Intensive agriculture | 1.2\% | 1.4\% | 1.2\% | -0.3\% | 0.3\% | 38\% |
| Low-density residential | 2.2\% | 1.1\% | 2.0\% | 1.2\% | 0.9\% | 73\% |

${ }^{\text {a }}$ Average number of structures per square mile.
${ }^{\mathrm{b}}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.
${ }^{\text {c Excludes area within the Bend Area and Klamath County. }}$

## NON-FEDERAL LAND IN WILDLAND FOREST USE BY OWNER CLASS

Non-Federal forest landowners provide most of the timber and other forest commodities produced in Oregon. In 2009, 88 percent of Oregon's timber harvest came from non-Federal land. Forest industry owners possessed only 20 percent of all forest land statewide, but produced 72 percent of the 2009 harvest. Other private owners furnished 4 percent. Non-Federal public and Native American owners provided an additional 12 percent of
the statewide timber harvest. The remaining 12 percent of Oregon's 2009 timber harvest came from Federal land (Oregon Department of Forestry 2010).

Forest industry owners owned 59 percent of Oregon's non-Federal land in wildland forest use in 2009 . Other private owners owned 27 percent of this land, and other public owners, the remaining 14 percent. Other private owners owned more than one-third of non-Federal land in wildland forest use in eastern Oregon, but less than one-fourth in western Oregon (Table 18).

Changes in the area of land in wildland forest use between 1974 and 2009 varied dramatically by region and owner class (Table 19). The area of land in wildland forest use owned by forest industry and by other public (non-Federal) owners remained relatively stable in eastern and western Oregon. But, the area of land in wildland forest use owned by other private owners declined 6 percent in Oregon, losing 8 percent in western Oregon and 3 percent in eastern Oregon.

An average of approximately 200 acres of non-Federal public land in wildland forest use shifted to other uses annually between 1974 and 2009. The comparable average annual loss on forest industry owned land in the same period was 400 acres, and on other private ownerships, a notable 5,000 acres annually. Of land in wildland forest use owned by other private owners, the average annual loss to other uses of 11,000 acres in the 1974-1984 period had declined to an average annual loss of about 3,000 acres in the 2000-2005 period and to about 1,000 acres in the period from 2005 to 2009. On land owned by other private owners, almost all change from wildland forest use to other land uses continued to be a shift to low-density residential use.

Land in wildland forest use owned by forest industry and other public owners averaged less than one structure per square mile in 2009. Land in wildland forest use that was owned by other private owners was more developed, with about 5 structures per square mile. In 2009, land in wildland forest use held in other private ownerships had 8 times the average number of structures per square mile as did land in wildland forest use that was owned by forest industry. However, the increases, in percent, in number of structures among these 3 owner classes over the 35 -year study period were similar.

For all non-Federal owner classes, the average distance between their land in wildland forest use and land in low-density residential or urban uses diminished between 1974 and 2009. In 1974, 11 percent of land in wildland forest use owned by forest industry owners was 1 mile or less from land in these more developed uses; this statistic had increased to 15 percent in 2009. For other private owners, the comparable statistics increased from 26 percent in 1974 to 34 percent in 2009. For other public (non-Federal) owners, the comparable statistics increased from 12 percent to 15 percent.

Table 18 - Area of non-Federal land classified as wildland forest use, by region and owner class, 2009

| Region | Forest industry | Other private | Other public | All non-Federal <br> owners |
| :--- | :---: | :---: | :---: | :---: |
|  | Thousand acres |  |  |  |
| Oregon | 6,158 | 2,860 | 1,478 | 10,496 |
| Western Oregon | 4,400 | 1,714 | 1,064 | 7,177 |
| Eastern Oregon | 1,758 | 1,146 | 415 | 3,319 |
|  | Area, by owner class, as a percentage of all non-Federal land |  |  |  |
| Oregon | $59 \%$ | $27 \%$ | $14 \%$ | $100 \%$ |
| Western Oregon | $61 \%$ | $24 \%$ | $15 \%$ | $100 \%$ |
| Eastern Oregon | $53 \%$ | $35 \%$ | $13 \%$ | $100 \%$ |

Table 19 - Change, in percent, in the area of non-Federal land classified as wildland forest use, between 1974 and 2009, by region and owner class

| Region | Forest industry | Other private | Other public | All non-Federal <br> owners |
| :--- | :---: | :---: | :---: | :---: |
|  | Change, in percent, in wildland forest area between 1974 and 2009 |  |  |  |
| Oregon | $0 \%$ | $-6 \%$ | $-1 \%$ | $-2 \%$ |
| Western Oregon | $0 \%$ | $-8 \%$ | $-1 \%$ | $-2 \%$ |
| Eastern Oregon | $0 \%$ | $-3 \%$ | $0 \%$ | $-1 \%$ |

## DIRECTING GROWTH WITH COMPREHENSIVE LAND USE PLANNING

The conversion of productive forest and agricultural land to more developed uses is an enduring policy concern in Oregon. In response to the loss of this land to more developed uses, the Oregon Legislature passed the Land Conservation and Development Act in 1973 to limit further loss and to manage urbanization. The Act required all cities and counties to prepare comprehensive land use plans in accordance with statewide goals.

Goals 3 and 4 of the Act are designed to limit and manage the loss of forest, agricultural, and range land.

- Goal 3 - Agricultural land shall be preserved and maintained for farm use, consistent with existing and future needs for agricultural products, forest and open space, and with the state's agricultural land use policy expressed in ORS 215.243 and 215.70. (Range land is considered to be agricultural land in Goal 3).
- Goal 4 - To conserve forest land by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient
forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources, and to provide for recreational opportunities and agriculture.

Other goals provide for managed urban growth in limited areas and for low-density residential, commercial, and industrial uses.

Non-Federal lands in Oregon were zoned for resource uses (non-developable zones) or for development (developable zones) during the implementation of comprehensive, county-level land use plans in the mid-1980s, The state currently has 26.8 million acres of non-Federal land classified as non-developable zones and 1.7 million acres classified as developable zones (Table 20).

Most land use change between 1984 and 2009 has occurred on private land zoned as developable, and within these private holdings, almost entirely on land owned by "other private" owners (Tables 21 and 22). Virtually no changes in land uses have occurred on other public (non-Federal) ownerships.

Figure 15 - Distribution of private land in Oregon zoned by counties for forest, farm, and range land uses, by land use class and year


Zoned by counties for forest, farm and range land uses

$$
\square \text { Resource land use classes }{ }^{\text {a }} \quad \text { Low-density residential land use class } \square \text { Urban land use class }{ }^{b}
$$

${ }^{a}$ Resource land use classes include wildland forest, wildland range (eastern Oregon), mixed forest/agriculture, mixed range/agriculture (eastern Oregon), and intensive agriculture land use classes.
${ }^{\mathrm{b}}$ A negligible amount of land zoned by counties for forest, farm, and range land uses is in urban use.

## Land use change in non-developable zones on private land

The areas and proportions of private land in forest, agricultural, and range uses that was zoned as non-developable has remained nearly constant after completion of comprehensive land use plans in the mid-1980s (Figure 15). In 1974, land that was in wildland forest use and later zoned in the mid-1980s
for resource uses accounted for 37.1 percent of all private land in Oregon zoned as non-developable in the county land use plans; the comparable statistic was 36.8 percent in 1984 and was 36.6 percent in 2009. Between 1974 and 2009, land that was in wildland range use and zoned for resource uses remained constant at approximately 34 percent of all private land zoned as non-developable.

Table 20a - Area of non-Federal land in non-developable zones in Oregon, by land use class and year ${ }^{\text {ab }}$

|  | Non-developable zones |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Land use class | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |  |
|  |  | Thousand acres |  |  |  |  |  |
| Wildland forest | 10,317 | 10,250 | 10,221 | 10,215 | 10,208 | 10,205 |  |
| Wildland range | 9,178 | 9,069 | 9,035 | 9,015 | 9,001 | 8,997 |  |
| Mixed forest/agriculture | 824 | 807 | 800 | 800 | 798 | 796 |  |
| Mixed range/agriculture | 639 | 645 | 647 | 660 | 662 | 662 |  |
| Intensive agriculture | 5,426 | 5,451 | 5,458 | 5,452 | 5,457 | 5,456 |  |
| Low-density residential | 306 | 465 | 524 | 544 | 557 | 568 |  |
| Urban | 7 | 10 | 11 | 12 | 14 | 14 |  |
| Other | 70 | 70 | 70 | 70 | 70 | 70 |  |
| Total area | 26,767 | 26,767 | 26,767 | 26,767 | 26,767 | 26,767 |  |

a Does not include land that shifted to or from non-Federal ownership between 1974 and 2009.
${ }^{\mathrm{b}}$ Totals are different from those in other tables in this report because some sample points did not have a designated land use from available GIS data layers and because other tables may include only private lands.

Table 20b - Area of non-Federal land in developable zones in Oregon, by land use class and year ${ }^{a b}$

| Land use class | Developable zones |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Thousand acres |  |  |  |  |  |
|  | 250 | 204 | 187 | 182 | 175 | 171 |
|  | 142 | 117 | 104 | 97 | 95 | 94 |
|  | 118 | 84 | 70 | 68 | 63 | 57 |
|  | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 351 | 274 | 249 | 228 | 214 | 205 |
| Low-density residential | 444 | 555 | 587 | 593 | 594 | 606 |
| Urban | 367 | 438 | 475 | 505 | 531 | 540 |
| Other | 6 | 6 | 6 | 6 | 6 | 6 |
| Total area | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 |

[^6]For private land zoned as non-developable that was in intensive agricultural use, the comparable statistic was virtually unchanged at about 22 percent throughout this period. And, the area of private land in mixed forest/agricultural or mixed range/agriculture uses remained virtually constant at about 6 percent of total land zoned as non-developable throughout Oregon between 1974 and 2009.

Two percent of the private land zoned in the mid-1980s as non-developable in county land use plans was classified as being in low-density residential use in 2009, up from 1 percent in 1974; most of this 250,000 acre increase occurred in the period between 1974 and 1984 before
the plans were implemented. Between 1984 and 2009 after the plans were adopted, 98,000 acres of private land in non-developable zones changed from resource land uses to low-density residential use. A negligible amount of private land in urban use was in areas zoned as nondevelopable throughout the 35 -year study period.

Why is there development in non-developable zones after county-level land use plans were implemented? Some development in non-developable zones near areas already developed is allowed by the laws and zoning that govern land use planning, and there have been zoning changes since the plans were implemented in the mid-1980s. There are also minor inaccuracies in the

Table 21a - Average annual change in the area of non-Federal land in non-developable zones in Oregon, by land use class and period ab

|  | Non-developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4 -}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}-$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
| Wildlannual change, in percent |  |  |  |  |  |
| Wildland range | $-0.1 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed forest/agriculture | $-0.1 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $-0.2 \%$ | $-0.1 \%$ | $0.0 \%$ | $-0.1 \%$ | $-0.1 \%$ |
| Intensive agriculture | $0.1 \%$ | $0.0 \%$ | $0.3 \%$ | $0.1 \%$ | $0.0 \%$ |
| Low-density residential | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Urban | $4.5 \%$ | $1.1 \%$ | $0.6 \%$ | $0.5 \%$ | $0.5 \%$ |


${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.

Table 21b - Average annual change in the area of forest industry land in nondevelopable zones in Oregon, by land use class and period ab

|  | Non-developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4 -}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}-$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
| Wildlannual change, in percent |  |  |  |  |  |
| Wildland range | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed forest/agriculture | $-0.7 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $-0.2 \%$ | $0.3 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Intensive agriculture | $-8.1 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Low-density residential | $3.4 \%$ | $0.1 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Urban | $9.2 \%$ | $1.1 \%$ | $0.0 \%$ | $0.0 \%$ | $3.5 \%$ |

[^7]county comprehensive plans GIS zoning layer that created some minor sampling errors in our database.

## Land use change in developable zones on private land

Private land in Oregon zoned in the mid-1980s as developable that was in forest, agricultural, and range uses has been converted rapidly to low-density and urban uses between 1984 and 2009 (Table 22 and Figure 16). Twenty-four percent of private land in these resource land uses in areas zoned as developable shifted to urban and low-density uses in this period. After county-level land use plans were implemented in the mid-1980s, the percentage of private land in forest,
agricultural, and range uses within all private land zoned as developable declined from about 40 percent in 1984 to 31 percent in 2009.

Private land in urban use within developable zones increased 53 percent over the entire 35-year study period. Recent changes were a 5 percent increase in the 2000-2005 period and another 2 percent gain between 2005 and 2009. These trends are due mostly to the conversion of private land in low-density residential use to urban use within acreage zoned as developable. The area of private land in low-density residential use zoned as developable remained constant between 2000 and 2005 before increasing again in the 2005-2009 period.

Table 21 c - Average annual change in the area of other private land in non-developable zones in Oregon, by land use class and period ${ }^{\text {ab }}$

|  | Non-developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
| Wildlannul change, in percent |  |  |  |  |  |
| Wildland range | $-0.2 \%$ | $-0.1 \%$ | $0.0 \%$ | $-0.1 \%$ | $0.0 \%$ |
| Mixed forest/agriculture | $-0.1 \%$ | $-0.1 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $-0.2 \%$ | $-0.1 \%$ | $0.0 \%$ | $-0.1 \%$ | $-0.1 \%$ |
| Intensive agriculture | $0.0 \%$ | $0.0 \%$ | $0.3 \%$ | $0.1 \%$ | $0.0 \%$ |
| Low-density residential | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Urban | $4.6 \%$ | $1.1 \%$ | $0.6 \%$ | $0.5 \%$ | $0.4 \%$ |

${ }^{\text {a }}$ Does not include land that shifted to or from non-Federal ownership between 1974 and 2009.
${ }^{b}$ Does not include sample points that did not have a designated land use from available GIS data layers.

Table 21d - Average annual change in the area of other public land in non-developable zones in Oregon, by land use class and period ab

|  | Non-developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4 -}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
| Wildland forest change, in percent |  |  |  |  |  |
| Wildland range | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed forest/agriculture | $-0.4 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $-0.4 \%$ | $0.0 \%$ | $0.0 \%$ | $-0.2 \%$ | $0.0 \%$ |
| Intensive agriculture | $3.6 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Low-density residential | $0.9 \%$ | $-0.1 \%$ | $-0.1 \%$ | $0.0 \%$ | $0.0 \%$ |
| Urban | $2.3 \%$ | $0.8 \%$ | $0.4 \%$ | $0.3 \%$ | $0.3 \%$ |

[^8]Thirty-one percent - 460,000 acres - of all private land zoned as developable was still in forest, agricultural, or range uses in 2009. Much private land in resource uses within developable zones is likely to shift to more developed land uses in the future because it is closer to developed land uses and because it already has more structures present than are found on land in resource land uses within non-developable zones. In 1974, 39 percent of these 460,000 acres was within one-quarter mile of land in low-density residential or urban uses, but in 2009 this had increased to 66
percent. The average number of structures per square mile on this private developable land that was in resource land uses within one-quarter mile of more developed uses was 30.2 structures in 2009; for nondevelopable private land in resource land uses, the average number of structures per square mile was 3.2.

Most development of private land in resource land uses has occurred on land zoned for development that is owned by other private owners. Other private owners owned ninety-three percent - 427,000 acres - of all

Table 22a - Average annual change in the area of non-Federal land in developable zones in Oregon, by land use class and period ${ }^{\text {ab }}$

|  | Developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}-$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}-$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
|  | annual change, in percent |  |  |  |  |
| Wildland forest | $-2.1 \%$ | $-0.7 \%$ | $-0.5 \%$ | $-0.8 \%$ | $-0.6 \%$ |
| Wildland range | $-1.9 \%$ | $-1.3 \%$ | $-1.1 \%$ | $-0.4 \%$ | $-0.4 \%$ |
| Mixed forest/agriculture | $-3.6 \%$ | $-1.6 \%$ | $-0.4 \%$ | $-1.4 \%$ | $-2.3 \%$ |
| Mixed range/agriculture | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Intensive agriculture | $-2.5 \%$ | $-0.8 \%$ | $-1.4 \%$ | $-1.3 \%$ | $-1.1 \%$ |
| Low-density residential | $2.4 \%$ | $0.5 \%$ | $0.2 \%$ | $0.0 \%$ | $0.5 \%$ |
| Urban | $2.1 \%$ | $0.7 \%$ | $1.0 \%$ | $1.0 \%$ | $0.4 \%$ |


${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.
Table 22b - Average annual change in the area of forest industry land in developable zones in Oregon, by land use class and period ab

|  | Developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4 -}$ | $\mathbf{1 9 8 4}-$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average annual change, in percent |  |  |  |  |
| Wildland forest | $-0.7 \%$ | $-0.6 \%$ | $0.0 \%$ | $0.4 \%$ | $0.0 \%$ |
| Wildland range | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed forest/agriculture | $-1.9 \%$ | $-2.9 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Intensive agriculture | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $-2.3 \%$ | $0.0 \%$ |
| Low-density residential | $2.4 \%$ | $1.3 \%$ | $0.0 \%$ | $-0.7 \%$ | $0.9 \%$ |
| Urban | $1.3 \%$ | $0.9 \%$ | $0.0 \%$ | $1.9 \%$ | $0.0 \%$ |

[^9]private land in resource uses that was zoned as developable in 2009. The rate of conversion from resource land uses to more developed uses on land zoned as developable remained relatively high for the other private owner group compared to forest industry in the 20052009 period.

The supply of developable private land in Oregon is limited, and some private land zoned as developable may not be feasible to develop, thereby further limiting the supply of developable land. Currently with
slow economic and population growth, the rate of conversion of land in resource uses to more developed uses is low. When the economy improves, assuming that historical rates of development reappear, demand could increase to develop more land currently in forest, agricultural, and range uses that are zoned as nondevelopable.

Table 22c - Average annual change in the area of other private land in developable zones in Oregon, by land use class and period ${ }^{\text {ab }}$

|  | Developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4 -}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
|  | annual change, in percent |  |  |  |  |
| Wildland forest | $-2.6 \%$ | $-0.8 \%$ | $-0.7 \%$ | $-1.2 \%$ | $-0.8 \%$ |
| Wildland range | $-2.0 \%$ | $-1.4 \%$ | $-1.2 \%$ | $-0.3 \%$ | $-0.3 \%$ |
| Mixed forest/agriculture | $-3.7 \%$ | $-1.7 \%$ | $-0.5 \%$ | $-1.4 \%$ | $-2.6 \%$ |
| Mixed range/agriculture | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Intensive agriculture | $-2.8 \%$ | $-0.9 \%$ | $-1.4 \%$ | $-1.5 \%$ | $-1.2 \%$ |
| Low-density residential | $2.6 \%$ | $0.5 \%$ | $0.2 \%$ | $0.2 \%$ | $0.5 \%$ |
| Urban | $2.3 \%$ | $0.8 \%$ | $1.0 \%$ | $1.1 \%$ | $0.5 \%$ |

a Does not include land that shifted to or from non-Federal ownership between 1974 and 2009.
${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.
Table 22d - Average annual change in the area of other public land in developable zones in Oregon, by land use class and period ${ }^{\text {ab }}$

|  | Developable zones |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Land use class | $\mathbf{1 9 7 4}$ | $\mathbf{1 9 8 4}-$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}-$ | $\mathbf{2 0 0 5 -}$ |
|  | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 9}$ |
|  | Average |  |  |  |  |
| Wildlannual change, in percent |  |  |  |  |  |
| Wildland range | $-0.4 \%$ | $-0.3 \%$ | $0.0 \%$ | $0.0 \%$ | $-0.5 \%$ |
| Mixed forest/agriculture | $-0.8 \%$ | $-0.9 \%$ | $-0.7 \%$ | $-0.9 \%$ | $0.0 \%$ |
| Mixed range/agriculture | $-2.7 \%$ | $0.0 \%$ | $0.0 \%$ | $-1.5 \%$ | $0.0 \%$ |
| Intensive agriculture | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Low-density residential | $-1.0 \%$ | $-0.6 \%$ | $-1.6 \%$ | $0.3 \%$ | $-0.8 \%$ |
| Urban | $0.5 \%$ | $0.7 \%$ | $-0.2 \%$ | $-1.2 \%$ | $0.9 \%$ |

[^10]Figure 16 - Distribution of private land in Oregon zoned by counties for developable land uses, by land use class and year

${ }^{a}$ Resource land use classes include wildland forest, wildland range (eastern Oregon), mixed forest/agriculture, mixed range/agriculture (eastern Oregon), and intensive agriculture land use classes. Developed land use classes include low-density residential and urban land use classes.

## BENCHMARKS

Oregon uses Benchmarks 81 and 82 to assess how well the State of Oregon is retaining non-Federal land that is in agricultural and wildland forest land uses. The basis for Benchmark 81 is the percentage of private land in agricultural use present in 1974 that is still in agricultural use. For Benchmark 82 the basis is the percentage of non-Federal land in wildland forest use in 1974 that is still so classified. The Oregon Progress Board has set specific numeric 2010 targets for land in wildland forest use, but has not done so for agricultural land use.

The Oregon Board of Forestry uses Benchmark 82 to define its Indicator of Sustainable Forest Management C.a. In addition, the Board of Forestry set a target of no net loss in the area of wildland forest use in Oregon between 2009 and 2020 .

Benchmark 81statistics reflect the slowdown in development of private land in agricultural land use to more developed land uses after county land use plans were implemented in the mid-1980s (Figure 17). Of private land in Oregon classified as agricultural land use in 1974, 97.4 percent remained in this use 35 years later
in 2009, a 3.6 percent decline. Fifty-four percent of this decline of land in agricultural land uses occurred in the 10 -year period between 1974 and 1984 before land use plans were implemented. Over the 35 -year study period, the area of private land in agricultural use remained constant in eastern Oregon, but declined 9 percent in western Oregon (Figure 18). Large declines in the area of land in agricultural use occurred in the Portland and Bend Areas between 1974 and 2009. Oregon does not have a 2010 target for Benchmark 81. However, the 2005 target was still being achieved in 2009.

Oregon is meeting the targets for wildland forest use set by Benchmark 82 and by the Indicator of Sustainable Forest Management C.a. Of Oregon's non-Federal land in wildland forest use in 1974, 98.1 percent was still in this use in 2009 (Figure 19). This exceeds the 2010 target of 97.4 percent specified by the Progress Board and the Board of Forestry. Our statistics show continuing statewide success in meeting these targets: between 1974 and 1984, 1.1 percent of Oregon's non-Federal land in wildland forest use was converted to more developed uses, but between 1984 and 2005, only 0.7 percent- 72,000 acres- were converted, a statistic which declined to only 0.1 percent- 8,000 acres- between 2005 and 2009.

However, achievement of the Benchmark 82 target of 97.4 percent varies by region and non-Federal owner class. It is being met or exceeded in all regions except in the Portland and Bend Areas and in southwest Oregon (Figure 20). Statewide by owner class the target is being achieved on land in wildland forest use owned by forest industry and by other public (non-Federal) owners, but is not being met on land in this use owned by other private owners (Figure 21). Other private owners in 2010 had 94.1 percent of land that was in wildland forest use in 1974 still in this use.

Another statistic assessed (without a specific target) by the Indicator of Sustainable Forest Management C.a. is the average number of structures per square mile on
non-Federal land in wildland forest use. As measured by this statistic, development on land remaining in wildland forest use continued at a relatively high rate until the 2005-2009 period (Figure 22), which overlaps the severe economic downturn that began in 2007. The rate at which structures were added on land in wildland forest use declined after land use plans were implemented by 1984. But, in the period 2000-2005, this rate returned to that which existed before 1984. This caused the average number of structures per square mile on land in wildland forest use to more than double between 1974 and 2005, and by 2009 the average number of structures per square mile had increased by 73 percent since 1984 .

Figure 17-Oregon Benchmark 81: Percentage of private land in Oregon classified as agricultural land use in 1974 that remained in agricultural land use in later years ${ }^{\text {a }}$

${ }^{\text {a }}$ Agricultural land for this benchmark includes the following land use classes: intensive agriculture, mixed forest/agriculture, mixed range/agriculture, and wildland range. Wildland range and mixed range/agriculture are not recognized land use classes in western Oregon.

Figure 18 - Percentage of private land classified as agricultural land use in 1974 that remained in agricultural land use in 2009, by region ${ }^{\text {a }}$

${ }^{\text {a }}$ Agricultural land for this benchmark includes the following land use classes: intensive agriculture, mixed forest/agriculture, mixed range/agriculture, and wildland range. Wildland range and mixed range/agriculture are not recognized land use classes in western Oregon.

Figure 19-Oregon Benchmark 82: Percentage of non-Federal land in Oregon classified as wildland forest land use in 1974 that remained in wildland forest use in later years


Figure 20 - Percentage of non-Federal land in Oregon classified as wildland forest use in 1974 that remained in wildland forest use in 2009, by region


Figure 21 - Percentage of non-Federal land in Oregon classified as wildland forest use in 1974 that remained in wildland forest use in 2009, by owner class


Figure 22 - Oregon Indicator of Sustainable Forest Management: The average number of structures, as a percent by year, relative to the number present in 1974 on non-Federal land classified as wildland forest in Oregon in 1974


## SUMMARY

Oregon's land use planning program appears to have slowed the conversion of non-Federal land from resource uses to more developed uses since the mid1980s, the time when comprehensive land use plans were adopted. Despite high population and income growth between 2000 and 2005, development of this resource land remained lower than before these plans were implemented; the rate of conversion of this land to low-density and urban uses averaged only about 6,000 acres annually across Oregon in this period. Development slowed again in the 2005-2009 period as the economy entered recession in 2007; losses of land in resource land uses to more developed, urbanized uses fell to their lowest levels of the 35 -year study period. Conversion of land in resource uses to low-density residential or urban uses has occurred since 1984 mostly on other private (non-industrial private) ownerships that were zoned for development in the county-level land use plans.

However, the average number of structures per square mile has increased on private land remaining in wildland forest, intensive agriculture, wildland range, and other resource uses after 1984. For example, between 2000 and 2005, the average number of structures per square mile added on private land in wildland forest use increased at a rate greater than that between 1974 and 1984. The average number of structures per square mile increased on private land in forest, agricultural, and range uses between 2005 and 2009, but at a much lower rate than in prior periods. Increases in the number of structures and the conversion of private land in resource uses to more developed uses has brought the remaining resource land closer to developed land.

The target for the retention of non-Federal land in wildland forest use set by Oregon Benchmarks and Indicators of Sustainable Forest Management for 2010 is being met statewide. Similarly, the Oregon Benchmark 2005 target for the retention of agricultural land was met; there is no 2010 target for the Oregon agricultural benchmark, but the 2005 target is still being achieved in 2010.

This report will be updated in 2014 and every 5 years thereafter. Future reports will reassess Oregon Benchmarks and Indicators of Sustainable Forest Management and will provide information for evaluating the effects of land use laws and policies on Oregon's land in resource uses and their management.

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## GLOSSARY

Agriculture (land) uses - Includes the intensive agriculture, mixed forest/agriculture, and mixed range/agriculture land use classes.

Average annual change, in area - Calculated in two steps: 1) the estimated area present, by land use class, at the beginning of a specific time period is subtracted from the estimated area present, by land use class, at the end of the period, and 2) this difference is divided by the number of years in the period.

## Average annual change, in the number of struc-

 tures - Calculated in two steps: 1) the estimated total number of structures present, by land use class, at the beginning of a specific time period is subtracted from the estimated total number of structures present, by land use class, at the end of the period, and 2) this difference is divided by the number of years in the period.
## Average annual change, in percent, in area -

 Calculated in four steps: 1) the estimated area present, by land use class, at the beginning of a specific time period is subtracted from the estimated area present, by land use class, at the end of the period, 2) this difference is divided by the estimated area present, by land use class, at the beginning of the period, 3) the result from step 2 is divided by the number of years, to the nearest month, in the period, and 4) the result from step 3 is multiplied by 100 to get the average annual change in percent.Average annual change, in percent, in the number of structures - Calculated in four steps: 1) the estimated total number of structures present, by land use class, at the beginning of a specific time period is subtracted from the estimated total number of structures present, by land use class, at the end of the period, 2) this difference is divided by the estimated total number of structures present, by land use class, at the beginning of the period, 3) the result from step 2 is divided by the number of years in the period, and 4) the result from step 3 is multiplied by 100 to get the average annual change in percent.

## Average number of structures per square mile -

 Calculated in four steps: 1) the number of structures on each 80 -acre sample plot are counted on each plot within the land use class, 2) this count is multiplied by 8 to expand the count to the number of structures per square mile, 3) these expanded estimatesare summed for all plots falling within the land use class to get the estimated total number of structures, by land use class, and 4) this sum is divided by the number of sample plots, by land use class.

Developable land - Land zoned for development by the comprehensive county land use plans mandated by the 1973 Oregon Land Conservation and Development Act. Developable land includes land zoned as rural residential or urban (land within urban growth boundaries).

Forest industry owners - Land owned by companies that grow timber for industrial use, including companies with and without wood processing plants.

Intensive agriculture (land use class) - A polygon of land in agricultural use of at least 640 acres. The polygon has fewer than 9 non-farm-related structures per 640 acres, and these structures are scattered generally across the polygon. Agricultural land occupies more than 80 -percent of the polygon. Agricultural land is land used for growing row crops, seed crops, orchards, vineyards, hayfields, nursery stock, Christmas trees, and for improved pasture and grazing land.

Land in resource (land) uses - Land in wildland forest, wildland range, intensive agriculture, mixed forest/agriculture, or mixed range/agriculture land uses.

Land use class - The dominant land use in the polygon of land surrounding the sample point. It is not zoning specified in a comprehensive land use plan. Each sample point used to develop the information used in this study was classified into 1 of 8 land use classes. The 8 land use classes are: wildland forest, wildland range, intensive agriculture, mixed forest/ agriculture, mixed range/agriculture, low-density residential, urban, and other.

Land use zone - The zoning present at a sample point. It was obtained from county and municipal maps of comprehensive land use plans compiled by the Oregon Department of Land Conservation and Development. Zone was determined for all sample points on non-Federal land.

## Low-density residential (land use class) -

A polygon of land of any size in rural residential or low-density commercial uses. The polygon has 9 or more structures per 640 acres, and these structures
are scattered generally across the polygon. The average acreage for each development is less than 80 acres, but average residential lot size is greater than one acre. Improved road patterns are generally spaced onequarter mile or less apart. Examples are rural subdivisions not attached to a town or city and forest or agricultural land containing many structures that are not used for forest or farm management.

## Mixed forest/agriculture (land use class) - A

 polygon of land with intermingled forest, agricultural, and range uses (range use is recognized only in eastern Oregon). The polygon is at least 640 acres in size and has fewer than 9 structures per 640 acres. These structures are scattered generally across the polygon. Land in agricultural use comprises 20 to 80 percent of the polygon, and the remainder is land in forest, range (eastern Oregon only), or "other" (naturally non-vegetated) land uses; land in forest use is at least 50 percent of this remainder. Improved roads within the polygon are generally spaced a half mile or more apart.Mixed range/agriculture (land use class) - A polygon of land with intermingled range, agricultural, and forest uses. The polygon is at least 640 acres in size and has fewer than 9 structures per 640 acres. These structures are scattered generally across the polygon. Land in agricultural use comprises 20 to 80 percent of the polygon, and the remainder is land in range, forest, or "other" (naturally non-vegetated) land uses; land in forest use is less than 50 percent of this remainder. Improved roads within the polygon are generally spaced a half mile or more apart. This land use classification is used only in eastern Oregon.

Nearest distances to adjacent land uses - The nearest distances between a sample point and the boundaries of all adjacent land uses within 1 mile of the point. The attribute was interpreted on all sample points on non-Federal land. This attribute enabled us to understand how proximity to more developed areas affects rates and patterns of land use change.

Number of structures - A count of the number of individual buildings or clusters of buildings within 80 - and 640 -acre circles centered on each sample point. The attribute is a measure of development which provides a more precise assessment of change toward urbanization than is possible merely by examining area changes among the 8 land use classes. We did not collect number of structures on sample points
classified as urban use.
Non-Federal owners - All public, private, and industrial owners except for Federal owners such as the U.S Department of Agriculture, Forest Service, and the Bureau of Land Management.

Non-developable land - Land zoned for forest, farm, or range use by the comprehensive county land use plans mandated by the 1973 Oregon Land Conservation and Development Act. Non-developable land includes land zoned as forest, agriculture, forest/ agriculture, and range.

Other private owners - Private land not owned by the forest industry. Includes farmer-owned land and other miscellaneous private land.

Other (land use class) - A polygon of naturally non-vegetated land of at least 640 acres. Examples include beaches and dunes, lava fields, mountaintop rock and snow, and large bodies of water including reservoirs or lakes. This land use class was not used in reports previous to 2005 but is backdated to 1974 in this study.

Other public owners - Land administered by public agencies other than the U.S. Department of Agriculture, Forest Service and the U.S. Department of Interior, Bureau of Land Management. Includes land owned by local, county, and state agencies, and land owned by Native Americans.

Owner class - A broad classification of ownership. It was determined for all sample points on nonFederal land. Three owner classes were recognized: forest industry, other private and other public (State, county, local public, and Native American owners). Area change among non-Federal (and Federal) owner classes is not estimated in this report. This information was derived from a 1986 forest inventory in eastern Oregon and a 1997 forest inventory in western Oregon; both inventories were of non-Federal land.

Private land - Land owned by forest industry and other private owners.

Structure - Individual buildings or clusters of buildings. These buildings may or may not be related to the management of the land on which they are located.

Urban (land use class) - A polygon of land of at least 40 acres that is comprised of commercial, service,
or subdivided residential areas with city street patterns and closely-spaced buildings. Single family residential lots generally are less than one acre. All land within the incorporated boundaries of incorporated municipalities is in this class. If the following are within $1 / 4$ mile of this urban classification, they are classified as urban: golf courses, industrial parks, airports, maintained parks, mill and other industrial complexes, quarries, and dams. If less than 40 acres, the polygon is classified as low-density residential use.

Wildland forest (land use class) - A polygon of land in forest use of at least 640 acres. The polygon has fewer than 5 structures per 640 acres, and these structures are scattered generally across the polygon. Forest land occupies more than 80-percent of the polygon and the remainder is agricultural or "other" (naturally non-vegetated) land. In eastern Oregon, the remainder can also include range land.

Wildland range (land use class) - A polygon of undeveloped land in range use (non-forest or nonagricultural land) of at least 640 acres. The polygon has fewer than 5 structures per 640 acres, and these structures are scattered generally across the area. Forest land comprises less than 51 percent of the polygon, and agricultural land, less than 20 percent. This class may include grassland, non-irrigated pastures or hayfields, marshes or sagebrush land. Land in this classification often does not receive enough precipitation or lacks the soil quality to support tree growth of any significant size or density. Western juniper and other lower-productivity forest areas are sometimes classified as wildland range because grazing is the dominant use. This land use classification is used only in eastern Oregon.

## APPENDIX - DETAILED INFORMATION

Table A1 Area of non-Federal land in Oregon, by owner class, land use class, and year
Table A2 Area, in percent, of non-Federal land in Oregon, by owner class, land use class, and year
Table A3 Average annual change in the area of non-Federal land in Oregon, by owner class, land use class, and period

Table A4 Average annual change, in percent, in the area of non-Federal land in Oregon, by owner class, land use class, and period

Table A5 Changes in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to 2009
Table A6 Changes, in percent, in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to 2009

Table A7 Average number of structures per square mile on non-Federal land in Oregon between 1974 and 2009, by owner class, land use class, and year

Table A8 Average annual change, in percent, in the average number of structures per square mile on non-Federal lands in Oregon between 1974 and 2009, by owner class, land use class, and period

Table A9 Average number of structures per square mile on non-Federal land in Oregon that stayed in the same land use class between 1974 and 2009, by owner class, land use class, and year

Table A10 Average annual change, in percent, in the average number of structures per square mile on non-Federal lands in Oregon that stayed in the same land use class between 1974 and 2009, by owner class, land use class, and period

Table A11 Area of non-Federal land in Oregon, by owner class, number of structures, and year
Table A12 Area, in percent, of non-Federal land in Oregon, by owner class, number of structures, and year
Table B1 Area of non-Federal land in Oregon, by region, land use class, and year
Table B2 Area of private land in Oregon, by region, land use class, and year
Table B3 Area, in percent, of non-Federal land in Oregon, by region, land use class, and year
Table B4 Area, in percent, of private land in Oregon, by region, land use class, and year
Table B5 Average number of structures per square mile on non-Federal land in Oregon, by region, land use class, and year

Table B6 Average number of structures per square mile on private land in Oregon, by region, land use class, and year

Table C1 Area of non-Federal lands in western Oregon, by county, land use class, and year
Table C2 Area of non-Federal lands in eastern Oregon, by county, land use class, and year

Table A1 - Area of non-Federal land in Oregon, by owner class, land use class, and year abc

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | $\begin{aligned} & \text { Net change, } \\ & \text { in area, } \\ & 1974 \text { to } 2009 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand acres |  |  |  |  |  |  |
| All non-Federal owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 10,697 | 10,580 | 10,531 | 10,520 | 10,504 | 10,496 | -200 |
| Wildland range | 9,320 | 9,187 | 9,139 | 9,112 | 9,096 | 9,091 | -229 |
| Mixed forest/agriculture | 947 | 895 | 873 | 871 | 864 | 856 | -91 |
| Mixed range/agriculture | 640 | 646 | 648 | 660 | 663 | 663 | 23 |
| Intensive agriculture | 5,849 | 5,795 | 5,779 | 5,751 | 5,741 | 5,730 | -119 |
| Low-density residential | 791 | 1,064 | 1,159 | 1,184 | 1,201 | 1,225 | 434 |
| Urban | 378 | 454 | 491 | 523 | 551 | 560 | 182 |
| Other | 85 | 85 | 85 | 85 | 85 | 84 | 0 |
| Total area | 28,706 | 28,706 | 28,706 | 28,706 | 28,706 | 28,706 | 0 |
| Forest industry owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 6,171 | 6,164 | 6,159 | 6,159 | 6,160 | 6,158 | -13 |
| Wildland range | 331 | 308 | 307 | 307 | 307 | 306 | -25 |
| Mixed forest/agriculture | 50 | 49 | 50 | 50 | 50 | 50 | 0 |
| Mixed range/agriculture | 4 | 2 | 2 | 2 | 2 | 2 | -2 |
| Intensive agriculture | 53 | 75 | 75 | 75 | 75 | 75 | 22 |
| Low-density residential | 15 | 25 | 30 | 30 | 29 | 32 | 17 |
| Urban | 5 | 5 | 6 | 6 | 6 | 6 | 1 |
| Other | - | - | - | - | - | - | - |
| Total area | 6,629 | 6,629 | 6,629 | 6,629 | 6,629 | 6,629 | 0 |
| Other private owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 3,039 | 2,934 | 2,893 | 2,882 | 2,866 | 2,860 | -179 |
| Wildland range | 7,950 | 7,876 | 7,830 | 7,804 | 7,789 | 7,784 | -166 |
| Mixed forest/agriculture | 839 | 792 | 769 | 767 | 761 | 753 | -86 |
| Mixed range/agriculture | 621 | 622 | 624 | 636 | 638 | 638 | 18 |
| Intensive agriculture | 5,536 | 5,438 | 5,424 | 5,400 | 5,391 | 5,381 | -155 |
| Low-density residential | 710 | 964 | 1,049 | 1,073 | 1,092 | 1,112 | 402 |
| Urban | 311 | 380 | 416 | 443 | 468 | 477 | 166 |
| Other | 29 | 29 | 29 | 29 | 29 | 29 | - |
| Total area | 19,034 | 19,034 | 19,034 | 19,034 | 19,034 | 19,034 | 0 |
| Other public owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 1,486 | 1,481 | 1,479 | 1,479 | 1,479 | 1,478 | -8 |
| Wildland range | 1,038 | 1,003 | 1,001 | 1,001 | 1,000 | 1,000 | -38 |
| Mixed forest/agriculture | 58 | 55 | 55 | 55 | 54 | 54 | -5 |
| Mixed range/agriculture | 15 | 22 | 22 | 22 | 22 | 22 | 7 |
| Intensive agriculture | 260 | 283 | 279 | 275 | 275 | 274 | 14 |
| Low-density residential | 66 | 75 | 81 | 81 | 80 | 81 | 16 |
| Urban | 63 | 69 | 70 | 74 | 77 | 77 | 14 |
| Other | 55 | 55 | 55 | 55 | 55 | 55 | - |
| Total area | 3,042 | 3,042 | 3,042 | 3,042 | 3,042 | 3,042 | 0 |

- = less than 500 acres or none found.
${ }^{\mathrm{a}}$ Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 19851987 inventory of non-Federal forest land in eastern Oregon.

Table A2 - Area, in percent, of non-Federal land in Oregon, by owner class, land use class, and year abc

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | Net change, in percent, $1974 \text { to } 2009$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent |  |  |  |  |  |  |
| All non-Federal owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 37.3 | 36.9 | 36.7 | 36.6 | 36.6 | 36.6 | -1.9 |
| Wildland range | 32.5 | 32.0 | 31.8 | 31.7 | 31.7 | 31.7 | -2.5 |
| Mixed forest/agriculture | 3.3 | 3.1 | 3.0 | 3.0 | 3.0 | 3.0 | -9.6 |
| Mixed range/agriculture | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 3.6 |
| Intensive agriculture | 20.4 | 20.2 | 20.1 | 20.0 | 20.0 | 20.0 | -2.0 |
| Low-density residential | 2.8 | 3.7 | 4.0 | 4.1 | 4.2 | 4.3 | 54.9 |
| Urban | 1.3 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 48.0 |
| Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | -0.5 |
| Total percent | 100 | 100 | 100 | 100 | 100 | 100 | NA |
| Forest industry owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 93.1 | 93.0 | 92.9 | 92.9 | 92.9 | 92.9 | -0.2 |
| Wildland range | 5.0 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | -7.4 |
| Mixed forest/agriculture | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | -0.9 |
| Mixed range/agriculture | 0.1 | - | - | - | - | - | -42.6 |
| Intensive agriculture | 0.8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 42.3 |
| Low-density residential | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 109.1 |
| Urban | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 30.0 |
| Other | - | - | - | - | - | - |  |
| Total percent | 100 | 100 | 100 | 100 | 100 | 100 | NA |
| Other private owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 16.0 | 15.4 | 15.2 | 15.1 | 15.1 | 15.0 | -5.9 |
| Wildland range | 41.8 | 41.4 | 41.1 | 41.0 | 40.9 | 40.9 | -2.1 |
| Mixed forest/agriculture | 4.4 | 4.2 | 4.0 | 4.0 | 4.0 | 4.0 | -10.2 |
| Mixed range/agriculture | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | 3.4 | 2.9 |
| Intensive agriculture | 29.1 | 28.6 | 28.5 | 28.4 | 28.3 | 28.3 | -2.8 |
| Low-density residential | 3.7 | 5.1 | 5.5 | 5.6 | 5.7 | 5.8 | 56.6 |
| Urban | 1.6 | 2.0 | 2.2 | 2.3 | 2.5 | 2.5 | 53.6 |
| Other | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | -1.6 |
| Total percent | 100 | 100 | 100 | 100 | 100 | 100 | NA |
| Other public owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 48.9 | 48.7 | 48.6 | 48.6 | 48.6 | 48.6 | -0.5 |
| Wildland range | 34.1 | 33.0 | 32.9 | 32.9 | 32.9 | 32.9 | -3.7 |
| Mixed forest/agriculture | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | -7.9 |
| Mixed range/agriculture | 0.5 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 46.8 |
| Intensive agriculture | 8.6 | 9.3 | 9.2 | 9.0 | 9.1 | 9.0 | 5.3 |
| Low-density residential | 2.2 | 2.5 | 2.7 | 2.7 | 2.6 | 2.7 | 24.0 |
| Urban | 2.1 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 22.1 |
| Other | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |  |
| Total percent | 100 | 100 | 100 | 100 | 100 | 100 | NA |

NA = Not applicable.

- = less than 0.05 percent or none found.
${ }^{\mathrm{a}}$ Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
Table A3 - Average annual change in the area of non-Federal land in Oregon, by owner class,

|  | Average annual change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} 1974- \\ 1984 \\ \hline \end{array}$ | $\begin{array}{r} 1984- \\ 1994 \end{array}$ | $\begin{array}{r} 1994- \\ 2000 \end{array}$ | $\begin{array}{r} 2000- \\ 2005 \end{array}$ | $\begin{array}{r} 2005- \\ 2009 \\ \hline \end{array}$ |
| All non-Federal owners |  |  | Acres ${ }^{\mathbf{a}}$ |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | -12,100 | -4,300 | -1,900 | -3,200 | -2,000 |
| Wildland range | -13,700 | -5,600 | -3,800 | -3,800 | -1,400 |
| Mixed forest/agriculture | -5,500 | -1,900 | -300 | -1,400 | -2,000 |
| Mixed range/agriculture | 500 | 300 | 1,700 | 600 | - |
| Intensive agriculture | -4,600 | -1,900 | -4,200 | -2,100 | -2,800 |
| Low-density residential | 29,500 | 8,600 | 3,900 | 3,400 | 6,100 |
| Urban | 8,700 | 3,200 | 5,100 | 5,800 | 2,200 |
| Other | - | - | - | - | -100 |
| Forest industry owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | -700 | -500 | - | 100 | -500 |
| Wildland range | -2,100 | -100 | - | - | -200 |
| Mixed forest/agriculture | -100 | 100 | - | - | - |
| Mixed range/agriculture | -300 | - | - | - | - |
| Intensive agriculture | 2,000 | - | - | -100 | - |
| Low-density residential | 1,100 | 400 | - | -100 | 700 |
| Urban | - | - | - | 100 | - |
| Other | - | - | - | - | - |
| Other private owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | -10,900 | -3,700 | -1,800 | -3,400 | -1,400 |
| Wildland range | -7,600 | -5,400 | -3,700 | -3,700 | -1,200 |
| Mixed forest/agriculture | -5,000 | -2,000 | -300 | -1,200 | -2,000 |
| Mixed range/agriculture | 100 | 300 | 1,700 | 600 | - |
| Intensive agriculture | -8,600 | -1,600 | -3,600 | -2,100 | -2,500 |
| Low-density residential | 27,500 | 7,700 | 3,900 | 3,900 | 4,900 |
| Urban | 8,000 | 3,100 | 4,400 | 5,100 | 2,200 |
| Other | - | - | - | - | -100 |
| Other public owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | -600 | -200 | - | - | -100 |
| Wildland range | -4,200 | -200 | -100 | -100 | - |
| Mixed forest/agriculture | -400 | - | - | -200 | - |
| Mixed range/agriculture | 700 | - | - | - | - |
| Intensive agriculture | 1,900 | -400 | -600 | 100 | -400 |
| Low-density residential | 1,000 | 600 | 100 | -400 | 500 |
| Urban | 700 | 100 | 700 | 600 | - |
| Other | - | - | - | - | - |

$-=$ less than 50 acres or none found.
b Totals may be off because of rounding. Acres are rounded to the nearest 100 acres. ${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. ${ }^{\mathrm{d}}$ See Glossary for how the average annual change in the area of a land use class is calculated
Table A5 - Changes in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to $2009{ }^{\text {abcd }}$

| All non-Federal owners | Land use class |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wildland forest | Wildland range | Mixed forest/ agriculture | Mixed range/ agriculture | Intensive agriculture | Low-density residential | Urban | $\text { Other }{ }^{\mathrm{d}}$ |
|  |  |  |  | Thousa |  |  |  |  |
| 1974 area, all non-Federal owners | 10,697 | 9,320 | 947 | 640 | 5,849 | 791 | 378 | 85 |
| Increase in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | 25 | - | 9 | 163 | 9 | - |
| From wildland range use to: | - | NA | - | 31 | 103 | 88 | 8 | - |
| From mixed forest/agriculture use to: | 2 | 2 | NA | - | 2 | 107 | 9 | - |
| From mixed range/agriculture use to: | - | - | - | NA | 8 | - | - | - |
| From intensive agriculture use to: | 3 | - | 6 | - | NA | 143 | 89 | - |
| From low-density residential use to: | - | - | - | - | - | NA | 67 | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in area between 1974 and 2009 | 6 | 2 | 32 | 31 | 122 | 501 | 182 | - |
| Decreases in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -2 | - | -3 | - | - | - |
| To wildland range use from: | - | NA | -2 | - | - | - | - | - |
| To mixed forest/agriculture use from: | -25 | - | NA | - | -6 | - | - | - |
| To mixed range/agriculture use from: | - | -31 | - | NA | - | - | - | - |
| To intensive agriculture use from: | -9 | -103 | -2 | -8 | NA | - | - | - |
| To low-density residential use from: | -163 | -88 | -107 | - | -143 | NA | - | - |
| To urban use from: | -9 | -8 | -9 | - | -89 | -67 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area between 1974 and 2009 | -206 | -231 | -122 | -8 | -241 | -67 | - | - |
| 2009 area, all non-Federal owners | 10,496 | 9,091 | 856 | 663 | 5,730 | 1,225 | 560 | 85 |
| Forest industry owners |  |  |  | Thous |  |  |  |  |
| 1974 area, forest industry owners | 6,171 | 331 | 50 | 4 | 53 | 15 | 5 | - |
| Increase in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | 3 | - | - | 12 | - | - |
| From wildland range use to: | - | NA | - | - | 23 | 2 | - | - |
| From mixed forest/agriculture use to: | 1 | - | NA | - | - | 2 | - | - |
| From mixed range/agriculture use to: | - | - | - | NA | 2 | - | - | - |
| From intensive agriculture use to: | - | - | - | - | NA | 2 | - | - |
| From low-density residential use to: | - | - | - | - | - | NA | - | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in area between 1974 and 2009 | 2 | - | 3 | - | 25 | 18 | 1 | - |
| Decreases in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -1 | - | - | - | - | - |
| To wildland range use from: | - | NA | - | - | - | - | - | - |
| To mixed forest/agriculture use from: | -3 | - | NA | - | - | - | - | - |
| To mixed range/agriculture use from: | - | - | - | NA | - | - | - | - |
| To intensive agriculture use from: | - | -23 | - | -2 | NA | - | - | - |
| To low-density residential use from: | -12 | -2 | -2 | - | -2 | NA | - | - |
| To urban use from: | - | - | - | - | - | - | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area between 1974 and 2009 | -15 | -25 | -3 | -2 | -3 | -1 | - | - |
| 2009 area, forest industry owners | 6,158 | 306 | 50 | 2 | 75 | 32 | 6 | - |
| - = less than 500 acres changed between 1974 and 2009. |  |  |  |  |  |  |  |  |
| ${ }^{\text {a }}$ Totals may be off due to rounding. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ${ }^{\mathrm{b}}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009. ${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. ${ }^{\mathrm{d}}$ There was no area change recognized within the "other" land use class. |  |  |  |  |  |  |  |  |

Table A5 (Continued) - Changes in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to 2009 abed

| Other private owners | Land use class |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wildland forest | Wildland range | Mixed forest/ agriculture | Mixed range/ agriculture | Intensive agriculture | Low-density residential | Urban | Other ${ }^{\text {d }}$ |
|  |  |  |  |  |  |  |  |  |
| 1974 area, other private owners | 3,039 | 7,950 | 839 | $621$ | 5,536 | 710 | 311 | 29 |
| Increase in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | 22 | - | 8 | 144 | 9 | - |
| From wildland range use to: | - | NA | - | 24 | 52 | 85 | 7 | - |
| From mixed forest/agriculture use to: | 1 | 2 | NA | - | 2 | 99 | 9 | - |
| From mixed range/agriculture use to: | - | - | - | NA | 6 | - | - | - |
| From intensive agriculture use to: | 2 | - | 6 | - | NA | 134 | 81 | - |
| From low-density residential use to: | - | - | - | - | - | NA | 61 | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in area between 1974 and 2009 | 4 | 2 | 27 | 24 | 68 | 463 | 166 | - |
| Decreases in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -1 | - | -2 | - | - | - |
| To wildland range use from: | - | NA | -2 | - | - | - | - | - |
| To mixed forest/agriculture use from: | -22 | - | NA | - | -6 | - | - | - |
| To mixed range/agriculture use from: | - | -24 | - | NA | - | - | - | - |
| To intensive agriculture use from: | -8 | -52 | -2 | -6 | NA | - | - | - |
| To low-density residential use from: | -144 | -85 | -99 | - | -134 | NA | - | - |
| To urban use from: | -9 | -7 | -9 | - | -81 | -61 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area between 1974 and 2009 | -183 | -168 | -113 | -7 | -223 | -61 | - | - |
| 2009 area, other private owners | 2,860 | 7,784 | 753 | 638 | 5,381 | 1,112 | 477 | 29 |
| Other public owners |  |  |  | Thous |  |  |  |  |
| 1974 area, other public owners | 1,486 | 1,038 | 58 | 15 | 260 | 66 | 63 | 55 |
| Increase in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | - | - | - | 7 | - | - |
| From wildland range use use to: | - | NA | - | 7 | 28 | 2 | 1 | - |
| From mixed forest/agriculture use to: | - | - | NA | - | - | 6 | - | - |
| From mixed range/agriculture use to: | - | - | - | NA | - | - | - | - |
| From intensive agriculture use to: | - | - | 1 | - | NA | 6 | 7 | - |
| From low-density residential use to: | - | - | - | - | - | NA | 6 | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in area between 1974 and 2009 | - | - | 1 | 7 | 28 | 21 | 14 | - |
| Decreases in area between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | - | - | - | - | - | - |
| To wildland range use from: | - | NA | - | - | - | - | - | - |
| To mixed forest/agriculture use from: | - | - | NA | - | -1 | - | - | - |
| To mixed range/agriculture use from: | - | -7 | - | NA | - | - | - | - |
| To intensive agriculture use from: | - | -28 | - | - | -NA | - | - | - |
| To low-density residential use from: | -7 | -2 | -6 | - | -6 | NA | - | - |
| To urban use from: | - | -1 | - | - | -7 | -6 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area between 1974 and 2009 | -8 | -38 | -6 | - | -14 | -6 | - | - |
| 2009 area, other public owners | 1,478 | 1,000 | 54 | 22 | 274 | 81 | 77 | 55 |

$-=$ less than 500 acres changed between 1974 and 2009.
NA $=$ Not applicable. (A land use cannot change from or to itself)
${ }^{\mathrm{a}}$ Totals may be off due to rounding.
${ }^{\mathrm{b}}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009 . ${ }^{c}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. ${ }^{\mathrm{d}}$ There was no change in the area of the "other" land use class.
Table A6 - Changes, in percent, in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to $2009{ }^{\text {abcd }}$

|  | Land use class |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wildland forest | Wildland range | Mixed forest/ agriculture | Mixed range/ agriculture | Intensive agriculture | Low-density residential | Urban | Other ${ }^{\text {d }}$ |
| All non-Federal owners | Thousand acres |  |  |  |  |  |  |  |
| 1974 area, all non-Federal owners | 10,697 | 9,320 | 947 | 640 | 5,849 | 791 | 378 | 85 |
| Increase in area, in percent, between 1974 and 2009: | Percent of 1974 area |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | 2.6 | - | 0.2 | 20.6 | 2.5 | - |
| From wildland range use to: | - | NA | - | 4.9 | 1.8 | 11.2 | 2.2 | - |
| From mixed forest/agriculture use to: | <0.1 | $<0.1$ | NA | - | $<0.1$ | 13.5 | 2.5 | - |
| From mixed range/agriculture use to: | - | - | - | NA | 0.1 | 0.1 | - | - |
| From intensive agriculture use to: | $<0.1$ | - | 0.7 | - | NA | 18.0 | 23.4 | - |
| From low-density residential use to: | <0.1 | - | - | - | - | NA | 17.7 | - |
| From urban use to: | - | - | - | - | $<0.1$ | - | NA | - |
| From other use to: | - | - | - | - | - | 0.1 | - | NA |
| Total increase in area, in percent, between 1974 and 2009 | 0.1 | <0.1 | 3.3 | 4.9 | 2.1 | 63.4 | 48.2 | - |
| Decreases in area, in percent, between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -0.2 | - | -0.0 | -0.1 | - | - |
| To wildland range use from: | - | NA | -0.2 | - | - | - | - | - |
| To mixed forest/agriculture use from: | -0.2 | - | NA | - | -0.1 | - | - | - |
| To mixed range/agriculture use from: | - | -0.3 | - | NA | - | - | - | - |
| To intensive agriculture use from: | -0.1 | -1.1 | -0.2 | -1.2 | NA | - | -0.1 | - |
| To low-density residential use from: | -1.5 | -0.9 | -11.3 | -0.1 | -2.4 | NA | - | -0.5 |
| To urban use from: | -0.1 | -0.1 | -1.0 | - | -1.5 | -8.4 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area, in percent, between 1974 and 2009 | -1.9 | -2.5 | -12.9 | -1.3 | -4.1 | -8.5 | -0.1 | -0.5 |
| 2009 area as a percent of 1974 area | 98.1 | 97.5 | 90.4 | 103.6 | 98.0 | 154.9 | 148.0 | 99.5 |
| Forest industry owners | Thousand acres |  |  |  |  |  |  |  |
| 1974 area, forest industry owners | 6,171 | 331 | 50 | 4 | 53 | 15 | 5 | - |
| Increase in area, in percent, between 1974 and 2009: | Percent of 1974 area |  |  |  |  |  |  |  |
| From wildland forest use to: | NA | - | 5.6 | - | 0.9 | 75.8 | 10.0 | - |
| From wildland range use to: | - | NA | - | - | 43.2 | 12.1 | - | - |
| From mixed forest/agriculture use to: | <0.1 | - | NA | - | - | 15.1 | - | - |
| From mixed range/agriculture use to: | - | - | - | NA | 3.5 | - | - | - |
| From intensive agriculture use to: | <0.1 | - | - | - | NA | 12.1 | 10.0 | - |
| From low-density residential use to: | $<0.1$ | - | - | - | - | NA | 10.0 | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in area, in percent, between 1974 and 2009 | <0.1 | - | 5.6 | - | 47.6 | 115.2 | 30.0 | - |
| Decreases in area, in percent, between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -1.9 | - | -0.9 | -3.0 | - | - |
| To wildland range use from: | - | NA | - | - | - | - | - | - |
| To mixed forest/agriculture use from: | -0.0 | - | NA | - | - | - | - | - |
| To mixed range/agriculture use from: | - | - | - | NA | - | - | - | - |
| To intensive agriculture use from: | -0.0 | -6.9 | - | -42.6 | NA | - | - | - |
| To low-density residential use from: | -0.2 | -0.6 | -4.6 | - | -3.5 | NA | - | - |
| To urban use from: | -0.0 | - | - | - | -0.9 | -3.0 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area, in percent, between 1974 and 2009 | -0.2 | -7.4 | -6.5 | -42.6 | -5.3 | -6.1 | - | - |
| 2009 area as a percent of 1974 area | 99.8 | 92.6 | 99.1 | 57.4 | 142.3 | 209.1 | 130.0 | 100.0 |


$\mathrm{NA}=$ Not applicable. (A land use cannot change from or to itself).
${ }^{\text {a }}$ Totals may be off due to rounding.
${ }^{\mathrm{b}}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009. ${ }^{\text {c }}$ A Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
Table A6 (Continued) - Changes, in percent, in the area of non-Federal lands in Oregon, by owner class and land use class, 1974 to $2009{ }^{\text {abcd }}$

|  | Land use class |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wildland forest | Wildland range | Mixed forest/ agriculture | Mixed range/ agriculture | Intensive agriculture | Low-density residential | Urban | Other ${ }^{\text {d }}$ |
| Other private owners |  |  |  | Thous | cres |  |  |  |
| 1974 area, other private owners | 3,039 | 7,950 | 839 | 621 | 5,536 | 710 | 311 | 29 |
| Increase in area, in percent, between 1974 and 2009: |  |  |  | Percent of | area |  |  |  |
| From wildland forest use to: | NA | - | 2.6 | - | 0.2 | 20.2 | 2.8 | - |
| From wildland range use to: | - | NA | - | 3.9 | 0.9 | 11.9 | 2.2 | - |
| From mixed forest/agriculture use to: | $<0.1$ | $<0.1$ | NA | - | <0.1 | 14.0 | 2.8 | - |
| From mixed range/agriculture use to: | - | - | - | NA | 0.1 | 0.1 | - | - |
| From intensive agriculture use to: | 0.1 | - | 0.7 | - | NA | 18.9 | 26.1 | - |
| From low-density residential use to: | - | - | - | - | - | NA | 19.6 | - |
| From urban use to: | - | - | - | - | - | - | NA | - |
| From other use to: | - | - | - | - | - | 0.1 | - | NA |
| Total increase in area, in percent, between 1974 and 2009 | 0.1 | <0.1 | 3.3 | 3.9 | 1.2 | 65.2 | 53.6 | - |
| Decreases in area, in percent, between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | -0.2 | - | -0.0 | - | - | - |
| To wildland range use from: | - | NA | -0.2 | - | - | - | - | - |
| To mixed forest/agriculture use from: | -0.7 | - | NA | - | -0.1 | - | - | - |
| To mixed range/agriculture use from: | - | -0.3 | - | NA | - | - | - | - |
| To intensive agriculture use from: | -0.3 | -0.7 | -0.2 | -1.0 | NA | - | - | - |
| To low-density residential use from: | -4.7 | -1.1 | -11.8 | -0.1 | -2.4 | NA | - | -1.6 |
| To urban use from: | -0.3 | -0.1 | -1.0 | - | -1.5 | -8.6 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area, in percent, between 1974 and 2009 | -6.0 | -2.1 | -13.5 | -1.1 | -4.0 | -8.6 | - | -1.6 |
| 2009 area as a percent of 1974 area | 94.1 | 97.9 | 89.8 | 102.9 | 97.2 | 156.6 | 153.6 | 98.4 |
| Other public owners |  |  |  | Thousa |  |  |  |  |
| 1974 area, other public owners | 1,486 | 1,038 | 58 | 15 | 260 | 66 | 63 | 55 |
| Increase in area, in percent, between 1974 and 2009: |  |  |  | Percent of | area |  |  |  |
| From wildland forest use to: | NA | - | 0.8 | 位 | - | 11.3 | - | - |
| From wildland range use to: | - | NA | - | 46.8 | 10.7 | 2.8 | 2.2 | - |
| From mixed forest/agriculture use to: | - | - | NA | - | - | 8.5 | 0.7 | - |
| From mixed range/agriculture use to: | - | - | - | NA | - | - | - | - |
| From intensive agriculture use to: | - | - | 1.6 | - | NA | 9.9 | 11.0 | - |
| From low-density residential use to: | - | - | - | - | - | NA | 8.8 | - |
| From urban use to: | - | - | - | - | 0.2 | - | NA | - |
| From other use to: | - | - | - | - | - | - | - | NA |
| Total increase in are, in percent, between 1974 and 2009 | - | - | 2.4 | 46.8 | 10.8 | 32.5 | 22.8 | - |
| Decreases in area, in percent, between 1974 and 2009: |  |  |  |  |  |  |  |  |
| To wildland forest use from: | NA | - | - | - | - | - | - | - |
| To wildland range use from: | - | NA | - | - | - | - | - | - |
| To mixed forest/agriculture use from: | -0.0 | - | NA | - | -0.4 | - | - | - |
| To mixed range/agriculture use from: | - | -0.7 | - | NA | - | - | - | - |
| To intensive agriculture use from: | - | -2.7 | - | - | NA | - | -0.7 | - |
| To low-density residential use from: | -0.5 | -0.2 | -9.5 | - | -2.5 | NA | - | - |
| To urban use from: | - | -0.1 | -0.8 | - | -2.7 | -8.5 | NA | - |
| To other use from: | - | - | - | - | - | - | - | NA |
| Total decrease in area, in percent, between 1974 and 2009 | -0.5 | -3.7 | -10.3 | - | -5.5 | -8.5 | -0.7 | - |
| 2009 area as a percent of 1974 area | 99.5 | 96.3 | 92.1 | 146.8 | 105.3 | 124.0 | 122.1 | 100.0 |

[^11]|  | Average annual change in the average number of structures per square mile |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} 1974- \\ 1984 \end{array}$ | $\begin{array}{r} 1984- \\ 1994 \end{array}$ | $\begin{array}{r} 1994- \\ 2000 \end{array}$ | $\begin{array}{r} 2000- \\ 2005 \end{array}$ | $\begin{array}{r} 2005- \\ 2009 \end{array}$ |
|  | Percent |  |  |  |  |
| All non-Federal owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.44 | 2.11 | 1.60 | 4.05 | 0.61 |
| Wildland range | 3.18 | 2.50 | 1.07 | 1.90 | 1.75 |
| Mixed forest/agriculture | 3.34 | 2.01 | 1.55 | 1.73 | 0.48 |
| Mixed range/agriculture | 0.97 | 5.66 | 5.15 | 1.49 | 3.12 |
| Intensive agriculture | 1.32 | 1.14 | 1.08 | 0.70 | 0.48 |
| Low-density residential | 1.95 | 1.44 | 1.77 | 1.62 | 0.75 |
| Other | 7.15 | $<0.01$ | 2.74 | 5.91 | -19.85 |
| Forest industry owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 2.66 | 2.12 | 1.91 | 4.71 | 1.00 |
| Wildland range | 0.65 | 0.03 | 10.78 | 9.91 | 7.63 |
| Mixed forest/agriculture | 2.68 | 1.63 | 1.61 | 2.04 | 1.32 |
| Mixed range/agriculture | - | - | - | - | - |
| Intensive agriculture | -1.41 | 1.02 | 0.77 | 1.93 | 0.82 |
| Low-density residential | 1.62 | 1.45 | 1.97 | 1.03 | -0.93 |
| Other | - | - | - | - | - |
| Other private owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.70 | 2.16 | 1.53 | 4.07 | 0.53 |
| Wildland range | 3.07 | 2.54 | 1.03 | 1.90 | 1.71 |
| Mixed forest/agriculture | 3.39 | 2.05 | 1.55 | 1.74 | 0.47 |
| Mixed range/agriculture | 1.03 | 5.68 | 4.81 | 1.53 | 3.18 |
| Intensive agriculture | 1.40 | 1.13 | 1.06 | 0.69 | 0.50 |
| Low-density residential | 1.87 | 1.47 | 1.81 | 1.69 | 0.81 |
| Other | 6.60 | $<0.01$ | $<0.01$ | 6.15 | -30.41 |
| Other public owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.85 | 2.18 | 0.93 | 3.40 | 2.46 |
| Wildland range | 5.24 | 1.94 | 2.62 | 2.22 | 3.32 |
| Mixed forest/agriculture | 2.05 | 1.69 | 1.22 | 1.13 | 0.95 |
| Mixed range/agriculture | - | - | - | 0.00 | 0.00 |
| Intensive agriculture | 0.32 | 1.32 | 1.54 | 0.72 | -0.23 |
| Low-density residential | 3.21 | 1.24 | 1.11 | 0.70 | 0.70 |
| Other | - |  | 20.41 | 6.16 | - |
| - = less than an average annual change of 0.005 structures per square mile present or none found. ${ }^{\text {a }}$ Number of structures includes only structures that stayed in same land use class between 1974 and 2009. <br> ${ }^{\mathrm{b}}$ Number of structures includes all structures present in a specified land use class during the specified period. <br> ${ }^{\text {c }}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009. <br> ${ }^{\mathrm{d}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. <br> ${ }^{\mathrm{e}}$ See Glossary for how the average annual change, in percent, in the number of structures within a land use class is calculated. |  |  |  |  |  |

Table A7 - Average number of structures per square mile on non-Federal land in Oregon between 1974 and

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | Net change, in percent, 1974 to 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average number of structures per square mile |  |  |  |  |  |  |
| All non-Federal owners Land use class: |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 0.7 | 0.9 | 1.2 | 1.3 | 1.6 | 1.6 | 140.3 |
| Wildland range | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 108.5 |
| Mixed forest/agriculture | 7.4 | 10.1 | 12.8 | 14.0 | 15.3 | 15.6 | 109.6 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.4 | 1.5 | 1.7 | 189.4 |
| Intensive agriculture | 6.1 | 7.1 | 7.8 | 8.4 | 8.7 | 8.8 | 45.0 |
| Low-density residential | 61.2 | 73.2 | 85.8 | 95.8 | 103.5 | 106.6 | 74.2 |
| Other | 0.2 | 0.5 | 0.5 | 0.6 | 0.8 | 0.3 | 41.7 |
| Forest industry owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 140.1 |
| Wildland range | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 331.1 |
| Mixed forest/agriculture | 4.0 | 5.1 | 6.2 | 6.9 | 7.6 | 8.0 | 102.1 |
| Mixed range/agriculture | - | - | - | - | - | - | - |
| Intensive agriculture | 7.8 | 6.6 | 7.3 | 7.6 | 8.3 | 8.6 | 10.7 |
| Low-density residential | 40.0 | 46.7 | 55.1 | 62.2 | 65.4 | 63.1 | 57.7 |
| Other |  |  |  |  |  |  |  |
| Other private owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 1.9 | 2.7 | 3.5 | 3.8 | 4.6 | 4.7 | 142.9 |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 106.3 |
| Mixed forest/agriculture | 7.9 | 10.9 | 13.7 | 15.1 | 16.4 | 16.7 | 111.4 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.5 | 1.6 | 1.8 | 186.3 |
| Intensive agriculture | 6.1 | 7.2 | 7.9 | 8.5 | 8.7 | 8.9 | 46.0 |
| Low-density residential | 61.8 | 73.3 | 86.1 | 96.4 | 104.6 | 108.0 | 74.7 |
| Other | 0.7 | 1.4 | 1.4 | 1.4 | 1.8 | 0.4 | -37.8 |
| Other public owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 147.2 |
| Wildland range | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 177.4 |
| Mixed forest/agriculture | 3.7 | 4.5 | 5.4 | 5.8 | 6.2 | 6.4 | 71.9 |
| Mixed range/agriculture | - | - | - | 0.9 | 0.9 | 0.9 | NA |
| Intensive agriculture | 5.6 | 5.8 | 6.5 | 7.2 | 7.4 | 7.4 | 32.2 |
| Low-density residential | 60.2 | 82.0 | 93.6 | 100.3 | 103.8 | 106.7 | 77.1 |
| Other | - | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | NA |

NA = Can not be calculated.
$-=$ Average number of structu

- = Average number of structures per square mile less than 0.05 or none found
${ }^{\mathrm{b}}$ Number of structures includes all structures present in a specified land use class at the specified year
${ }^{c}$ Does not include area changes in ownership between non-Federal and Federal owner classes.
d Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a
1985-1987 inventory of non-Federal forest land in eastern Oregon.
See Glossary for how the average number of structures within a land use class is calculated.

|  | Average annual change in the average number of structures per square mile |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} 1974- \\ 1984 \\ \hline \end{array}$ | $\begin{array}{r} 1984- \\ 1994 \\ \hline \end{array}$ | $\begin{array}{r} 1994- \\ 2000 \\ \hline \end{array}$ | $\begin{array}{r} \hline 2000- \\ 2005 \\ \hline \end{array}$ | $\begin{array}{r} 2005- \\ 2009 \\ \hline \end{array}$ |
|  | Percent |  |  |  |  |
| All non-Federal owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.53 | 2.15 | 1.61 | 4.18 | 0.65 |
| Wildland range | 3.11 | 2.64 | 1.54 | 1.92 | 1.87 |
| Mixed forest/agriculture | 3.38 | 2.09 | 1.50 | 1.88 | 0.78 |
| Mixed range/agriculture | 1.05 | 4.27 | 1.75 | 2.22 | 3.60 |
| Intensive agriculture | 1.43 | 1.14 | 1.05 | 0.90 | 0.58 |
| Low-density residential | 3.32 | 1.74 | 1.62 | 1.22 | 1.00 |
| Other | 7.14 | $<0.01$ | 2.74 | 1.60 | -15.95 |
| Forest industry owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 2.67 | 2.13 | 1.91 | 4.72 | 0.99 |
| Wildland range | - | - | - | 17.55 | 19.16 |
| Mixed forest/agriculture | 2.73 | 2.02 | 1.63 | 1.84 | 1.35 |
| Mixed range/agriculture | - | - | - | - | - |
| Intensive agriculture | 2.21 | 0.82 | 0.63 | 1.66 | 1.15 |
| Low-density residential | 2.45 | 2.11 | 1.68 | 0.84 | 1.58 |
| Other | - | - | - | - |  |
| Other private owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.79 | 2.19 | 1.53 | 4.23 | 0.57 |
| Wildland range | 3.03 | 2.69 | 1.51 | 1.91 | 1.82 |
| Mixed forest/agriculture | 3.44 | 2.10 | 1.50 | 1.90 | 0.78 |
| Mixed range/agriculture | 1.04 | 4.31 | 1.30 | 2.30 | 3.69 |
| Intensive agriculture | 1.43 | 1.14 | 1.04 | 0.89 | 0.58 |
| Low-density residential | 3.25 | 1.77 | 1.67 | 1.29 | 1.01 |
| Other | 6.59 | - | - | - | -25.96 |
| Other public owners |  |  |  |  |  |
| Land use class: |  |  |  |  |  |
| Wildland forest | 3.85 | 2.18 | 0.93 | 3.40 | 2.46 |
| Wildland range | 6.79 | 1.94 | 2.62 | 2.22 | 3.32 |
| Mixed forest/agriculture | 2.05 | 1.89 | 1.22 | 1.13 | 0.96 |
| Mixed range/agriculture | - | - | - | - | - |
| Intensive agriculture | 1.16 | 1.20 | 1.22 | 0.78 | 0.33 |
| Low-density residential | 4.18 | 1.34 | 1.07 | 0.46 | 0.66 |
| Other | - | - | 20.41 | 6.16 | - |
| - = less than an average annual ch <br> ${ }^{\mathrm{a}}$ Number of structures includes on and 2009. <br> ${ }^{6}$ Number of structures was not sa <br> ${ }^{\mathrm{c}}$ Does not include land that chang <br> ${ }^{\mathrm{d}}$ Area by non-Federal owner class western Oregon and a 1985-1987 <br> ${ }^{\mathrm{e}}$ See Glossary for how the averag <br> a land use class is calculated. | .005 stru ures that <br> land cla rom non <br> 1995-1 of nonchange, | es per ed in s ied as u deral ow invent eral fore ercent, | re mile land us <br> use. <br> ship be of non-F and in e e numb |  | found. <br> 1974 <br> 2009. <br> d in <br> within |

Table A9 - Average number of structures per square mile on non -Federal land in Oregon that stayed in the same land use class between 1974 and 2009, by owner class, land use class, and year abcde

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | Net change, in percent, 1974 to 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average number of structures per square mile |  |  |  |  |  |  |
| All non-Federal owners Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 0.7 | 0.9 | 1.2 | 1.3 | 1.6 | 1.6 | 145.1 |
| Wildland range | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 118.0 |
| Mixed forest/agriculture | 7.3 | 10.0 | 12.7 | 13.9 | 15.2 | 15.7 | 115.7 |
| Mixed range/agriculture | 0.6 | 0.7 | 0.9 | 1.1 | 1.2 | 1.3 | 121.5 |
| Intensive agriculture | 6.0 | 7.1 | 7.8 | 8.4 | 8.8 | 9.0 | 48.3 |
| Low-density residential | 60.9 | 82.5 | 99.7 | 110.3 | 116.9 | 121.6 | 99.7 |
| Other | 0.2 | 0.5 | 0.5 | 0.6 | 0.7 | 0.3 | 40.9 |
| Forest industry owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 140.4 |
| Wildland range | - | - | - | <0.01 | <0.01 | <0.01 | NA |
| Mixed forest/agriculture | 4.0 | 5.2 | 6.5 | 7.2 | 7.9 | 8.3 | 110.9 |
| Mixed range/agriculture | - | - | - | - | - | - | - |
| Intensive agriculture | 7.9 | 9.7 | 10.7 | 11.1 | 12.0 | 12.6 | 59.8 |
| Low-density residential | 41.3 | 52.1 | 66.3 | 73.6 | 76.6 | 81.5 | 97.5 |
| Other | - | - | - | - | - | - | - |
| Other private owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 1.9 | 2.7 | 3.4 | 3.8 | 4.6 | 4.7 | 147.7 |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 116.2 |
| Mixed forest/agriculture | 7.7 | 10.7 | 13.6 | 14.9 | 16.3 | 16.8 | 117.4 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.1 | 1.2 | 1.3 | 116.2 |
| Intensive agriculture | 6.0 | 7.1 | 7.8 | 8.4 | 8.8 | 9.0 | 48.3 |
| Low-density residential | 61.4 | 82.6 | 100.0 | 111.1 | 118.1 | 122.9 | 100.3 |
| Other | 0.7 | 1.4 | 1.4 | 1.4 | 1.4 | 0.4 | -38.9 |
| Other public owners |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |
| Wildland forest | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 147.1 |
| Wildland range | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 212.9 |
| Mixed forest/agriculture | 3.7 | 4.5 | 5.5 | 6.0 | 6.3 | 6.6 | 75.6 |
| Mixed range/agriculture | - | - | - | 1.4 | 1.4 | 1.4 | NA |
| Intensive agriculture | 5.6 | 6.5 | 7.2 | 7.8 | 8.1 | 8.2 | 45.7 |
| Low-density residential | 60.5 | 90.5 | 104.4 | 111.5 | 114.1 | 117.1 | 93.6 |
| Other | - | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | NA |

NA = Can not be calculated
$\overline{=}=$ Average number of structures per square mile less than 0.05 or none found.
${ }^{\mathrm{b}}$ Number of structures includes only structures that stayed in same land use class between 1974 and 2009.
${ }_{d}^{\mathrm{c}}$ Does not include area changes in ownership between non-Federal and Federal owner classes.
${ }^{\mathrm{d}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a
${ }^{\mathrm{e}}$ See Glossary for how the average number of structures within a land use class is calculated.
Table A12 - Area, in percent, of non-Federal land in Oregon, by owner class, number of structures,
 $\overline{=}=$ less than 0.05 percent or none found.
${ }^{\text {a }}$ Totals may be off because of rounding.
${ }^{\mathrm{b}}$ These statistics estimate, in percent for each specified year, the combined area in all land use classes
except for area classified as urban use.
${ }^{c}$ Number of structures was not sampled on land classified as urban use.
 Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
e See Glossary for how the number of structures per square mile is calculated.
 ${ }^{\mathrm{a}}$ Totals may be off because of rounding.
b These statistics estimate, for each speci b These statistics estimate, for each specified year, the combined area in all land use classes except for area
classified as urban use. ${ }^{\text {d }}$ Number of structures was not sampled on land classified as urban use.
Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western
Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. ${ }^{\mathrm{e}}$ See Glossary for how the number of structures per square mile is calculated.
Table B1 - Area of non-Federal land, by region, land use class, and year ${ }^{\text {abcde }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand acres |  |  |  |  |  |  | Thousand acres |  |  |  |  |  |
| Oregon |  |  |  |  |  |  | Western Oregon |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | 10,697 | 10,580 | 10,531 | 10,520 | 10,504 | 10,496 | Wildland forest | 7,335 | 7,238 | 7,201 | 7,199 | 7,183 | 7,177 |
| Wildland range | 9,320 | 9,187 | 9,139 | 9,112 | 9,096 | 9,091 | Mixed forest/agriculture | 805 | 762 | 746 | 744 | 738 | 731 |
| Mixed forest/agriculture | 947 | 895 | 873 | 871 | 864 | 856 | Intensive agriculture | 2,057 | 1,946 | 1,923 | 1,903 | 1,885 | 1,876 |
| Mixed range/agriculture | 640 | 646 | 648 | 660 | 663 | 663 | Low-density residential | 526 | 716 | 762 | 763 | 779 | 794 |
| Intensive agriculture | 5,849 | 5,795 | 5,779 | 5,751 | 5,741 | 5,730 | Urban | 318 | 380 | 409 | 432 | 456 | 464 |
| Low-density residential | 791 | 1,064 | 1,159 | 1,184 | 1,201 | 1,225 | Other | 36 | 36 | 36 | 36 | 36 | 36 |
| Urban | 378 | 454 | 491 | 523 | 551 | 560 | Total a rea | 11,077 | 11,077 | 11,077 | 11,077 | 11,077 | 11,077 |
| Other | 85 | 85 | 85 | 85 | 85 | 84 | North Coast |  |  |  |  |  |  |
| Total area | 28,706 | 28,706 | 28,706 | 28,706 | 28,706 | 28,706 | Land use class: |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 1,374 | 1,373 | 1,371 | 1,370 | 1,369 | 1,367 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 27 | 27 | 24 | 24 | 24 | 24 |
| Wildland forest | 3,362 | 3,342 | 3,330 | 3,321 | 3,321 | 3,319 | Intensive agriculture | 49 | 49 | 49 | 49 | 49 | 49 |
| Wildland range | 9,320 | 9,187 | 9,139 | 9,112 | 9,096 | 9,091 | Low-density residential | 50 | 51 | 55 | 55 | 56 | 57 |
| Mixed forest/agriculture | 142 | 133 | 127 | 127 | 126 | 125 | Urban | 19 | 19 | 20 | 21 | 22 | 22 |
| Mixed range/agriculture | 640 | 646 | 648 | 660 | 663 | 663 | Other | 19 | 19 | 19 | 19 | 19 | 19 |
| Intensive agriculture | 3,792 | 3,849 | 3,856 | 3,848 | 3,856 | 3,854 | Total area | 1,537 | 1,537 | 1,537 | 1,537 | 1,537 | 1,537 |
| Low-density residential | 265 | 349 | 397 | 421 | 422 | 431 | Portland Area |  |  |  |  |  |  |
| Urban | 60 | 74 | 82 | 91 | 96 | 97 | Land use class: |  |  |  |  |  |  |
| Other | 48 | 48 | 48 | 48 | 48 | 48 | Wildland forest | 532 | 515 | 513 | 512 | 510 | 510 |
| Total area | 17,628 | 17,628 | 17,628 | 17,628 | 17,628 | 17,628 | Mixed forest/agriculture | 139 | 118 | 107 | 106 | 104 | 102 |
| Eastern Oregon, excluding the | Area an | Klamath | ounty |  |  |  | Intensive agriculture | 317 | 281 | 273 | 260 | 254 | 253 |
| Land use class: |  |  |  |  |  |  | Low-density residential |  |  |  | 167 | 167 | 168 |
| Wildland forest | 2,454 | 2,451 | 2,451 | 2,448 | 2,448 | 2,448 | Urban | 143 | 170 | 186 | 199 | 208 | 211 |
| Wildland range | 8,541 | 8,450 | 8,436 | 8,423 | 8,411 | 8,411 | Other | - | - | - | - | - | - |
| Mixed forest/agriculture | 91 | 91 | 91 | 91 | 91 | 91 | Total area | 1,244 | 1,244 | 1,244 | 1,244 | 1,244 | 1,244 |
| Mixed range/agriculture | 635 | 642 | 644 | 656 | 658 | 658 | North Willamette |  |  |  |  |  |  |
| Intensive agriculture | 3,282 | 3,341 | 3,346 | 3,344 | 3,352 | 3,350 | Land use class: |  |  |  |  |  |  |
| Low-density residential | 151 | 174 | 180 | 185 | 185 | 187 | Wildland forest | 879 | 874 | 872 | 872 | 870 | 870 |
| Urban | 34 | 40 | 41 | 42 | 43 | 43 | Mixed forest/agriculture | 164 | 152 | 152 | 152 | 152 | 150 |
| Other | 46 | 46 | 46 | 46 | 46 | 46 | Intensive agriculture | 760 | 727 | 718 | 715 | 709 | 705 |
| Total area | 15,235 | 15,235 | 15,235 | 15,235 | 15,235 | 15,235 | Low-density residential | 61 | 95 | 99 | 99 | 101 | 107 |
| Bend Area |  |  |  |  |  |  | Urban | 39 | 54 | 62 | 65 | 70 | 71 |
| Land use class: |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Wildland forest | 287 | 276 | 271 | 268 | 268 | 268 | Total area | 1,903 | 1,903 | 1,903 | 1,903 | 1,903 | 1,903 |
| Wildland range | 449 | 423 | 400 | 392 | 389 | 384 | South Willamette |  |  |  |  |  |  |
| Mixed forest/agriculture | 38 | 29 | 23 | 23 | 22 | 21 | Land use class: |  |  |  |  |  |  |
| Mixed range/agriculture | 5 | 5 | 5 | 5 | 5 | 5 | Wildland forest | 1,547 | 1,525 | 1,519 | 1,518 | 1,514 | 1,512 |
| Intensive agriculture | 143 | 137 | 136 | 132 | 132 | 132 | Mixed forest/agriculture | 59 | 59 | 61 | 60 | 59 | 59 |
| Low-density residential | 96 | 142 | 172 | 179 | 180 | 185 | Intensive agriculture | 657 | 625 | 622 | 619 | 615 | 614 |
| Urban | 15 | 21 | 27 | 35 | 38 | 39 | Low-density residential | 144 | 189 | 196 | 196 | 199 | 202 |
| Other | - | - | - | - | - | - | Urban | 57 | 66 | 67 | 72 | 77 | 78 |
| Total area | 1,034 | 1,034 | 1,034 | 1,034 | 1,034 | 1,034 | Other | 2 | 2 | 2 | 2 | 2 | 1 |
| Klamath County, excluding the | d Area |  |  |  |  |  | Total area | 2,467 | 2,467 | 2,467 | 2,467 | 2,467 | 2,467 |
| Land use class: |  |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Wildland forest | 620 | 615 | 608 | 604 | 604 | 603 | Land use class: |  |  |  |  |  |  |
| Wildland range | 330 | 313 | 304 | 297 | 297 | 295 | Wildland forest | 3,003 | 2,950 | 2,927 | 2,927 | 2,921 | 2,918 |
| Mixed forest/agriculture | 13 | 13 | 13 | 13 | 13 | 13 | Mixed forest/agriculture | 417 | 405 | 403 | 403 | 400 | 397 |
| Mixed range/agriculture | - | - | - | - | - | - | Intensive agriculture | 273 | 263 | 261 | 260 | 258 | 255 |
| Intensive agriculture | 367 | 370 | 373 | 372 | 372 | 372 | Low-density residential | 159 | 222 | 246 | 247 | 255 | 260 |
| Low-density residential | 18 | 33 | 45 | 57 | 57 | 59 | Urban | 60 | 70 | 74 | 75 | 77 | 80 |
| Urban | 10 | 13 | 14 | 14 | 15 | 15 | Other | 15 | 15 | 15 | 15 | 15 | 15 |
| Other | 2 | 2 | 2 | 2 | 2 | 2 | Total area | 3,926 | 3,926 | 3,926 | 3,926 | 3,926 | 3,926 |
| Total area | 1,360 | 1,360 | 1,360 | 1,360 | 1,360 | 1,360 |  |  |  |  |  |  |  |

$\overline{-}=$ less than 500 acres or none found.
a Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
chers not include land that changed to or from non-Federal ownership between 1974 and 2009.
Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
d See map in section titled "Approach" for specific geographic area associated with each region.
e Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.
Table B2 - Area of private land, by region, land use class, and year ${ }^{\text {abcde }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oregon |  | Thousand acres |  |  |  |  | Western Oregon | Thousand acres |  |  |  |  |  |
| Land use class: |  | Land use class: |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 9,210 | 9,098 | 9,052 | 9,041 | 9,025 | 9,018 | Wildland forest | 6,264 | 6,172 | 6,137 | 6,134 | 6,119 | 6,114 |
| Wildland range | 8,281 | 8,184 | 8,138 | 8,111 | 8,096 | 8,090 | Mixed forest/agriculture | 762 | 721 | 705 | 704 | 698 | 691 |
| Mixed forest/agriculture | 889 | 841 | 818 | 817 | 810 | 803 | Intensive agriculture | 1,949 | 1,843 | 1,822 | 1,806 | 1,788 | 1,778 |
| Mixed range/agriculture | 625 | 624 | 626 | 638 | 641 | 641 | Low-density residential | 486 | 668 | 711 | 712 | 729 | 743 |
| Intensive agriculture | 5,588 | 5,512 | 5,499 | 5,476 | 5,466 | 5,456 | Urban | 263 | 319 | 348 | 367 | 389 | 397 |
| Low-density residential | 725 | 989 | 1,078 | 1,103 | 1,121 | 1,144 | Other | 14 | 14 | 14 | 14 | 14 | 13 |
| Urban | 315 | 385 | 421 | 449 | 474 | 483 | Total area | 9,737 | 9,737 | 9,737 | 9,737 | 9,737 | 9,737 |
| Other | 29 | 29 | 29 | 29 | 29 | 29 | North Coast |  |  |  |  |  |  |
| Total area | 25,663 | 25,663 | 25,663 | 25,663 | 25,663 | 25,663 | Land use class: |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 854 | 853 | 851 | 851 | 849 | 848 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 22 | 22 | 19 | 19 | 19 | 19 |
| Wildland forest | 2,947 | 2,927 | 2,916 | 2,906 | 2,906 | 2,904 | Intensive agriculture | 43 | 43 | 43 | 43 | 43 | 43 |
| Wildland range | 8,281 | 8,184 | 8,138 | 8,111 | 8,096 | 8,090 | Low-density residential | 43 | 44 | 47 | 47 | 48 | 49 |
| Mixed forest/agriculture | 127 | 119 | 113 | 113 | 112 | 112 | Urban | 17 | 17 | 18 | 19 | 20 | 20 |
| Mixed range/agriculture | 625 | 624 | 626 | 638 | 641 | 641 | Other | 4 | 4 | 4 | 4 | 4 | 4 |
| Intensive agriculture | 3,639 | 3,670 | 3,677 | 3,669 | 3,678 | 3,677 | Total area | 982 | 982 | 982 | 982 | 982 | 982 |
| Low-density residential | 239 | 321 | 368 | 391 | 393 | 400 | Portland Area |  |  |  |  |  |  |
| Urban | 52 | 66 | 73 | 82 | 85 | 86 | Land use class: |  |  |  |  |  |  |
| Other | 16 | 16 | 16 | 16 | 16 | 16 | Wildland forest | 441 | 425 | 423 | 422 | 420 | 420 |
| Total area | 15,926 | 15,926 | 15,926 | 15,926 | 15,926 | 15,926 | Mixed forest/agriculture | 132 | 113 | 101 | 100 | 98 | 96 |
| Eastern Oregon, excluding the | Area an | Klamath | unty |  |  |  | Intensive agriculture | 304 | 269 | 261 | 251 | 245 | 243 |
| Land use class: |  |  |  |  |  |  | Low-density residential | 102 | 150 | 156 | 157 | 158 | 159 |
| Wildland forest | 2,084 | 2,080 | 2,080 | 2,078 | 2,078 | 2,078 | Urban | 109 | 131 | 147 | 159 | 167 | 170 |
| Wildland range | 7,572 | 7,516 | 7,502 | 7,489 | 7,478 | 7,478 | Other | - | - | - | - | - | - |
| Mixed forest/agriculture | 79 | 79 | 79 | 79 | 79 | 79 | Total area | 1,088 | 1,088 | 1,088 | 1,088 | 1,088 | 1,088 |
| Mixed range/agriculture | 621 | 620 | 622 | 634 | 637 | 637 | North Willamette |  |  |  |  |  |  |
| Intensive agriculture | 3,152 | 3,185 | 3,190 | 3,188 | 3,196 | 3,196 | Land use class: |  |  |  |  |  |  |
| Low-density residential | 133 | 154 | 159 | 164 | 164 | 165 | Wildland forest | 781 | 776 | 774 | 774 | 773 | 772 |
| Urban | 32 | 38 | 39 | 39 | 40 | 40 | Mixed forest/agriculture | 157 | 146 | 146 | 146 | 146 | 144 |
| Other | 14 | 14 | 14 | 14 | 14 | 14 | Intensive agriculture | 718 | 686 | 679 | 676 | 671 | 667 |
| Total area | 13,685 | 13,685 | 13,685 | 13,685 | 13,685 | 13,685 | Low-density residential | 57 | 88 | 92 | 92 | 94 | 100 |
| Bend Area |  |  |  |  |  |  | Urban | 38 | 53 | 60 | 62 | 67 | 68 |
| Land use class: |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Wildland forest | 272 | 261 |  | 253 | 253 | 252 |  | 1,751 | 1,751 | 1,751 | 1,751 | 1,751 | 1,751 |
| Wildland range | 387 | 362 | 339 | 332 | 329 | 325 | South Willamette 1, 1, 1,751 1,751 |  |  |  |  |  |  |
| Mixed forest/agriculture | 36 | 29 | 22 | 22 | 21 | 21 | Land use class: |  |  |  |  |  |  |
| Mixed range/agriculture | 4 | 4 | 4 | 4 | 4 | 4 | Wildland forest | 1,452 | 1,432 | 1,426 | 1,425 | 1,421 | 1,419 |
| Intensive agriculture | 140 | 134 | 133 | 128 | 129 | 129 | Mixed forest/agriculture | 53 | 52 | 54 | 53 | 53 | 52 |
| Low-density residential | 90 | 135 | 164 | 171 | 173 | 177 | Intensive agriculture | 623 | 592 | 590 | 586 | 582 | 581 |
| Urban | 13 | 19 | 24 | 31 | 34 | 35 | Low-density residential | 134 | 177 | 183 | 184 | 188 | 190 |
| Other | - | - | - | - | - | - | Urban | 47 | 55 | 57 | 61 | 65 | 66 |
| Total area | 943 | 943 | 943 | 943 | 943 | 943 | Other | 1 | 1 | 1 | 1 | 1 | - |
| Klamath County, excluding the | d Area |  |  |  |  |  | Total area | 2,310 | 2,310 | 2,310 | 2,310 | 2,310 | 2,310 |
| Land use class: |  |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Wildland forest | 591 | 586 | 580 | 575 | 575 | 575 | Land use class: |  |  |  |  |  |  |
| Wildland range | 322 | 306 | 296 | 290 | 290 | 288 | Wildland forest | 2,736 | 2,685 | 2,663 | 2,663 | 2,657 | 2,654 |
| Mixed forest/agriculture | 12 | 12 | 12 | 12 | 12 | 12 | Mixed forest/agriculture | 399 | 388 | 386 | 386 | 383 | 380 |
| Mixed range/agriculture | - | - | - | - | - | - | Intensive agriculture | 261 | 253 | 250 | 250 | 247 | 245 |
| Intensive agriculture | 348 | 351 | 354 | 353 | 353 | 353 | Low-density residential | 149 | 210 | 232 | 232 | 241 | 246 |
| Low-density residential | 17 | 32 | 45 | 56 | 56 | 58 | Urban | 53 | 63 | 66 | 67 | 70 | 73 |
| Urban | 7 | 9 | 11 | 11 | 11 | 11 | Other | 9 | 9 | 9 | 9 | 9 | 9 |
| Other | 1 | 1 | 1 | 1 | 1 | 1 | Total area | 3,607 | 3,607 | 3,607 | 3,607 | 3,607 | 3,607 |
| Total area | 1,299 | 1,299 | 1,299 | 1,299 | 1,299 | 1,299 |  |  |  |  |  |  |  |

$\overline{-}=$ less than 500 acres or none found.
${ }^{\text {a }}$ Totals may be off because of rounding
b Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
c Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon. ${ }^{\mathrm{c}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
${ }_{\mathrm{d}}$ See map in section titled "Approach" for specific geographic area associated with each region.
${ }^{\mathrm{e}}$ Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon
Table B3 - Area, in percent, of non-Federal land, by region, land use class, and year ${ }^{\text {abcde }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oregon | Percent |  |  |  |  |  | Western Oregon | Percent |  |  |  |  |  |
| Land use class: | Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 37.3 | 36.9 | 36.7 | 36.6 | 36.6 | 36.6 | Wildland forest | 66.2 | 65.3 | 65.0 | 65.0 | 64.8 | 64.8 |
| Wildland range | 32.5 | 32.0 | 31.8 | 31.7 | 31.7 | 31.7 | Mixed forest/agriculture | 7.3 | 6.9 | 6.7 | 6.7 | 6.7 | 6.6 |
| Mixed forest/agriculture | 3.3 | 3.1 | 3.0 | 3.0 | 3.0 | 3.0 | Intensive agriculture | 18.6 | 17.6 | 17.4 | 17.2 | 17.0 | 16.9 |
| Mixed range/agriculture | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Low-density residential | 4.7 | 6.5 | 6.9 | 6.9 | 7.0 | 7.2 |
| Intensive agriculture | 20.4 | 20.2 | 20.1 | 20.0 | 20.0 | 20.0 | Urban | 2.9 | 3.4 | 3.7 | 3.9 | 4.1 | 4.2 |
| Low-density residential | 2.8 | 3.7 | 4.0 | 4.1 | 4.2 | 4.3 | Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Urban | 1.3 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | North Coast |  |  |  |  |  |  |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Land use class: |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 89.4 | 89.3 | 89.1 | 89.1 | 89.0 | 88.9 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 |
| Wildland forest | 19.1 | 19.0 | 18.9 | 18.8 | 18.8 | 18.8 | Intensive Agriculture | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Wildland range | 52.9 | 52.1 | 51.8 | 51.7 | 51.6 | 51.6 | Low-density residential | 3.2 | 3.3 | 3.6 | 3.6 | 3.6 | 3.7 |
| Mixed forest/agriculture | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | Urban | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 |
| Mixed range/agriculture | 3.6 | 3.7 | 3.7 | 3.7 | 3.8 | 3.8 | Other | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Intensive agriculture | 21.5 | 21.8 | 21.9 | 21.8 | 21.9 | 21.9 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Low-density residential | 1.5 | 2.0 | 2.3 | 2.4 | 2.4 | 2.4 | Portland Area |  |  |  |  |  |  |
| Urban | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | Land use class: |  |  |  |  |  |  |
| Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Wildland forest | 42.8 | 41.4 | 41.2 | 41.1 | 41.0 | 41.0 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Mixed forest/agriculture | 11.1 | 9.5 | 8.6 | 8.5 | 8.3 | 8.2 |
| Eastern Oregon, excluding the B | Area a | Klamat | unty |  |  |  | Intensive agriculture | 25.5 | 22.6 | 21.9 | 20.9 | 20.5 | 20.3 |
| Land use class: |  |  |  |  |  |  | Low-density residential | 9.0 | 12.8 | 13.3 | 13.4 | 13.5 | 13.5 |
| Wildland forest | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | Urban | 11.5 | 13.6 | 14.9 | 16.0 | 16.7 | 17.0 |
| Wildland range | 56.1 | 55.5 | 55.4 | 55.3 | 55.2 | 55.2 | Other | - | - | - | - | - | - |
| Mixed forest/agriculture | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mixed range/agriculture | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.3 | North Willamette |  |  |  |  |  |  |
| Intensive agriculture | 21.5 | 21.9 | 22.0 | 21.9 | 22.0 | 22.0 | Land use class: |  |  |  |  |  |  |
| Low-density residential | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | Wildland forest | 46.2 | 45.9 | 45.8 | 45.8 | 45.7 | 45.7 |
| Urban | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Mixed forest/agriculture | 8.6 | 8.0 | 8.0 | 8.0 | 8.0 | 7.9 |
| Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Intensive agriculture | 39.9 | 38.2 | 37.7 | 37.6 | 37.3 | 37.0 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Low-density residential | 3.2 | 5.0 | 5.2 | 5.2 | 5.3 | 5.6 |
| Bend Area |  |  |  |  |  |  | Urban | 2.0 | 2.8 | 3.3 | 3.4 | 3.7 | 3.8 |
| Land use class: |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Wildland forest | 27.8 | 26.7 | 26.2 | 26.0 | 26.0 | 25.9 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Wildland range | 43.5 | 41.0 | 38.7 | 37.9 | 37.6 | 37.2 | South Willamette |  |  |  |  |  |  |
| Mixed forest/agriculture | 3.7 | 2.8 | 2.2 | 2.2 | 2.1 | 2.1 | Land use class: |  |  |  |  |  |  |
| Mixed range/agriculture | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Wildland forest | 62.7 | 61.8 | 61.6 | 61.5 | 61.4 | 61.3 |
| Intensive agriculture | 13.9 | 13.3 | 13.2 | 12.7 | 12.8 | 12.7 | Mixed forest/agriculture | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.4 |
| Low-density residential | 9.2 | 13.7 | 16.7 | 17.3 | 17.4 | 17.9 | Intensive agriculture | 26.6 | 25.3 | 25.2 | 25.1 | 24.9 | 24.9 |
| Urban | 1.5 | 2.1 | 2.6 | 3.4 | 3.7 | 3.8 | Low-density residential | 5.8 | 7.7 | 7.9 | 7.9 | 8.1 | 8.2 |
| Other | - | - | - | - | - | - | Urban | 2.3 | 2.7 | 2.7 | 2.9 | 3.1 | 3.2 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Klamath County, excluding the | d Area |  |  |  |  |  | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Land use class: |  |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Wildland forest | 45.6 | 45.2 | 44.7 | 44.4 | 44.4 | 44.4 | Land use class: |  |  |  |  |  |  |
| Wildland range | 24.2 | 23.0 | 22.3 | 21.8 | 21.8 | 21.7 | Wildland forest | 76.5 | 75.1 | 74.5 | 74.5 | 74.4 | 74.3 |
| Mixed forest/agriculture | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | Mixed forest/agriculture | 10.6 | 10.3 | 10.3 | 10.3 | 10.2 | 10.1 |
| Mixed range/agriculture | - | - | - | - | - | - | Intensive agriculture | 7.0 | 6.7 | 6.6 | 6.6 | 6.6 | 6.5 |
| Intensive agriculture | 27.0 | 27.2 | 27.4 | 27.4 | 27.4 | 27.4 | Low-density residential | 4.0 | 5.7 | 6.3 | 6.3 | 6.5 | 6.6 |
| Low-density residential | 1.3 | 2.5 | 3.3 | 4.2 | 4.2 | 4.3 | Urban | 1.5 | 1.8 | 1.9 | 1.9 | 2.0 | 2.0 |
| Urban | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | Other | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Other | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  |  |  |  |  |  |

$-=$ less than 0.05 percent or none found.
${ }^{\text {Totals may be off because of rounding. }}$ Tot
${ }^{\mathrm{b}}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009. ${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.

[^12]Table B4 - Area, in percent, of private land, by region, land use class, and year abcde

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 | Western Oregon | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oregon | Percent |  |  |  |  |  |  | Percent |  |  |  |  |  |
| Land use class: |  | Land use class: |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 35.9 | 35.5 | 35.3 | 35.2 | 35.2 | 35.1 |  | Wildland forest | 64.3 | 63.4 | 63.0 | 63.0 | 62.8 | 62.8 |
| Wildland range | 32.3 | 31.9 | 31.7 | 31.6 | 31.5 | 31.5 | Mixed forest/agriculture | 7.8 | 7.4 | 7.2 | 7.2 | 7.2 | 7.1 |
| Mixed forest/agriculture | 3.5 | 3.3 | 3.2 | 3.2 | 3.2 | 3.1 | Intensive agriculture | 20.0 | 18.9 | 18.7 | 18.6 | 18.4 | 18.3 |
| Mixed range/agriculture | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | Low-density residential | 5.0 | 6.9 | 7.3 | 7.3 | 7.5 | 7.6 |
| Intensive agriculture | 21.8 | 21.5 | 21.4 | 21.3 | 21.3 | 21.3 | Urban | 2.7 | 3.3 | 3.6 | 3.8 | 4.0 | 4.1 |
| Low-density residential | 2.8 | 3.9 | 4.2 | 4.3 | 4.4 | 4.5 | Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Urban | 1.2 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | North Coast |  |  |  |  |  |  |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Land use class: |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 87.0 | 86.9 | 86.6 | 86.6 | 86.5 | 86.4 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 2.2 | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 |
| Wildland forest | 18.5 | 18.4 | 18.3 | 18.2 | 18.2 | 18.2 | Intensive agriculture | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| Wildland range | 52.0 | 51.4 | 51.1 | 50.9 | 50.8 | 50.8 | Low-density residential | 4.4 | 4.4 | 4.8 | 4.8 | 4.9 | 5.0 |
| Mixed forest/agriculture | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | Urban | 1.7 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 |
| Mixed range/agriculture | 3.9 | 3.9 | 3.9 | 4.0 | 4.0 | 4.0 | Other | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Intensive agriculture | 22.9 | 23.0 | 23.1 | 23.0 | 23.1 | 23.1 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Low-density residential | 1.5 | 2.0 | 2.3 | 2.5 | 2.5 | 2.5 | Portland Area |  |  |  |  |  |  |
| Urban | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | Land use class: |  |  |  |  |  |  |
| Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Wildland forest | 40.6 | 39.1 | 38.9 | 38.8 | 38.6 | 38.6 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Mixed forest/agriculture | 12.1 | 10.4 | 9.2 | 9.2 | 9.0 | 8.8 |
| Eastern Oregon, excluding the B | Area a | Klama | ounty |  |  |  | Intensive agriculture | 27.9 | 24.8 | 24.0 | 23.1 | 22.5 | 22.4 |
| Land use class: |  |  |  |  |  |  | Low-density residential | 9.4 | 13.8 | 14.3 | 14.4 | 14.5 | 14.6 |
| Wildland forest | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | Urban | 10.0 | 12.1 | 13.5 | 14.6 | 15.3 | 15.6 |
| Wildland range | 55.3 | 54.9 | 54.8 | 54.7 | 54.6 | 54.6 | Other | - | - | - | - | - | - |
| Mixed forest/agriculture | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mixed range/agriculture | 4.5 | 4.5 | 4.5 | 4.6 | 4.7 | 4.7 | North Willamette |  |  |  |  |  |  |
| Intensive agriculture | 23.0 | 23.3 | 23.3 | 23.3 | 23.4 | 23.4 | Land use class: |  |  |  |  |  |  |
| Low-density residential | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | Wildland forest | 44.6 | 44.3 | 44.2 | 44.2 | 44.1 | 44.1 |
| Urban | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Mixed forest/agriculture | 8.9 | 8.4 | 8.3 | 8.3 | 8.3 | 8.2 |
| Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Intensive agriculture | 41.0 | 39.2 | 38.8 | 38.6 | 38.3 | 38.1 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Low-density residential | 3.2 | 5.0 | 5.3 | 5.3 | 5.4 | 5.7 |
| Bend Area |  |  |  |  |  |  | Urban | 2.1 | 3.0 | 3.4 | 3.5 | 3.8 | 3.9 |
| Land use class: |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Wildland forest | 28.8 | 27.6 | 27.2 | 26.9 | 26.9 | 26.8 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Wildland range | 41.1 | 38.4 | 36.0 | 35.3 | 34.9 | 34.4 | South Willamette |  |  |  |  |  |  |
| Mixed forest/agriculture | 3.8 | 3.1 | 2.4 | 2.4 | 2.3 | 2.2 | Land use class: |  |  |  |  |  |  |
| Mixed range/agriculture | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Wildland forest | 62.9 | 62.0 | 61.7 | 61.7 | 61.5 | 61.4 |
| Intensive agriculture | 14.8 | 14.2 | 14.1 | 13.6 | 13.6 | 13.6 | Mixed forest/agriculture | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| Low-density residential | 9.6 | 14.3 | 17.4 | 18.2 | 18.3 | 18.8 | Intensive agriculture | 27.0 | 25.6 | 25.5 | 25.4 | 25.2 | 25.2 |
| Urban | 1.4 | 2.0 | 2.6 | 3.3 | 3.6 | 3.7 | Low-density residential | 5.8 | 7.7 | 7.9 | 7.9 | 8.1 | 8.2 |
| Other | - | - | - | - | - | - | Urban | 2.0 | 2.4 | 2.4 | 2.6 | 2.8 | 2.9 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Other | - | - | - | - | - | - |
| Klamath County, excluding the | d Area |  |  |  |  |  | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Land use class: |  |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Wildland forest | 45.5 | 45.1 | 44.6 | 44.3 | 44.3 | 44.2 | Land use class: |  |  |  |  |  |  |
| Wildland range | 24.8 | 23.6 | 22.8 | 22.3 | 22.3 | 22.2 | Wildland forest | 75.8 | 74.4 | 73.8 | 73.8 | 73.7 | 73.6 |
| Mixed forest/agriculture | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | Mixed forest/agriculture | 11.1 | 10.8 | 10.7 | 10.7 | 10.6 | 10.5 |
| Mixed range/agriculture | - | - | - | - | - | - | Intensive agriculture | 7.2 | 7.0 | 6.9 | 6.9 | 6.8 | 6.8 |
| Intensive agriculture | 26.8 | 27.1 | 27.3 | 27.2 | 27.2 | 27.2 | Low-density residential | 4.1 | 5.8 | 6.4 | 6.4 | 6.7 | 6.8 |
| Low-density residential | 1.3 | 2.5 | 3.4 | 4.3 | 4.3 | 4.5 | Urban | 1.5 | 1.7 | 1.8 | 1.9 | 1.9 | 2.0 |
| Urban | 0.6 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | Other | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  |  |  |  |  |  |

$-=$ less than 0.05 percent or none found.
${ }^{\mathrm{a}}$ Totals may be off because of rounding.
${ }^{\text {b }}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009. ${ }^{\mathrm{c}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.

[^13]Table B5 - Average number of structures per square mile on non -Federal land, by region, land use class, and year ${ }^{\text {abcde }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average number of structures per square mile |  |  |  |  |  |  | Average number of structures per square mile |  |  |  |  |  |
| Oregon |  |  |  |  |  |  | Western Oregon |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | 0.7 | 0.9 | 1.2 | 1.3 | 1.6 | 1.6 | Wildland forest | 0.9 | 1.2 | 1.5 | 1.7 | 2.1 | 2.1 |
| Wildland range | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | Mixed forest/agriculture | 8.2 | 11.3 | 14.0 | 15.5 | 16.8 | 17.4 |
| Mixed forest/agriculture | 7.4 | 10.1 | 12.8 | 14.0 | 15.3 | 15.6 | Intensive agriculture | 11.5 | 13.5 | 14.9 | 15.8 | 16.7 | 17.2 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.4 | 1.5 | 1.7 | Low-density residential | 67.1 | 78.9 | 95.1 | 104.7 | 110.4 | 113.5 |
| Intensive agriculture | 6.1 | 7.1 | 7.8 | 8.4 | 8.7 | 8.8 | Other | 0.7 | 1.4 | 1.4 | 1.7 | 2.2 | 0.9 |
| Low-density residential | 61.2 | 73.2 | 85.8 | 95.8 | 103.5 | 106.6 |  |  |  |  |  |  |  |
| Other | 0.2 |  | $0.5$ | $0.6$ | $0.8$ | $0.3$ | North Coast |  |  |  |  |  |  |
|  | Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 0.6 | 0.8 | 0.9 | 0.9 | 1.1 | 1.1 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 8.7 | 13.4 | 16.7 | 16.7 | 16.7 | 16.9 |
| Wildland forest | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | Intensive agriculture | 14.8 | 17.2 | 19.0 | 19.4 | 19.9 | 20.8 |
| Wildland range | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | Low-density residential | 71.4 | 94.3 | 107.4 | 116.6 | 122.7 | 136.5 |
| Mixed forest/agriculture | 3.4 | 3.9 | 5.7 | 6.1 | 6.7 | 5.6 | Other | 1.3 | 2.8 | 2.8 | 3.4 | 3.4 | 1.3 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.4 | 1.5 | 1.7 |  |  |  |  |  |  |  |
| Intensive agriculture | 3.7 | 4.3 | 4.8 | 5.2 | 5.2 | 5.3 | Portland Area |  |  |  |  |  |  |
| Low-density residential | 50.1 | 61.7 | 68.2 | 80.2 | 91.2 | 94.5 | Land use class: |  |  |  |  |  |  |
| Other |  | - | - | - |  | - | Wildland forest | 2.1 | 2.8 | 3.2 | 3.7 | 4.2 | 3.9 |
|  |  |  |  |  |  |  | Mixed forest/agriculture | 15.5 | 21.3 | 25.6 | 28.6 | 30.5 | 31.2 |
| Eastern Oregon, excluding the Bend Area and Klamath County |  |  |  |  |  |  | Intensive agriculture | 18.5 | 21.7 | 24.1 | 25.2 | 26.3 | 26.9 |
| Land use class: |  |  |  |  |  |  | Low-density residential | 72.8 | 92.3 | 108.6 | 124.8 | 133.2 | 136.3 |
| Wildland forest | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | Other | - | - | - | - | - | - |
| Wildland range | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 |  |  |  |  |  |  |  |
| Mixed forest/agriculture | 2.8 | 3.3 | 5.1 | 5.1 | 5.5 | 5.1 | North Willamette |  |  |  |  |  |  |
| Mixed range/agriculture | 0.6 | 0.6 | 0.9 | 1.3 | 1.4 | 1.6 | Land use class: |  |  |  |  |  |  |
| Intensive agriculture | 3.6 | 4.2 | 4.6 | 5.0 | 4.9 | 4.9 | Wildland forest | 1.5 | 2.1 | 2.5 | 2.8 | 3.2 | 3.5 |
| Low-density residential | 50.5 | 66.4 | 72.9 | 82.2 | 85.7 | 88.1 | Mixed forest/agriculture | 9.7 | 13.4 | 15.3 | 17.5 | 18.6 | 20.5 |
| Other | - | - | - | - | - | - | Intensive agriculture | 10.9 | 12.6 | 13.7 | 14.7 | 15.4 | 16.4 |
|  |  |  |  |  |  |  | Low-density residential | 80.7 | 85.6 | 99.8 | 108.6 | 112.8 | 116.9 |
| Bend Area |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 6 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | South Willamette |  |  |  |  |  |  |
| Wildland range | 0.6 | 0.8 | 1.1 | 1.5 | 1.9 | 2.2 | Land use class: |  |  |  |  |  |  |
| Mixed forest/agriculture | 7.8 | 8.6 | 12.0 | 14.8 | 17.0 | 12.0 | Wildland forest | 0.7 | 1.0 | 1.2 | 1.3 | 1.6 | 1.6 |
| Mixed range/agriculture | 8.0 | 13.0 | 14.0 | 18.0 | 18.0 | 18.0 | Mixed forest/agriculture | 12.6 | 17.5 | 19.8 | 21.8 | 22.7 | 22.3 |
| Intensive agriculture | 8.9 | 10.3 | 11.5 | 12.9 | 13.8 | 14.2 | Intensive agriculture | 8.0 | 9.5 | 10.2 | 10.8 | 12.2 |  |
| Low-density residential | $51.8$ | 60.7 | 68.8 | 87.2 | 106.0 | 110.3 | Low-density residential | 61.5 | 74.5 | 91.9 | 98.0 | 104.4 | 101.7 |
| Other | - | - | - | - | - | - | Other | - | - | - | - | 8.0 | - |
| Klamath County, excluding the Bend Area |  |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | - | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | Wildland forest | 0.8 | 1.1 | 1.4 | 1.6 | 2.1 | 2.1 |
| Wildland range | 0.3 | 0.6 | 0.8 | 1.0 | 1.2 | 1.3 | Mixed forest/agriculture | 5.7 | 7.7 | 10.4 | 11.3 | 12.7 | 13.0 |
| Mixed forest/agriculture | 0.9 | 1.8 | 1.8 | 1.8 | 1.8 | 2.2 | Intensive agriculture | 14.8 | 18.0 | 21.2 | 22.2 | 22.4 | 22.6 |
| Mixed range/agriculture | - | - | - | - | - | - | Low-density residential | 62.7 | 67.7 | 84.9 | 93.4 | 97.5 | 102.5 |
| Intensive agriculture | 2.9 | 4.0 | 4.5 | 5.0 | 5.3 | 5.4 | Other | - | - | - | - | 0.3 | 0.6 |
| Low-density residential | 36.9 | 40.8 | 47.3 | 52.6 | 63.7 | 66.0 |  |  |  |  |  |  |  |
| Other | - | - | - | - | - | - |  |  |  |  |  |  |  |

[^14]Table B6 - Average number of structures per square mile on private land, by region, land use class, and year ${ }^{\text {abcde }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average number of structures per square mile |  |  |  |  |  |  | Average number of structures per square mile |  |  |  |  |  |
| Oregon |  |  |  |  |  |  | Western Oregon |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | 0.7 | 1.0 | 1.3 | 1.4 | 1.7 | 1.8 | Wildland forest | 1.0 | 1.4 | 1.7 | 1.9 | 2.3 | 2.3 |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | Mixed forest/agriculture | 8.4 | 11.6 | 14.4 | 15.9 | 17.3 | 17.9 |
| Mixed forest/agriculture | 7.7 | 10.5 | 13.2 | 14.6 | 15.9 | 16.2 | Intensive agriculture | 11.6 | 13.6 | 15.1 | 15.9 | 16.8 | 17.4 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.5 | 1.5 | 1.7 | Low-density residential | 67.6 | 79.1 | 95.7 | 105.5 | 111.4 | 114.3 |
| Intensive agriculture | 6.1 | 7.1 | 7.9 | 8.4 | 8.7 | 8.9 | Other | 1.7 | 3.3 | 3.3 | 3.3 | 4.3 | 1.1 |
| Low-density residential | 61.3 | 72.6 | 85.2 | 95.5 | 103.5 | 106.6 |  |  |  |  |  |  |  |
| Other | 0.7 | 1.4 | 1.4 | 1.4 | 1.8 | 0.4 | North Coast |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Eastern Oregon |  |  |  |  |  |  | Wildland forest | 0.9 | 1.1 | 1.2 | 1.3 | 1.5 | 1.7 |
| Land use class: |  |  |  |  |  |  | Mixed forest/agriculture | 10.5 | 16.2 | 20.4 | 20.4 | 20.4 | 20.4 |
| Wildland forest | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | Intensive agriculture | 13.6 | 15.9 | 17.5 | 18.0 | 18.5 | 19.1 |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | Low-density residential | 75.4 | 99.3 | 114.4 | 124.8 | 131.4 | 146.6 |
| Mixed forest/agriculture | 3.5 | 4.2 | 6.2 | 6.6 | 7.3 | 6.1 | Other | 5.7 | 11.4 | 11.4 | 11.4 | 11.4 | 2.7 |
| Mixed range/agriculture | 0.6 | 0.7 | 1.0 | 1.5 | 1.5 | 1.7 |  |  |  |  |  |  |  |
| Intensive agriculture | 3.7 | 4.4 | 4.8 | 5.2 | 5.3 | 5.3 | Portland Area |  |  |  |  |  |  |
| Low-density residential | 49.1 | 59.0 | 65.3 | 77.7 | 89.1 | 92.8 | Land use class: |  |  |  |  |  |  |
| Other | - | - | - | - | - | - | Wildland forest | 2.4 | 3.3 | 3.8 | 4.4 | 5.0 | 4.6 |
|  |  |  |  |  |  |  | Mixed forest/agriculture | 16.2 | 21.8 | 26.5 | 29.7 | 31.6 | 32.4 |
| Eastern Oregon, excluding the B | Area | Kama | unty |  |  |  | Intensive agriculture | 18.9 | 22.1 | 24.6 | 25.7 | 26.8 | 27.4 |
| Land use class: |  |  |  |  |  |  | Low-density residential | 72.9 | 93.2 | 109.3 | 125.9 | 134.6 | 137.7 |
| Wildland forest | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.7 | Other | - | - | - | - | - | - |
| Wildland range | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 |  |  |  |  |  |  |  |
| Mixed forest/agriculture | 3.0 | 3.5 | 5.7 | 5.7 | 6.2 | 5.7 | North Willamette |  |  |  |  |  |  |
| Mixed range/agriculture | 0.6 | 0.6 | 1.0 | 1.4 | 1.5 | 1.7 | Land use class: |  |  |  |  |  |  |
| Intensive agriculture | 3.6 | 4.2 | 4.6 | 5.0 | 4.9 | 5.0 | Wildland forest | 1.6 | 2.3 | 2.7 | 3.0 | 3.5 | 3.8 |
| Low-density residential | 48.0 | 60.4 | 66.4 | 76.1 | 80.0 | 83.0 | Mixed forest/agriculture | 9.9 | 13.7 | 15.5 | 17.8 | 18.9 | 20.8 |
| Other | - | - | - | - | - | - | Intensive agriculture | 11.1 | 12.8 | 14.0 | 14.9 | 15.7 | 16.6 |
|  |  |  |  |  |  |  | Low-density residential | 78.3 | 84.0 | 98.0 | 106.7 | 111.2 | 114.8 |
| Bend Area |  |  |  |  |  |  | Other | - | - | - | - | - | - |
| Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | ${ }^{-}$ | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | South Willamette |  |  |  |  |  |  |
| Wildland range | 0.6 | 0.8 | 1.2 | 1.7 | 2.1 | 2.4 | Land use class: |  |  |  |  |  |  |
| Mixed forest/agriculture | 7.8 | 8.6 | 12.0 | 14.8 | 17.0 | 12.0 | Wildland forest | 0.7 | 1.0 | 1.2 | 1.3 | 1.6 | 1.6 |
| Mixed range/agriculture | 8.0 | 13.0 | 14.0 | 18.0 | 18.0 | 18.0 | Mixed forest/agriculture | 13.2 | 18.6 | 21.1 | 23.3 | 24.2 | 23.8 |
| Intensive agriculture | 9.0 | 10.4 | 11.6 | 13.0 | 14.0 | 14.3 | Intensive agriculture | 7.9 | 9.4 | 10.2 | 10.8 | 12.2 | 12.3 |
| Low-density residential | 52.7 | 61.9 | 69.7 | 88.3 | 107.0 | 111.6 | Low-density residential | 61.1 | 73.8 | 91.4 | 97.4 | 104.0 | 100.8 |
| Other | - | - | - | - | - | - | Other | - | - | - | - | 24.0 | - |
| Klamath County, excluding the | d Area |  |  |  |  |  | Southwest |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | - | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | Wildland forest | 0.8 | 1.1 | 1.5 | 1.7 | 2.2 | 2.2 |
| Wildland range | 0.2 | 0.6 | 0.8 | 1.0 | 1.2 | 1.3 | Mixed forest/agriculture | 5.7 | 7.8 | 10.5 | 11.4 | 12.9 | 13.2 |
| Mixed forest/agriculture | 0.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.7 | Intensive agriculture | 15.1 | 18.2 | 21.3 | 22.3 | 22.4 | 22.6 |
| Mixed range/agriculture | - | - | - | - | - | - | Low-density residential | 64.1 | 68.5 | 86.0 | 94.9 | 99.1 | 103.9 |
| Intensive agriculture | 2.9 | 4.0 | 4.5 | 5.1 | 5.4 | 5.5 | Other | - | - | - | - | - | 0.5 |
| Low-density residential | 38.3 | 41.0 | 46.3 | 51.1 | 61.9 | 64.2 |  |  |  |  |  |  |  |
| Other | - | - | - | - | - | - |  |  |  |  |  |  |  |

[^15]
$-=$ less than 500 acres or none found.
${ }^{\text {a }}$ Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
${ }^{\mathrm{d}}$ Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.

$-=$ less than 500 acres or none found.
and
Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009 .
${ }^{\text {c }}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon.
d Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.

$-=$ less than 500 acres or none found.
${ }^{\mathrm{a}}$ Totals may be off because of rounding.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
${ }^{\text {c }}$ Area by non-Federal owner class is from a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
Table C2 (Continued) - Area of non-Federal lands in eastern Oregon, by county, land use class, and year ${ }^{\text {abc }}$

|  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |  | 1974 | 1984 | 1994 | 2000 | 2005 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand acres |  |  |  |  |  |  | Thousand acres |  |  |  |  |  |
| MorrowCounty | Wallowa County |  |  |  |  |  |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | 90 | 90 | 90 | 87 | 87 | 87 | Wildland forest | 306 | 306 | 306 | 306 | 306 | 306 |
| Wildland range | 392 | 324 | 324 | 324 | 324 | 324 | Wildland range | 448 | 448 | 448 | 448 | 448 | 448 |
| Mixed forest/agriculture | - |  | - | - |  | - | Mixed forest/agriculture | 25 | 25 | 25 | 25 | 25 | 25 |
| Mixed range/agriculture | 130 | 129 | 129 | 129 | 129 | 129 | Mixed range/agriculture | - | - |  |  | - |  |
| Intensive agriculture | 429 | 497 | 496 | 496 | 496 | 495 | Intensive agriculture | 64 | 55 | 55 | 55 | 55 | 55 |
| Low-density residential | 1 | 2 | 3 | 6 | 6 | 7 | Low-density residential | 12 | 19 | 19 | 19 | 19 | 19 |
| Urban | - | 1 | 1 | 1 | 1 | 1 | Urban | 1 | 3 | 3 | 3 | 3 | 3 |
| Other | 7 | 7 | 7 |  | 7 | 7 | Other | - | - | - | - | - | - |
| Total a rea | 1,051 | 1,051 | 1,051 | 1,051 | 1,051 | 1,051 | Total a rea | 855 | 855 | 855 | 855 | 855 | 855 |
| Sherman County | Wasco County |  |  |  |  |  |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  | Land use class: |  |  |  |  |  |  |
| Wildland forest | 137 | 137 | 137 | 137 | 137 | 137 | Wildland forest | 235 609 | 234 609 | 234 609 | 234 609 | 234 609 | 234 609 |
| Wildland range | 137 | 137 | 137 | 137 | 137 | 137 | Wildland range | 609 | 609 | 609 | 609 | 609 | 609 |
| Mixed forest/agriculture | - | - | - | - | - | - | Mixed forest/agriculture | 51 | 51 | 51 | 51 | 51 | 51 |
| Mixed range/agriculture | - | - | - | - | - | - | Mixed range/agriculture | 103 | 103 | 103 | 103 | 103 | 103 |
| Intensive agriculture | 336 | 336 | 336 | 336 | 336 | 336 | Intensive agriculture | 192 | 192 | 192 | 192 | 192 | 192 |
| Low-density residential | - | - | - | - | - | - | Low-density residential | 27 | 27 | 27 | 27 | 27 | 27 |
| Urban | - | - | - | - | - | - | Urban | 3 | 4 | 4 | 4 | 4 | 4 |
| Other | - | - |  | - | - | - | Other | - | - | - | - | - | - |
| Total a rea | 473 | 473 | 473 | 473 | 473 | 473 | Total a rea | 1,221 | 1,221 | 1,221 | 1,221 | 1,221 | 1,221 |
| Umatilla County | Wheeler CountyLand use class: |  |  |  |  |  |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 264 | 261 | 261 | 261 | 261 | 261 | Wildland forest | 197 | 197 | 197 | 197 | 197 | 197 |
| Wildland range | 460 | 459 | 451 | 451 | 450 | 450 | Wildland range | 524 | 524 | 524 | 524 | 524 | 524 |
| Mixed forest/agriculture |  |  | - | - |  | - | Mixed forest/agriculture | 2 | 2 | 2 | 2 | 2 | 2 |
| Mixed range/agriculture | 171 | 171 | 171 | 171 | 171 | 171 | Mixed range/agriculture | 24 | 24 | 24 | 24 | 24 | 24 |
| Intensive agriculture | 698 | 694 | 700 | 698 | 697 | 697 | Intensive agriculture | 5 | 5 | 5 | 5 | 5 | 5 |
| Low-density residential | 37 | 43 | 45 | 47 | 47 | 47 | Low-density residential | - | - | - |  | - | - |
| Urban |  | 11 | 11 | 12 | 12 | 12 | Urban | - | - |  |  | - |  |
| Other | - | - |  | - | , | - | Other | - | - | - | - | - | - |
| Total a rea | 1,639 | 1,639 | 1,639 | 1,639 | 1,639 | 1,639 | Total a rea | 753 | 753 | 753 | 753 | 753 | 753 |
| Union County |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Land use class: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wildland forest | 277 | 277 | 277 | 277 | 277 | 277 |  |  |  |  |  |  |  |
| Wildland range | 241 | 241 | 241 | 241 | 241 | 241 |  |  |  |  |  |  |  |
| Mixed forest/agriculture | 5 | 5 | 5 | 5 | 5 | 5 |  |  |  |  |  |  |  |
| Mixed range/agriculture | - | - | - | - | - | - |  |  |  |  |  |  |  |
| Intensive agriculture | 177 | 175 | 173 | 173 | 173 | 173 |  |  |  |  |  |  |  |
| Low-density residential | 20 | 22 | 24 | 24 | 24 | 24 |  |  |  |  |  |  |  |
| Urban | 5 | 5 |  | 5 | 5 | 5 |  |  |  |  |  |  |  |
| Other | - | - | - | - | - | - |  |  |  |  |  |  |  |
| Total a rea | 725 | 725 | 725 | 725 | 725 | 725 |  |  |  |  |  |  |  |

$\overline{=}=$ less than 500 acres or none found.
${ }^{\mathrm{b}}$ Does not include land that changed to or from non-Federal ownership between 1974 and 2009.
${ }^{\text {c }}$ Area by non-Federal owner class is from a 1985-1987 inventory of non-Federal forest land in eastern Oregon.

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[^0]:    a Does not include land that shifted to or from private ownership between 1974 and 2009.
    ${ }^{\text {b }}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

[^1]:    ${ }^{a}$ Resource land use classes include wildland forest, wildland range (eastern Oregon), mixed forest/agriculture, mixed range/agriculture (eastern Oregon), and intensive agriculture land use classes. Developed land use classes include low-density residential and urban land use classes.

[^2]:    ${ }^{\text {a }}$ Resource land use classes include wildland forest, wildland range (eastern Oregon), mixed forest/agriculture, mixed range/agriculture (eastern Oregon), and intensive agriculture land use classes. Developed land use classes include low-density residential and urban land use classes.

[^3]:    ${ }^{\text {a }}$ Acres are rounded to the nearest 100 acres.
    ${ }^{\mathrm{b}}$ This table shows the areas of wildland forest, wildland range, and mixed forest/agriculture, mixed range/agriculture, and intensive agriculture that shifted to other land uses, but it does not include shifts in area from other uses to these uses.
    ${ }^{c}$ Wildland range and mixed range/agriculture classes are not recognized in western Oregon.

[^4]:    ${ }^{\text {a }}$ Does not include the Bend Area and Klamath County.

[^5]:    ${ }^{\text {a }}$ Resource land use classes include wildland forest, wildland range (eastern Oregon only), mixed forest/agriculture, mixed range/agriculture (eastern Oregon only), and intensive agriculture.
    ${ }^{\text {b }}$ The counties selected had lowest percentage of private land still remaining in resource land use classes in 2009 relative to the area in resource land use classes in 1974.

[^6]:    a Does not include land that shifted to or from non-Federal ownership between 1974 and 2009.
    ${ }^{\mathrm{b}}$ Totals are different from those in other tables in this report because some sample points did not have a designated land use from available GIS data layers and because other tables may include only private lands.

[^7]:    ${ }^{\text {a D Dees not include land that shifted to or from non-Federal ownership between } 1974 \text { and } 2009 . . ~ . ~ . ~}$
    ${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.

[^8]:    ${ }^{\text {a D Dees not include land that shifted to or from non-Federal ownership between } 1974 \text { and } 2009 . . ~ . ~ . ~}$
    ${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.

[^9]:    ${ }^{\text {a Does not include land that shifted to or from non-Federal ownership between } 1974 \text { and } 2009 . . . . ~ . ~}$
    ${ }^{b}$ Does not include sample points that did not have a designated land use from available GIS data layers.

[^10]:    
    ${ }^{\text {b }}$ Does not include sample points that did not have a designated land use from available GIS data layers.

[^11]:    - = less than 500 acres changed between 1974 and 2009.
    $N A=$ Not applicable. (A land use cannot change from or to itself).
    ${ }^{\mathrm{a}}$ Totals may be off due to rounding.
    ${ }^{\text {b }}$ Area estimates do not include changes between non-Federal owner classes between 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009 ${ }_{\mathrm{d}}^{\mathrm{c}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
    ${ }^{\mathrm{d}}$ There was no change in the area of the "other" land use class.

[^12]:    ${ }^{\mathrm{e}}$ Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.

[^13]:    ${ }^{\mathrm{e}}$ Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon

[^14]:    ${ }^{-}$a Average number of structures per square mile less than 0.05 or none found 10 and 1974 and 2009. Does not include land that changed to or from non-Federal ownership between 1974 and 2009 . ${ }^{\mathrm{b}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
    d Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.
    e
    ${ }^{\mathrm{e}}$ Number of structures was not sampled on land classified as urban use.

[^15]:    $\overline{\text { a }}=$ Average number of structures per square mile less than 0.05 or none found. ${ }^{\mathrm{b}}$ Area by non-Federal owner class is from a 1995-1997 inventory of non-Federal forest land in western Oregon and a 1985-1987 inventory of non-Federal forest land in eastern Oregon.
    ${ }^{\mathrm{d}}$ Wildland range and mixed range/agriculture land use classes are not recognized in western Oregon.
    ${ }^{\mathrm{e}}$ Number of structures was not sampled on land classified as urban use.

