

## Chapter 9 Timber

### Introduction

The United States has about 751 million acres of forest land, with 623 million acres in the conterminous United States. Forest land in the United States is widely but unevenly distributed, and varies from sparse scrub forest of the arid Interior West to highly productive forests along the Pacific Coast and in the South, and from pure hardwood forests to multispecies mixtures and coniferous forest. Almost two-thirds (514 million acres) of the Nation's forests are classified as timber lands, the primary source of wood production; 72 percent of these are in the East. About 75 million acres of forest are reserved for non-timber uses under the management of public agencies. The remaining 162 million acres do not qualify as timber land, but are important for watershed protection, wildlife habitat, grazing, and recreation. About 87 percent of these acres are found in the Interior West and interior Alaska.<sup>75</sup>

In FY 2012, about 541,000 mbf of timber was harvested on BLM and tribal lands. This timber harvest was associated with:

- \$554 million in value added,
- provided \$1.4 billion in output,
- and supported 7,000 jobs.

Market prices do not fully reflect changes to various ecosystem service values provided by forest lands.

The U.S. forest land base has remained relatively stable for almost 100 years, despite population growth. USDA expects the continuing need to accommodate a growing population will result in reduced forest area in the future, however, largely as a result of urbanization and other land development. Forest land losses are projected to range from 16 to 34 million acres in the conterminous United States. The South Region is expected to have the greatest loss of forest, ranging from 9 to 21 million acres between 2010 and 2060, roughly 4 to 8 percent of the region's 2007 forest land base.<sup>76</sup>

Historically, the volume of roundwood needed to make wood and paper products consumed in the United States (including product imports) grew at roughly the rate of population growth. Per capita consumption has declined with the downturn in housing construction since 2005. The weakening of the U.S. dollar and productivity gains by U.S. producers have lowered the import share of U.S. wood and paper product consumption and increased the export share of production, making the U.S. a net exporter of wood pulp, paper, and paperboard for the first time in many decades.<sup>77</sup>

During the past 50 years, the North American forest sector has undergone rapid labor-saving technology changes. These changes occurred also in other parts of the economy, as capital intensification reduced the demand for workers throughout a shrinking manufacturing sector, especially in the United States.

<sup>75</sup> USDA Forest Service. 2012. Future of America's Forest and Rangelands: Forest Service 2010 Resources Planning Act Assessment. Gen. Tech. Rep. WO-87. Washington, DC.

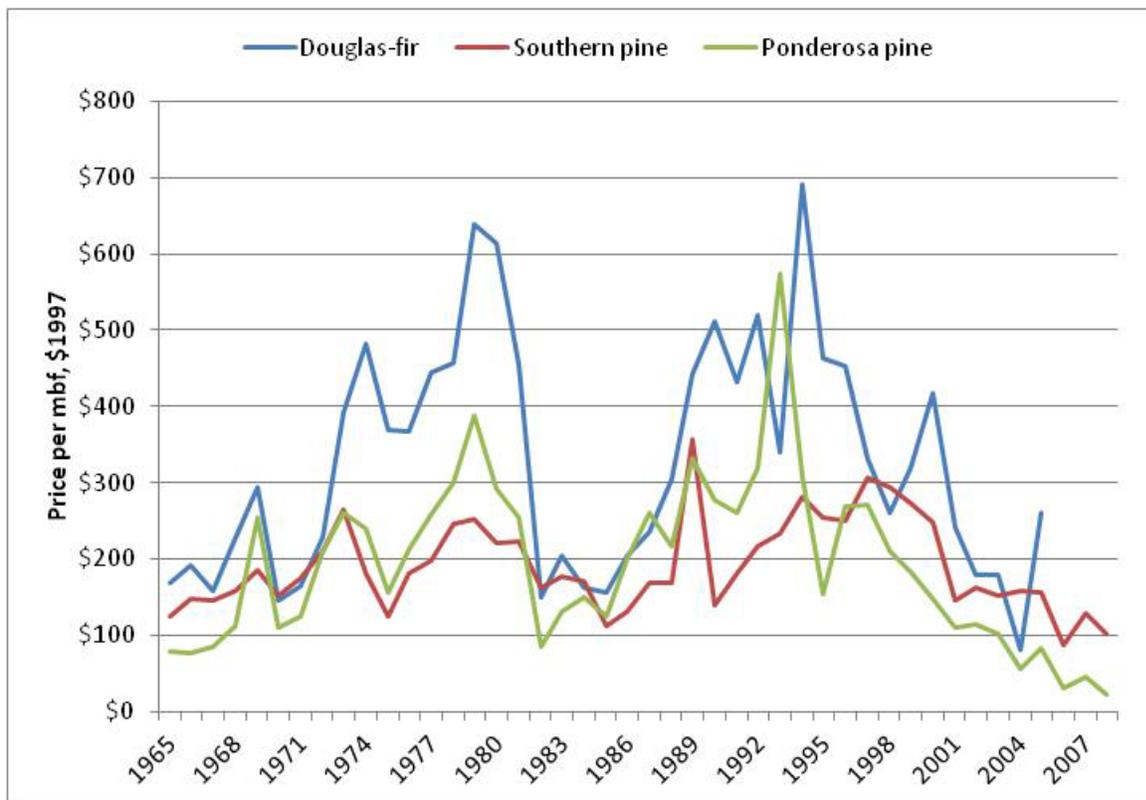
<sup>76</sup> Includes all forested lands (federal, state, and private). USDA Forest Service. 2012. Future of America's Forest and Rangelands: Forest Service 2010 Resources Planning Act Assessment. Gen. Tech. Rep. WO-87. Washington, DC.

<sup>77</sup> USDA Forest Service. 2012. Future of America's Forest and Rangelands: Forest Service 2010 Resources Planning Act Assessment. Gen. Tech. Rep. WO-87. Washington, DC.

The result for the forest sector was static or falling employment levels in lumber, wood, paper, and other products.

North American lumber prices have increased over the past several years. The price of Douglas fir has risen from about \$250 per MBF in January 2011 to about \$300 per MBF in the summer of 2012. Figure 9-1 shows the price trend for some key softwoods over 1990-2011.

Real price trends indicate that pulpwood has become relatively more abundant in the United States since the late 1990s, a result of increasing supplies (continued timber growth and maturation of pulpwood plantations, and other recent investments in plantation intensity), a general declining trend in consumption, and efficiency gains in timber harvesting and conversion technology.



**Figure 9-1. Stumpage Prices per Thousand Board Feet (\$1997)**

Source: USDA data. Real prices in \$1997. Douglas fir data not available beyond 2005.

Forests and woodlands make up one fourth of the lands managed by the BLM, or about 67 million acres. Of these, 11 million acres are commercial forestlands, generally with species used for products such as lumber, plywood, and paper. Fifty five million acres are woodlands, of which 11 million acres overlap with rangeland sites. These BLM lands are mostly piñon/juniper, western juniper and aspen and provide high quality wildlife habitat. Woodlands produce fuelwood, posts, poles, greenery and biomass for energy production to local communities. BLM's forests and woodlands are comprised of the Oregon and California (O&C) lands in western Oregon (2.3 million acres), and the public domain lands scattered across the 13 Western states (32 million acres) and Alaska (33 million acres). The O&C Act (Public Law 75-405) requires that the O&C lands be managed to provide a permanent source of timber supply,

protect watersheds, regulate stream flow, contribute to the economic stability of local communities and industries, and provide recreational opportunities.<sup>78</sup>

The BLM has traditionally placed its forested lands into one of two broad categories: Commercial Forest and Woodland. Commercial Forest Lands (also referred to as timberlands) were forest types that typically provided commercial processed wood products (lumber, plywood, paper, etc.) and were often considered the lands with the most potential for management. Woodlands were forest types that typically did not provide commercial wood products.

In the lower 48 states, BLM forest lands consist of tree species with a tall-stature growth, such as Douglas-fir, ponderosa pine, and lodgepole pine, and total about 4.6 million acres (or about 8% of BLM forested lands). Woodlands consist of tree species dominated with a low-stature, multiple-stem growth form and include pinyon pines, junipers, and many western oaks and total about 28 million acres. An additional 25 million acres are in Alaska, which occur in large, inaccessible expanses with very little market demand.

BLM data indicates that there is an estimated 150 million CF of annual mortality on BLM forested lands, predominately in the inland western states, due to insects and disease and wildfire. This mortality estimate may be an underestimate, but still equates to over 4 times greater than BLM's harvest volumes, and reflects the extent of the problems of wildlife and insects and disease.<sup>79</sup>

Native American reservations contained 6.1 million acres of unreserved, accessible, commercial timberland as of September 30, 2012.<sup>80</sup>

## Outputs, Economic Contributions, and Economic Values

Eight percent of BLM's forest land is classified as timberland. As of December 2010, there were about 15.5 billion cubic feet of standing inventory, which is equivalent to about 308 million tons. This timber is equivalent to about 396.5 million cubic feet of industrial output, or 0.8 million tons. Industrial output as percentage of inventory is 2%.<sup>81</sup>

BLM offered 242,000 thousand board feet (MBF) for sale in 2012. This compares to 240,000 MBF offered for sale in 2011. BLM has offered an average of about 250,000 MBF per year over 2005-2012. About 90% of the timber offered by BLM is from the O&C lands. About 333,209 MBF of timber, with a total value of \$35.1 million, was sold on tribal lands in FY 2012. About 70% of the timber value came from BIA's Northwest region; 21% came from the Midwest region.

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<sup>78</sup> See [http://www.blm.gov/wo/st/en/prog/more/forests\\_and\\_woodland.html](http://www.blm.gov/wo/st/en/prog/more/forests_and_woodland.html).

<sup>79</sup> The definition of commercial forest land (timberland) and woodland now include species such as aspen, pinyon pine, and juniper; also widespread wildfire activity has increased emphasis on vegetation treatments to reduce fuel loads regardless of the forest type. With the higher interest in forest health and fuels management there is more urgency for management in woodland areas. Source: BLM internal data.

<sup>80</sup> "Unreserved" is forest land that is administratively available for harvest; "accessible" is forest land that is physically, administratively and economically accessible to harvest or is anticipated to become so during the management plan period. Source: FY2012: Quarter 4 Catalog Of Forest Acres Compiled by: USDI, Bureau of Indian Affairs Division of Forestry Branch of Forest Resources Planning September 30, 2012.

<sup>81</sup> Source: BLM internal data.

Figure 9-2 shows BLM sawtimber harvest volumes and average prices per MBF over 2005-2012. Annual harvests have varied little since 2005, remaining in the range of 150,000 to 200,000 MBF. The average price has ranged from about \$202 per MBF in 2007 to about \$93 per MBF in 2009. Figure 9-3 shows timber volumes and price for timber harvested from tribal lands. Since 2007, the downward harvest trend on tribal lands is attributed to the closure of three large tribal sawmills (likely related to the economic slowdown).

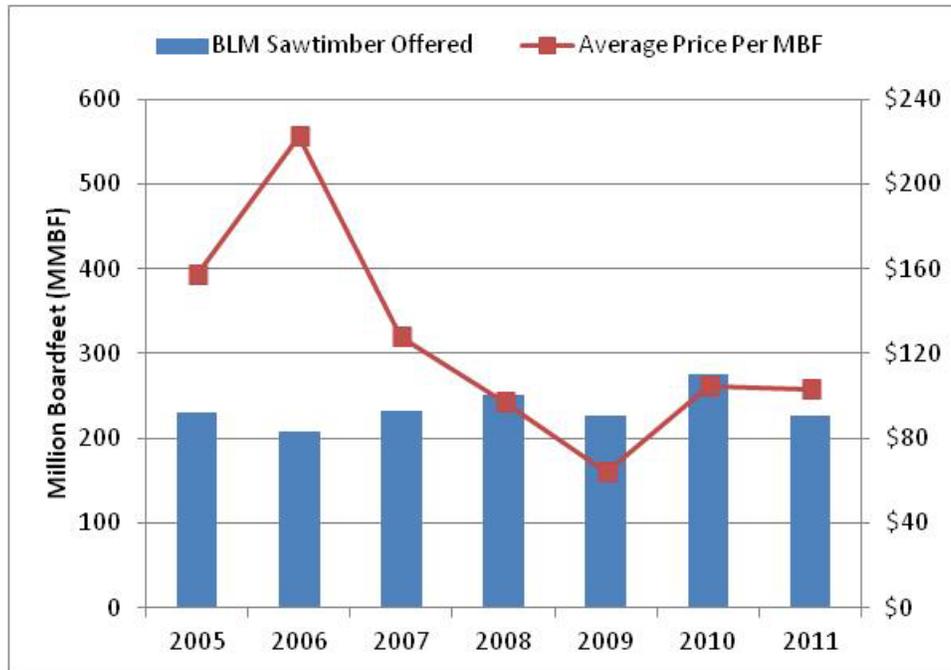


Figure 9-2. BLM Timber Harvest and Average Prices, FY 2005-2012

Source: BLM data.



Figure 9-3. Native American Timber Harvests and Prices

Source: BLM data.

BLM timber is sold on a competitive basis and the prices received reflect market values.<sup>82</sup> The average value of BLM sawtimber harvested in FY 2012 was \$120 per MBF. This compares to \$93 per MBF in 2011. The average value of timber harvested on tribal lands was \$105 per MBF. There is considerable variation across regions, with values in the Pacific Region exceeding \$200 per MBF. Economic contributions from timber are as follows:

- Timber produced from BLM lands supported over 3,000 jobs, nearly \$267 million in value added and about \$690 million in economic activity in 2012.<sup>83</sup>
- Timber produced from Native American timberlands is estimated to have supported over 4,000 jobs, nearly \$287 million in value added, and over \$719 million in economic activity in 2012.

<sup>82</sup> As noted previously, market prices do not reflect changes to various ecosystem service values provided by forest lands. These services include supporting water quality and quantity, nutrient cycling, recreation, and climate regulation. Quantifying the value of non-market services associated with forest ecosystems is difficult.

<sup>83</sup> Estimates reflect economic contribution from commercial sales of timber, primarily wood-based products including sawtimber, posts, poles, commercial fuelwood, and biomass. The BLM's forestry and woodlands management program manages public access to a variety of other forestry products including personal use fuelwood and non-wood Special Forest Products (such as Christmas trees, native seeds, mushrooms, and floral/greenery). Non-wood Special Forest Products from BLM-managed lands generated approximately \$250,000 in sales in FY12.