Montana’s Forest Industry Conditions & Outlook 2017

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Forest Industry Research

- State harvest & industry analyses
- Logging utilization studies
- Regional timber harvest reporting
- Quarterly Montana information
- Other forest economics projects
Montana’s Forest Industry

- Forestry & logging
- Wood & paper products manufacturing
- Forestry support

+ Public sector
## Occupations & Wages in Montana’s Forest Industry

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Median Wage</th>
<th>90th P-tile Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Worker</td>
<td>40</td>
<td>$26,080</td>
<td>$34,950</td>
</tr>
<tr>
<td>Logging Equipment Operator</td>
<td>390</td>
<td>40,110</td>
<td>50,080</td>
</tr>
<tr>
<td>Faller</td>
<td></td>
<td>45,340</td>
<td>70,390</td>
</tr>
<tr>
<td>Forester</td>
<td>190</td>
<td>52,620</td>
<td>72,220</td>
</tr>
<tr>
<td>Saw Operator</td>
<td>390</td>
<td>28,090</td>
<td>47,170</td>
</tr>
<tr>
<td>Cabinetmaker</td>
<td>660</td>
<td>29,490</td>
<td>47,100</td>
</tr>
<tr>
<td>Woodworking</td>
<td>480</td>
<td>35,880</td>
<td>47,840</td>
</tr>
<tr>
<td>Millwright</td>
<td>170</td>
<td>46,070</td>
<td>60,090</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics
## Forest-related Occupations & Wages in Montana

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Median Wage</th>
<th>90&lt;sup&gt;th&lt;/sup&gt; P-tile Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest &amp; Conservation Tech.</td>
<td>2,070</td>
<td>$31,940</td>
<td>$51,420</td>
</tr>
<tr>
<td>Cartographer</td>
<td>70</td>
<td>47,770</td>
<td>72,830</td>
</tr>
<tr>
<td>Environmental Engineering Tech.</td>
<td>100</td>
<td>52,410</td>
<td>71,980</td>
</tr>
<tr>
<td>Conservation Scientist</td>
<td>540</td>
<td>58,570</td>
<td>84,230</td>
</tr>
<tr>
<td>Natural Science Manager</td>
<td>330</td>
<td>88,910</td>
<td>124,010</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics
Montana’s Forest Industry

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>9,821</td>
<td>7,620</td>
<td>7,556</td>
</tr>
<tr>
<td>Earnings (millions)</td>
<td>$396</td>
<td>$277</td>
<td>$320</td>
</tr>
<tr>
<td>Primary sales (millions)</td>
<td>$1,078</td>
<td>$592</td>
<td>$589</td>
</tr>
<tr>
<td>Lumber production (MMBF)</td>
<td>1,001</td>
<td>418</td>
<td>535</td>
</tr>
</tbody>
</table>

Sources: Bureau of Economic Analysis, Western Wood Products Association, BBER
Montana Wood Products 2016 Conditions

- Slow U.S. homebuilding growth continued.
- Lumber & panel prices were up slightly.
- Strong dollar, changing demand from China, and end of SLA were challenges to industry.
- Private & public timber availability constrained most Montana mills.
- Weyerhaeuser purchased Plum Creek and closed two mills.
Montana Wood Products & Paper Manufacturing

Million $


Source: Bureau of Economic Analysis
Montana’s Primary Wood Products Industry
Montana Lumber production (MMBF)

Source: WWPA
Regional Timber Harvest

Billion Board Feet, Scribner

OR
WA
ID
MT
Montana Timber-Processing Facilities by Size Class

- **Under 10 MMBF Annual Use**
- **Over 10 MMBF Annual Use**

<table>
<thead>
<tr>
<th>Year</th>
<th>Under 10 MMBF</th>
<th>Over 10 MMBF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>140</td>
<td>38</td>
</tr>
<tr>
<td>1981</td>
<td>193</td>
<td>35</td>
</tr>
<tr>
<td>1988</td>
<td>183</td>
<td>36</td>
</tr>
<tr>
<td>1993</td>
<td>164</td>
<td>33</td>
</tr>
<tr>
<td>1998</td>
<td>194</td>
<td>26</td>
</tr>
<tr>
<td>2004</td>
<td>198</td>
<td>17</td>
</tr>
<tr>
<td>2009</td>
<td>91</td>
<td>11</td>
</tr>
<tr>
<td>2014</td>
<td>70</td>
<td>13</td>
</tr>
</tbody>
</table>
Issues for Montana’s Forest Industry

- Timber availability
- National forests
- Wildfire
- Weyerhaeuser
- Canadian lumber
Montana Forest Ownership

Source: USDA Forest Service FIA Program

19.8 million acres of productive, non-reserved timberland

61% National Forest
25% NIPF & Tribal
5% Industry
5% State
4% BLM

3.8 million acres reserved from harvesting (National Parks & Wilderness)

2.1 million acres non-productive
Montana Timberland Age

Source: USDA Forest Service FIA Program

Stand age (years)

Million acres

- National Forest
- Private & Tribal
- State
- Other federal
Montana Timber Volume

Source: USDA Forest Service FIA Program

The graph shows the timber volume in billion cubic feet for different tree diameter classes, categorized by ownership type: National Forest, Private & Tribal, State, and Other federal. The tree diameter classes range from 5.0-6.9 inches to 31.0+ inches.
National Forests
Wildfire vs. Harvest

Region One
- Montana & north Idaho
- Harvested acres are down
- Less than 0.05% of timberland with harvesting annually
- Includes commercial thinning

2006 - 2015
- 13,000 ac/yr of harvest
- 49,000 ac/yr of Rx fire
- 501,000 ac/yr of wildfire =
- 5 million acres (16%) of R1 forestland were affected by wildfire in past 10 years.
Number of cases and attorney fees by National Forest Region, 2008-2013

* WO = Washington Office & multi-region cases
National Forest Litigation Impacts

• Agency wins more than loses, projects get delayed seldom cancelled.

• EAJA fees are the *tip of the iceberg*, small compared to NEPA costs.

• Community economic impacts are largest $ value.

• Impacts extend beyond specific litigated projects.
Cottonwood Decision

- 9th Circuit ruling conflicts with 10th
- Millions of acres & dozens of projects impacted
- Canada lynx... and beyond!

- Legislative fix
Weyerhaeuser

- **Real Estate**
  - Maximize value of each acre
  - Highest value use

- **Timberland**
  - “We produce logs”
  - Divest less productive & non-strategic land

- **Wood products**
  - Reduce costs & improve productivity
  - Align with timber supply & strategic markets

Focused on value for shareholders
Canadian Lumber

Rising volume & share of US market

- Volume up 20-30% from 2015 & rising
- Over 30% of US consumption & rising
- Keeping a lid on lumber (& log) prices

Situation will change:

- ITC & DOC investigations & decisions
- Bark beetle impacts on BC timber supply

Source: WWPA
Major Issues for Montana’s Forest Industry in 2017

Timber supply & availability
- Private forest inventory & ownership
- National Forest management

Demand for wood products
- US Housing
- Canadian lumber
- Chinese economy
- Agriculture markets

Source: Bureau of Census, FEA, RSI
Montana Wood Products
Outlook 2016 & 2017

- Overall
- Sales
- Profit
- Production
- Employment

Declining/Improving

2017
2016

Montana Wood Products
Outlook 2016 & 2017

- Overall
- Sales
- Profit
- Production
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Declining/Improving

2017
2016
Thank you!

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www.BBER.umt.edu/ FIR