Timber Basket of the Interior West:
A Forest Products Industry Perspective in Idaho

Eric Simmons
Forest Industry Research Program, Bureau of Business and Economic Research (BBER)
University of Montana

Timber Measurements Society
Coeur d' Alene Idaho
April 2018

Bureau of Business and Economic Research

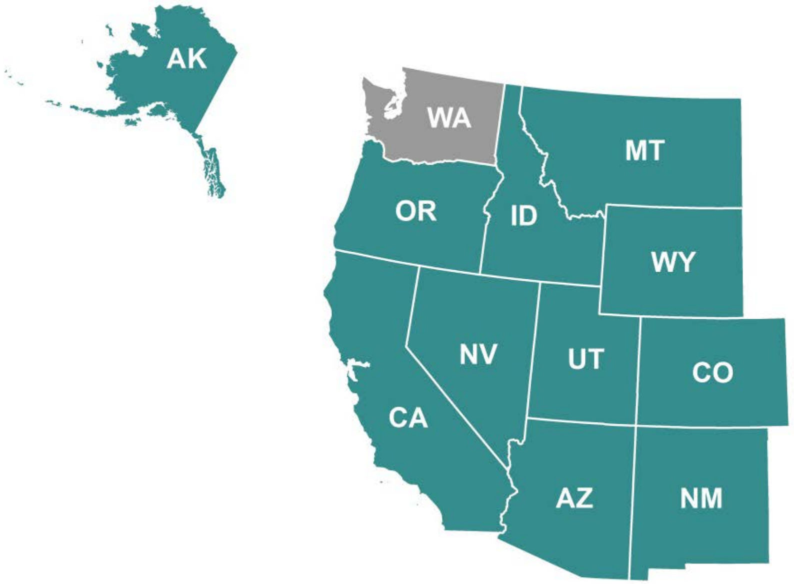
- The University of Montana, Missoula
- Research branch within UM College of Business Administration
- Regional economic analysis
- Survey research
- Industry analysis
  - Health care
  - Manufacturing
  - Energy
  - Forest products

UNIVERSITY OF MONTANA

www.bber.umt.edu

BBER

Forest Industry Research Program



- Rocky Mountain Research Station (RMRS)
- Pacific Northwest Research Station (PNWRS)
- FIA Timber Product Output (TPO) data collection in the west
- Describe industry structure, capacity, condition and changes over time
- Logging utilization studies





State-level Forest Industry Census

- Mill type, location, capacity, equipment, employment.
- Timber harvest volume, use, species, size, county and ownership.
- Product volume, sales and market locations. Provide insight into trends in sales, employment, and the economic contributions of the primary wood products industry to the state's economy.
- Mill residue volume and wood fiber use.

Idaho's Forest Products Industry & Timber Harvest

- BBER time series, 9 reports beginning in 1973 through 2015, a series of 3 briefs.

- THE FOREST PRODUCTS INDUSTRY IN IDAHO PART ONE: TIMBER HARVEST, PRODUCTS AND FLOW.

- THE FOREST PRODUCTS INDUSTRY IN IDAHO PART TWO: INDUSTRY SECTORS, CAPACITY AND OUTPUTS.

- THE FOREST PRODUCTS INDUSTRY IN IDAHO PART THREE: SALES, EMPLOYMENT AND CONTRIBUTION TO THE STATE'S ECONOMY.


FOREST INDUSTRY BRIEF NO. 10

THE FOREST PRODUCTS INDUSTRY IN IDAHO

PART 1: TIMBER HARVEST, PRODUCTS AND FLOW

BY ERIC A. SIMMONS AND TODD A. MORGAN

INTRODUCTION

FOREST INDUSTRY BRIEF NO. 11

THE FOREST PRODUCTS INDUSTRY IN IDAHO

PART 2: INDUSTRY SECTORS, CAPACITY AND OUTPUTS

BY ERIC A. SIMMONS AND TODD A. MORGAN

INTRODUCTION

IDAHO'S FOREST PRODUCTS INDUSTRY

TIMBER RECEIVED BY IDAHO MILLS

FOREST INDUSTRY BRIEF NO. 12

THE FOREST PRODUCTS INDUSTRY IN IDAHO

PART 3: SALES, EMPLOYMENT AND CONTRIBUTION TO THE STATE'S ECONOMY

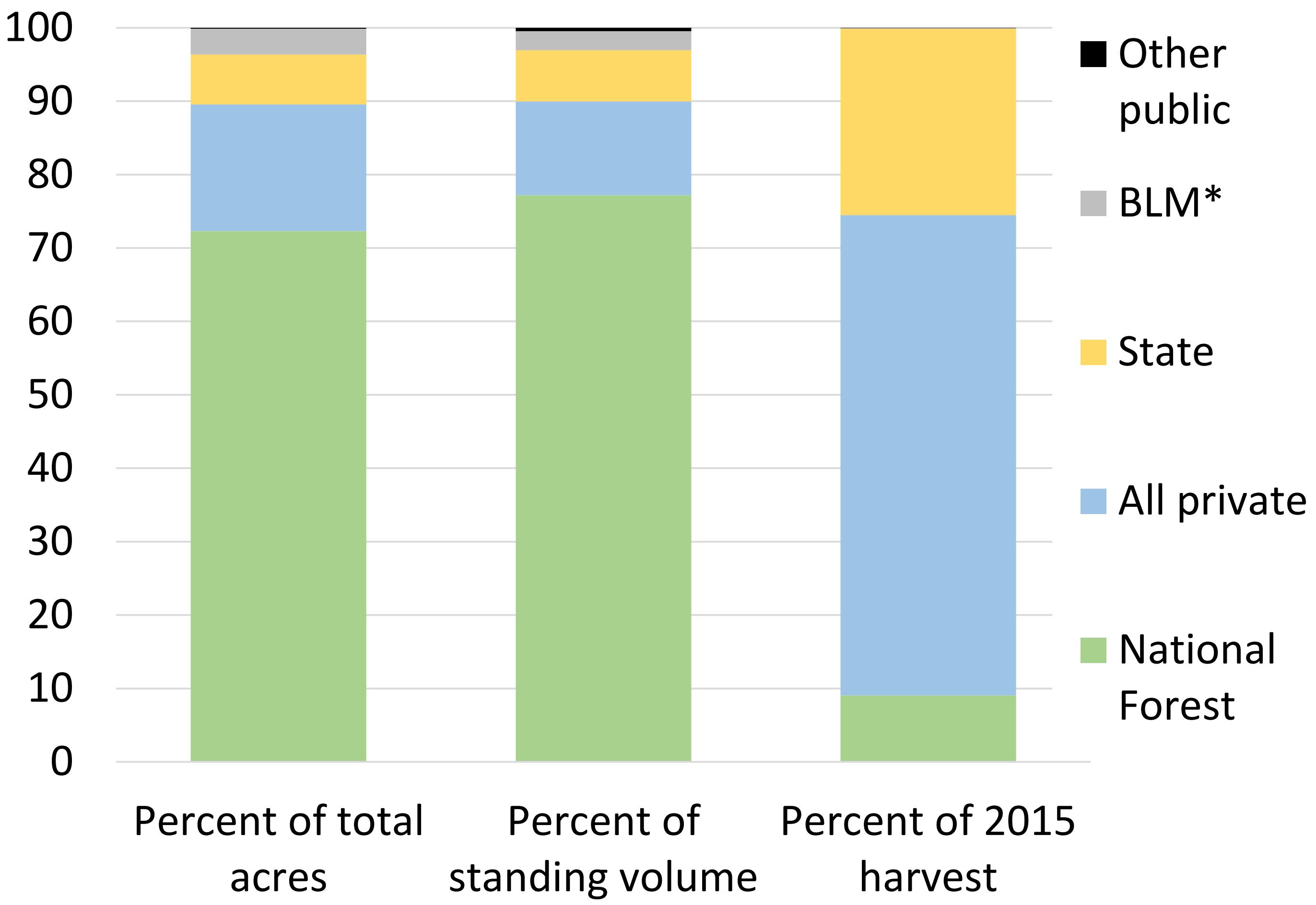
BY KATE C. MARCILLE, ERIC A. SIMMONS AND TODD A. MORGAN

INTRODUCTION

IDAHO'S PRIMARY PRODUCT SALES VALUE AND MARKETS

IDAHO'S FOREST INDUSTRY EMPLOYMENT AND LABOR INCOME

Percentage of Idaho timberland by ownership class in acres, standing volume and volume of harvest, 2015. (Source: FIA, FIDO online tool)



* BLM = Bureau of Land

*Timberland = Capable of producing 20 cubic feet (cf) of wood per acre per year (Helms 1998).

2015 Resource ownership and harvest snapshot

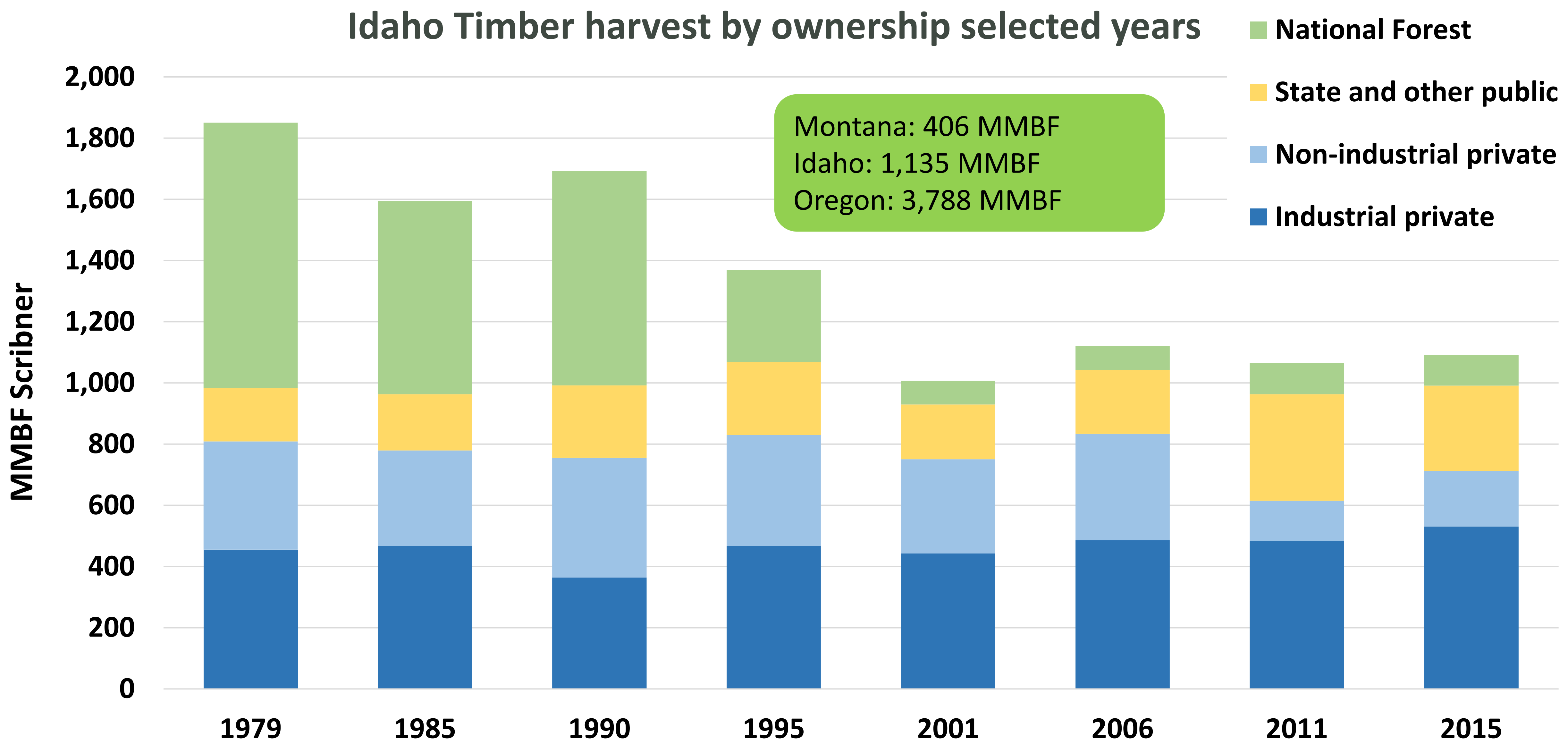
- National forests accounted for 72% of Idaho's non-reserved timberland and less than 10% of timber harvest volume in 2015.
- In 1990 and earlier USFS accounted for 40-50% of the yearly timber harvest.
- Since 1990 private and state timberlands have supplied the majority of the harvest.

- Idaho's total 2015 timber harvest was over 1.13 billion board feet (BBF) Scribner, about 6.5 percent higher than 2011 and 52 percent higher than the 2009 recession low of 746 million board feet (MMBF) Scribner.

- The harvest of timber for house logs more than doubled from 2011, indicating some improvement for a sector hit hard by the recession.

Conversion factors calculated from data:

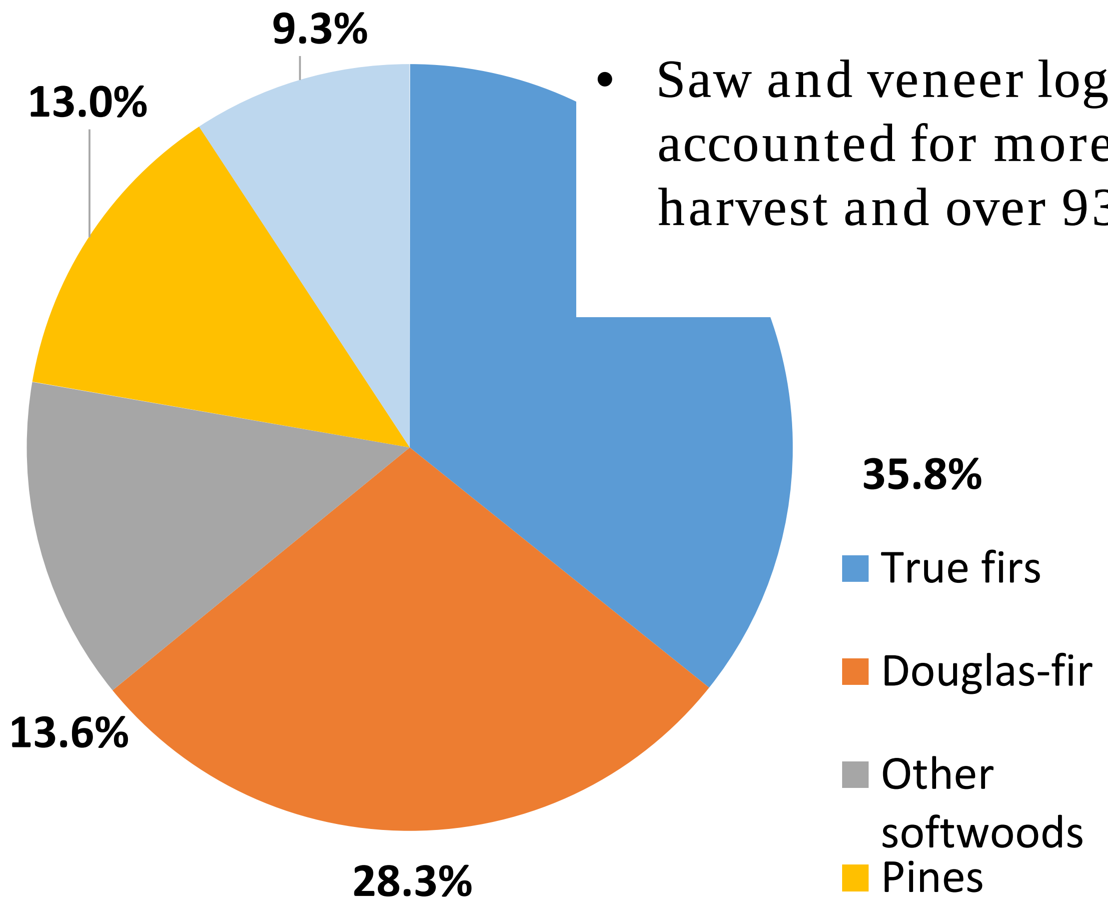
- 4.60 board feet Scribner per cubic foot for saw and veneer logs
- 4.60 board feet Scribner per cubic foot for house logs
- 2.81 board feet Scribner per cubic foot for pulpwood
- 3.52 board feet Scribner per cubic foot for other products



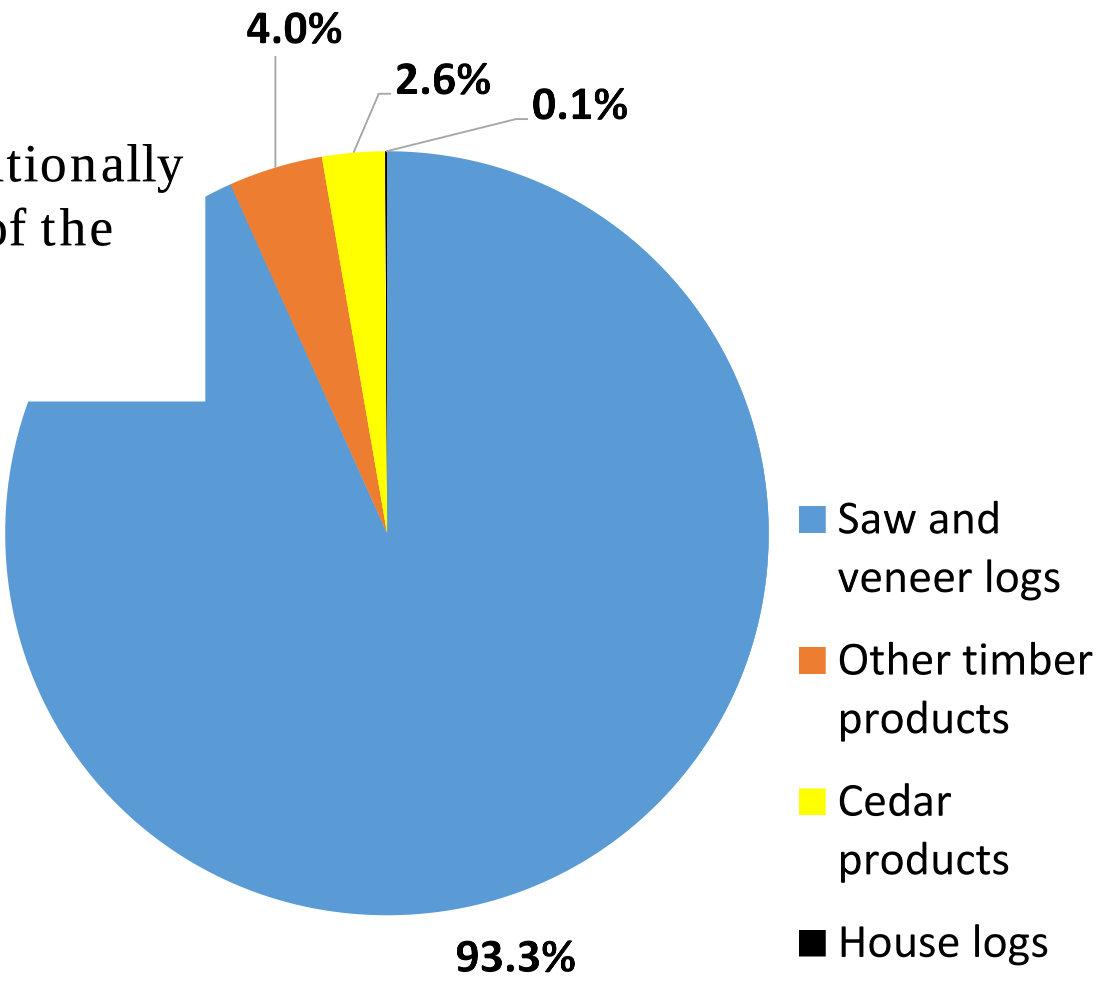
BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA

- True firs and Douglas-fir have accounted for more than 50% of the total harvest since the 1990’s and nearly 65% in 2015
- Saw and veneer logs have traditionally accounted for more that 80% of the harvest and over 93% in 2015

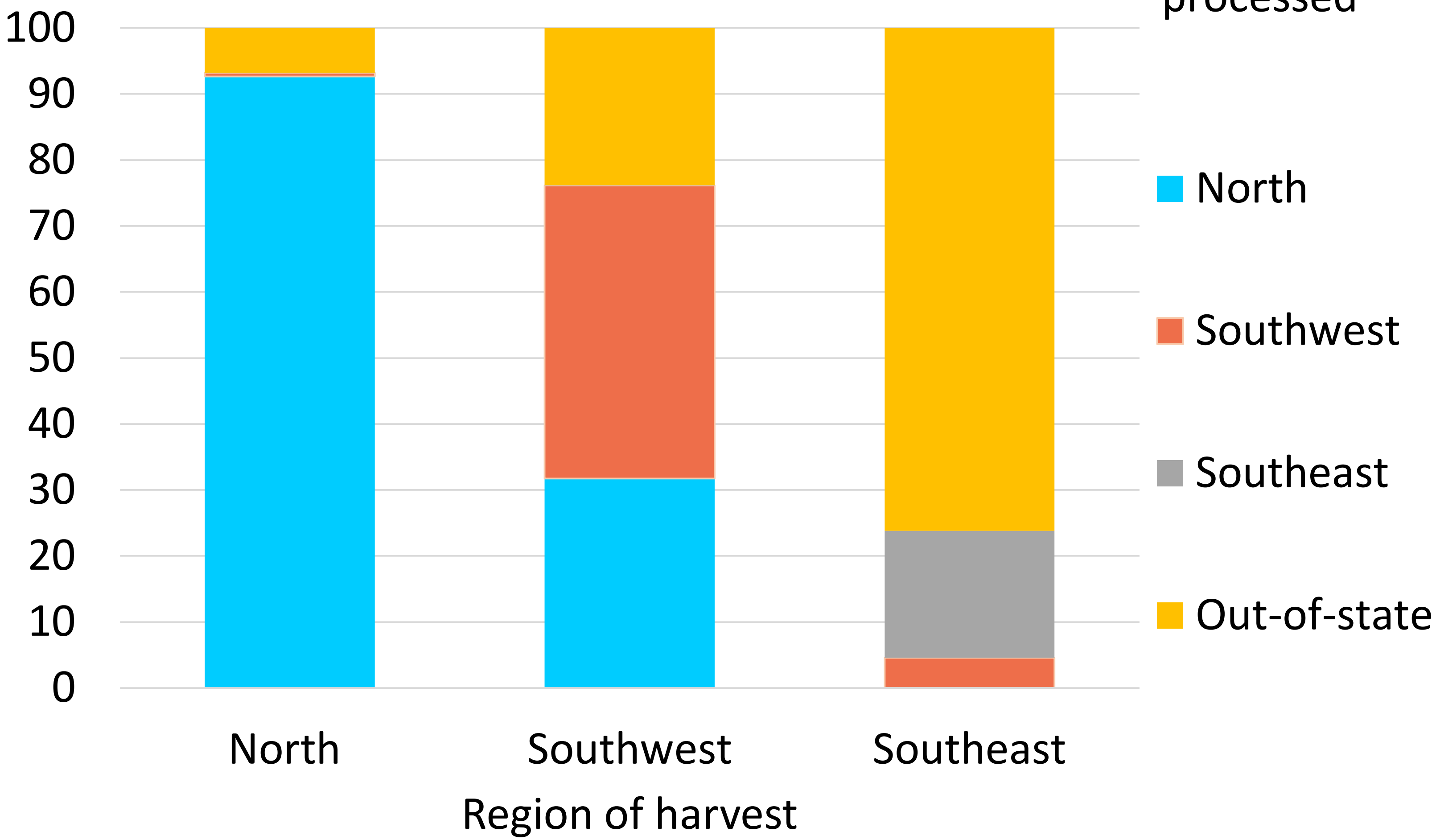
Harvest by species



Harvest by product



Flow of timber harvest, percent of total

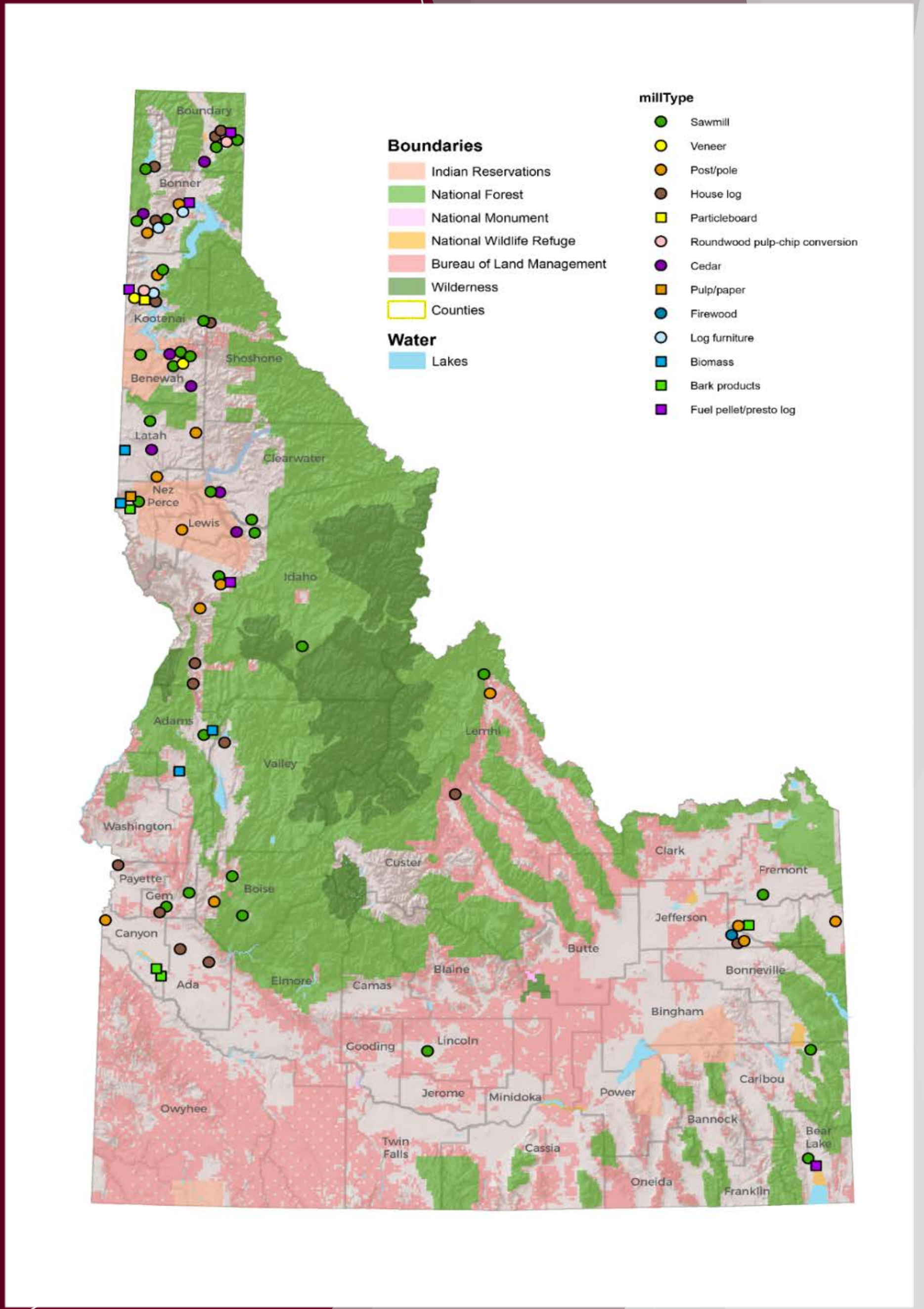


- About 93% of the trees harvested in North Idaho were processed in region.
- 76% of the trees harvested in Southeast Idaho were processed out-of-state.
- In 2015 Idaho was a net exporter of 12 million board feet Scribner. The first census since 1996 that Idaho was not a net importer of timber.

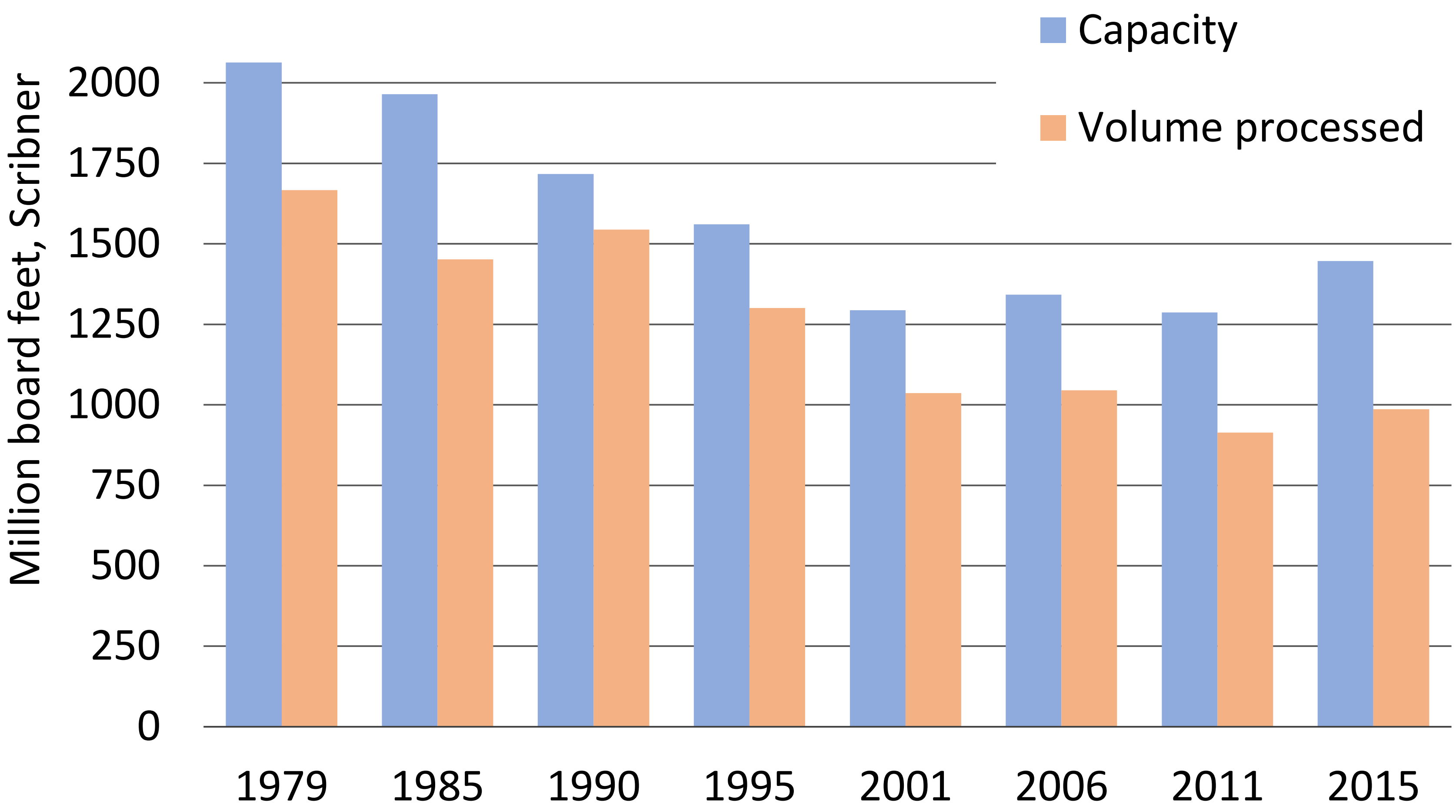
Idaho's Forest Products Industry 2015

- **28** sawmills
- **18** residue related facilities
- **18** post , pole utility pole, log furniture and firewood producers
- **15** log home/houselog manufacturers
- **7** cedar products manufacturers
- **2** plywood/veneer plants

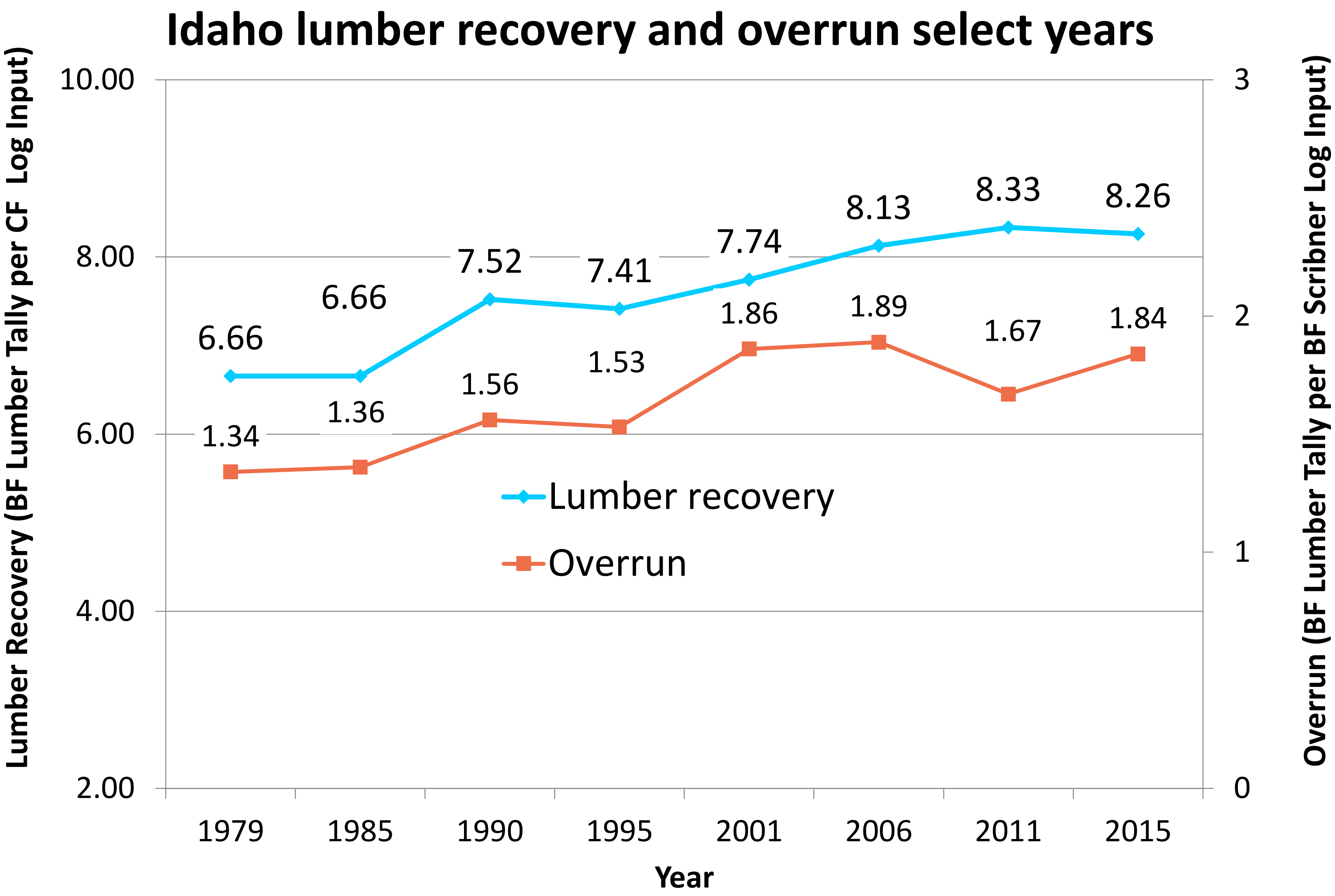
88 active primary wood products facilities 2015



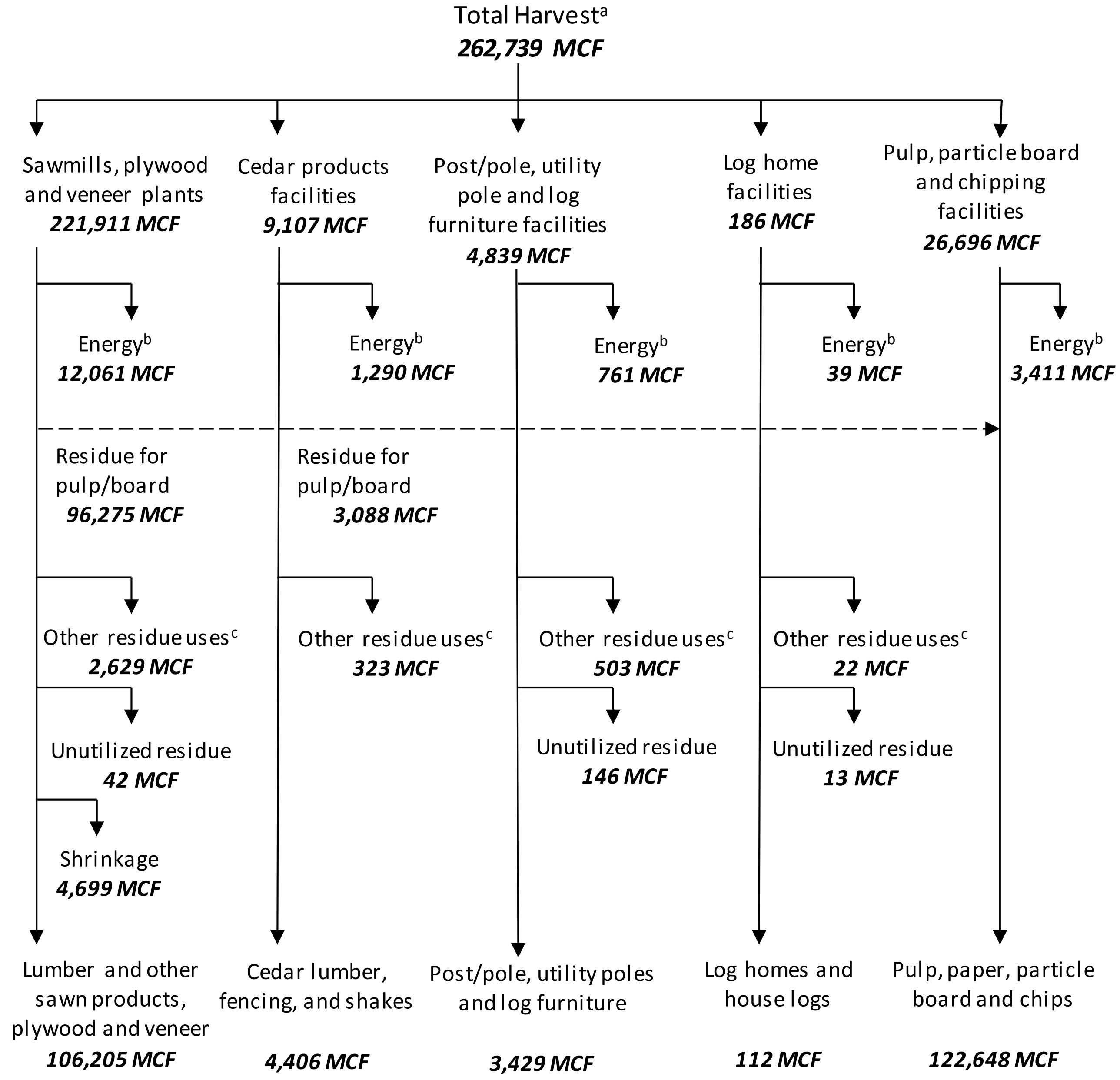
Capacity to process sawtimber: sawmills, plywood/veneer, houselogs, and utility poles



- Capacity to process sawtimber exceeded 1.4 BBF Scribner during 2015, about 12 percent higher than in 2011.
- Capacity utilization was about 68 percent of capacity overall and 69% for sawmills.
- Sawmill capacity has reached a level nearly equal to that in 1995 with about half the number of facilities.



- Idaho's 28 active sawmills produced about 1.7 billion board feet of lumber during 2015, and recovered an average of 1.84 board feet lumber tally per board foot Scribner of log input.
- Sawmills produced 90% (1.4 million bdu's) of all mill residues and less than one percent went unutilized.



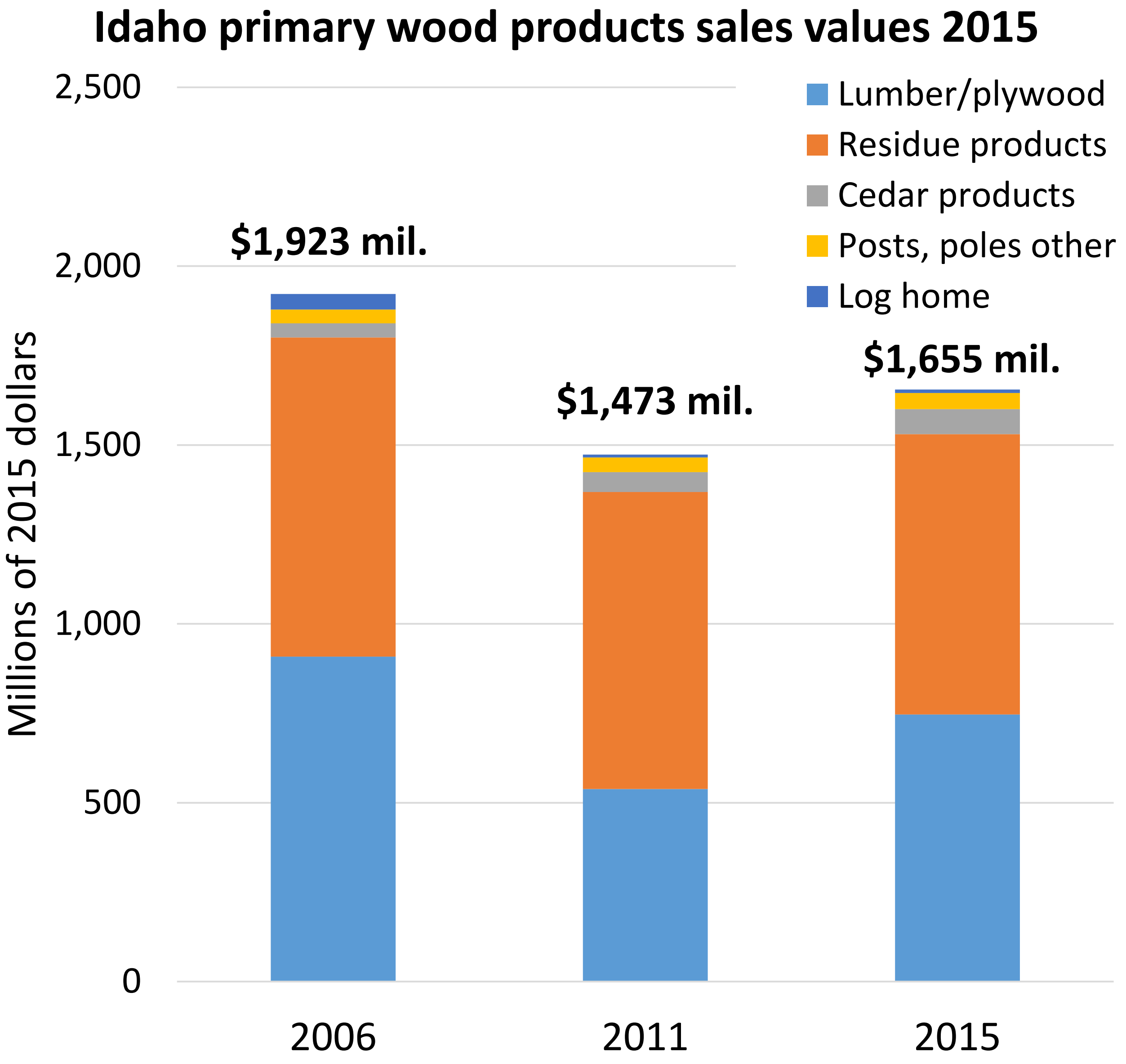
[a] Harvest volume does not include bark.
[b] Energy includes residue used internally for energy or sold for hog fuel, wood pellets, or compressed fuel logs.
[c] Other uses include landscape, mulch, and animal bedding.

- Sawmills received 84% of the raw log wood fiber harvested in Idaho and used 40% of the total wood fiber to make finished products.
- Residue product facilities received 10% of the raw log wood fiber harvested in Idaho and used 47% of the total wood fiber to make finished products.
- Smaller sectors had proportionally more unused wood fiber primarily due to constrained ability to sell their residuals.

- Idaho's primary wood products industry generated more than $1.65 billion in sales, including mill residue. Sales were up approximately 12 percent over 2011, but still below pre-recession levels.

- The in-state proportion of finished product sales increased from 10 percent of total sales in 2011 to 20, marking the highest proportion of in-state sales since 1995.

- Cedar products sales continued to increase as a proportion of total sales from 38% to 42% in 2015.



Employment & Labor Income

By Kate Marcille, Forest Economist BBER

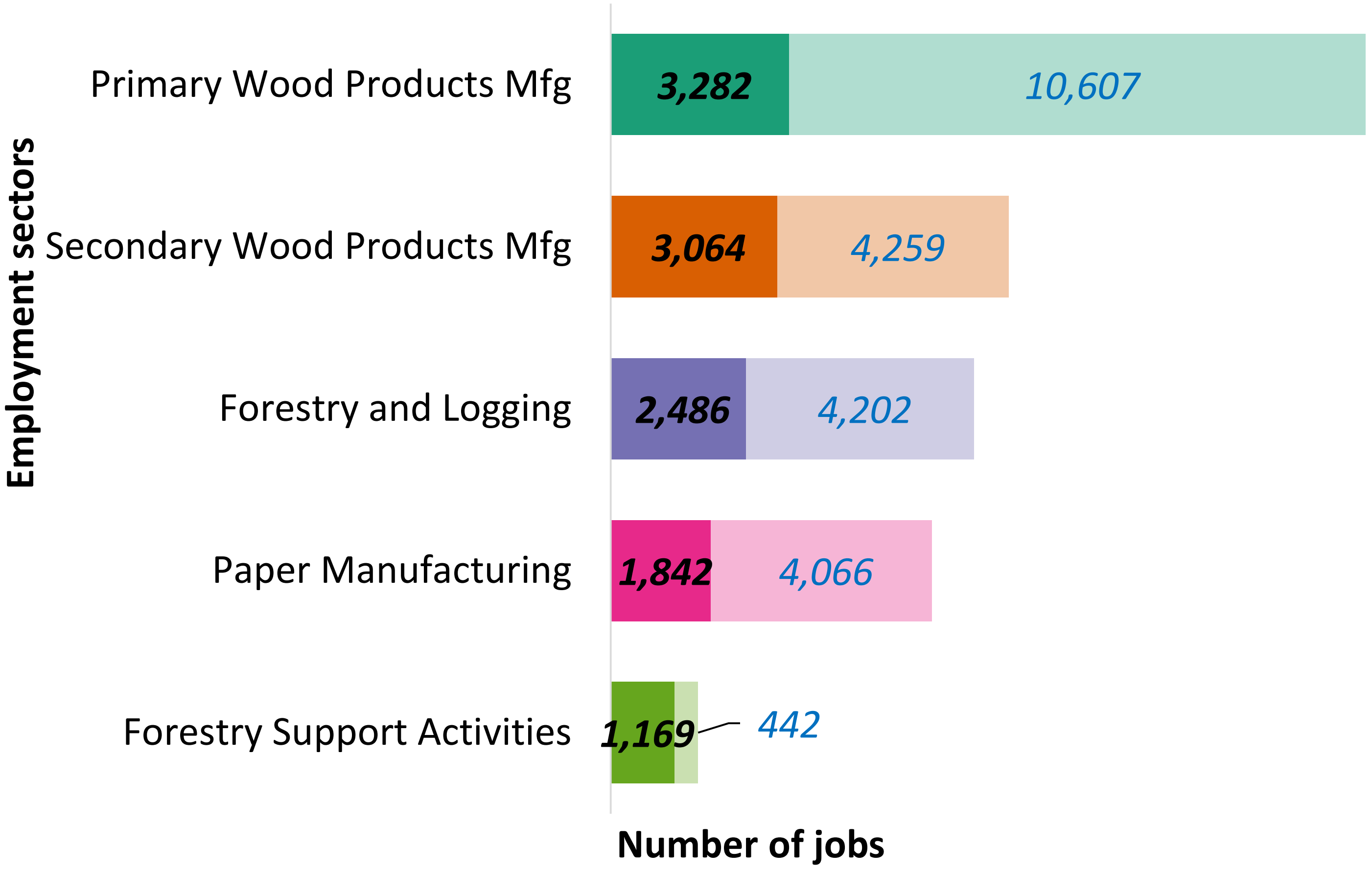
- 2015 total industry employment estimated at **11,823** full- and part-time workers

- Wood products manufacturing (54%)

- Total direct earnings of $805 million

- For every million board feet (MMBF) harvested in Idaho during 2015, approximately 10 jobs and $709,000 in labor income are directly provided in the forest industry.

Forest industry employment in Idaho stimulates *additional economic activity and opportunities* through employment and wages spent throughout the state economy



Source: USDC BEA 2017; USDC CB 2017: USDL BLS

Removals from Forest Inventory

TPO mill surveys

Logging utilization studies

FIA P-2 plots

Thank you!

Contact:

Eric A. Simmons
eric.simmons@business.umt.edu
(406) 243-4517

www.bber.umt.edu

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA