

# Celebrating Wood

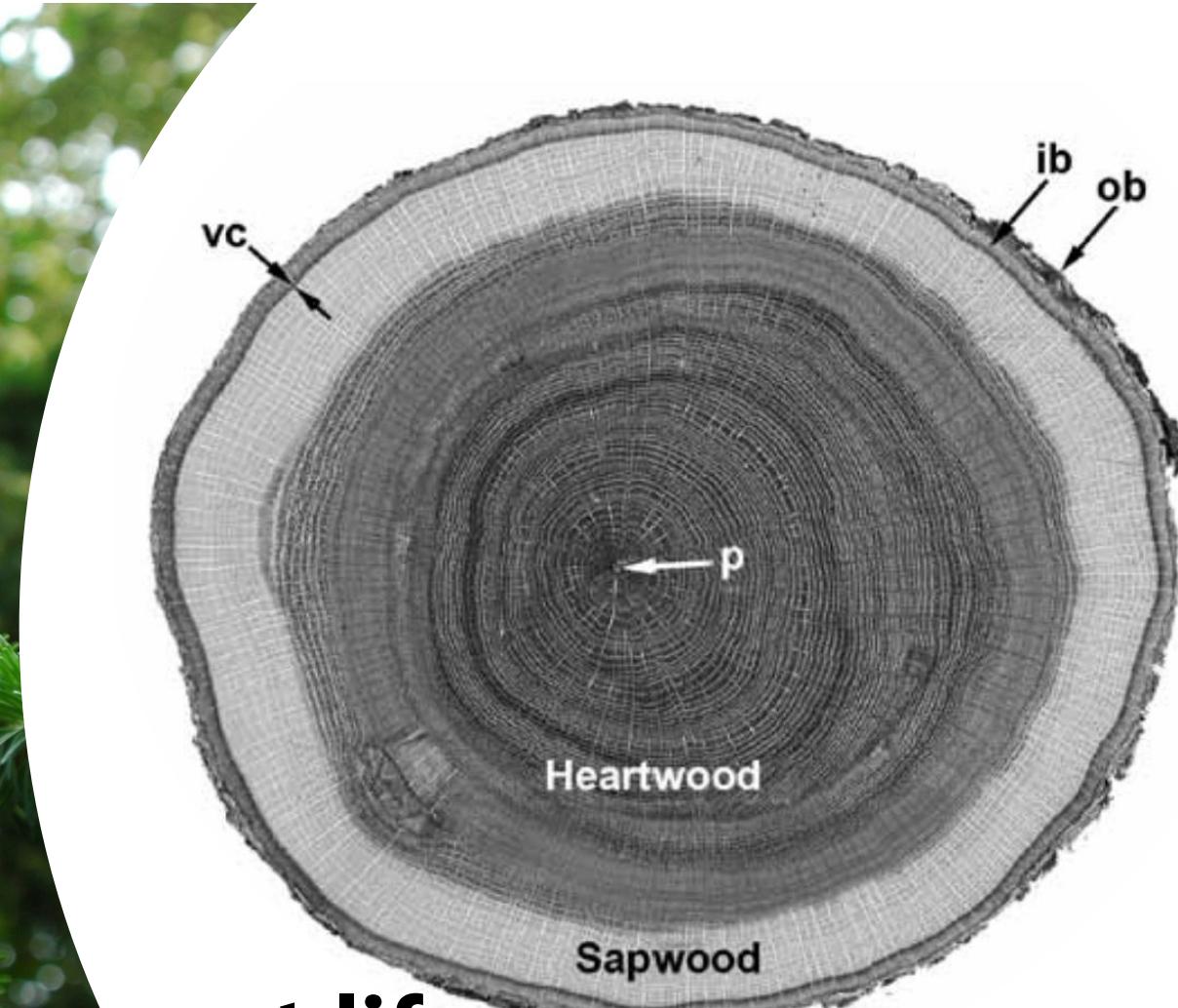
Victoria Diederichs  
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Oregon Tree Farm System Annual Meeting  
November 15, 2025

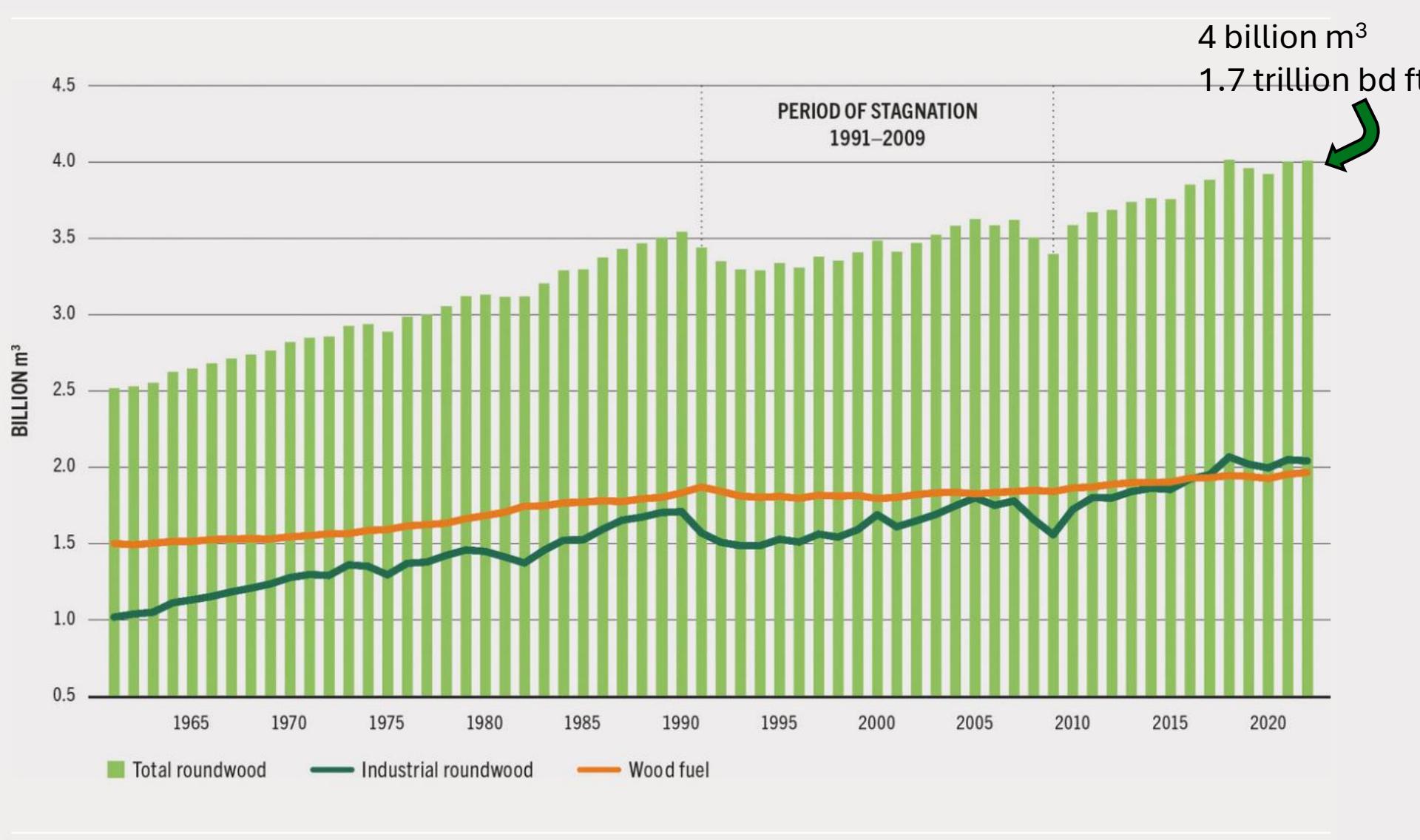
TALLWOOD  
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**Trees grow wood to support life**



# Total global roundwood use





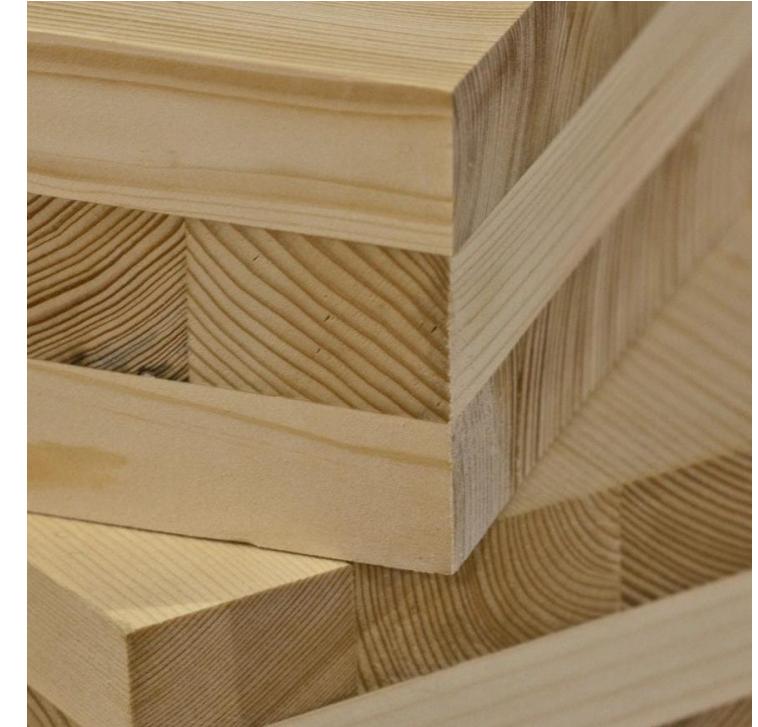
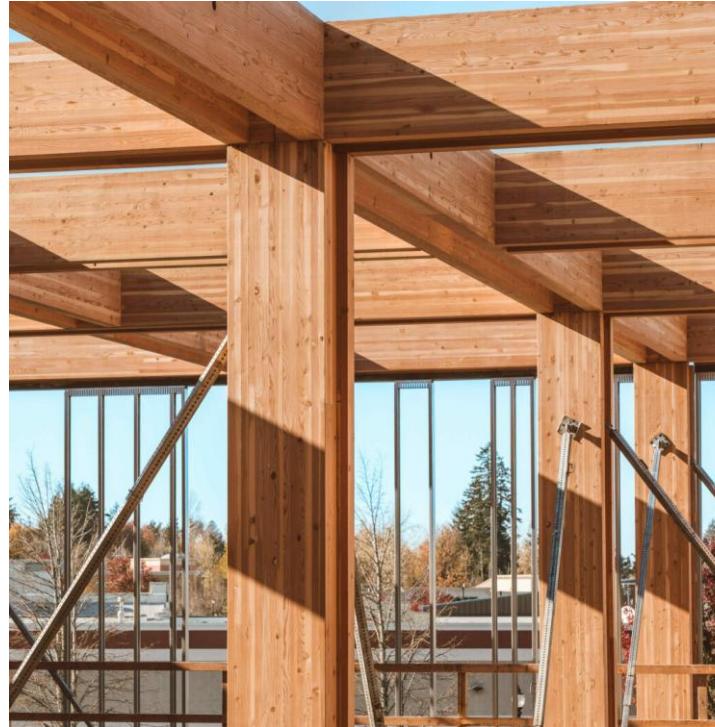
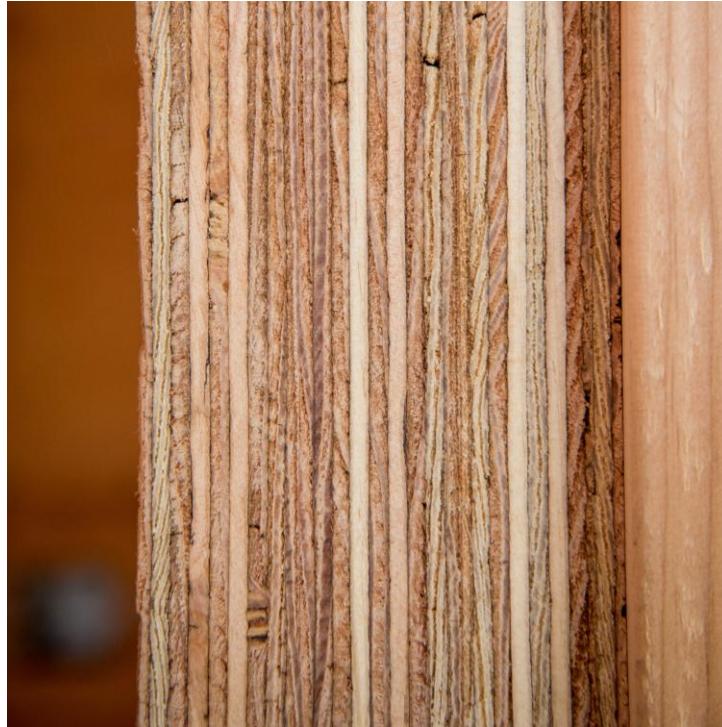
← Albany Historic Carousel & Museum



Wood has many non-structural uses

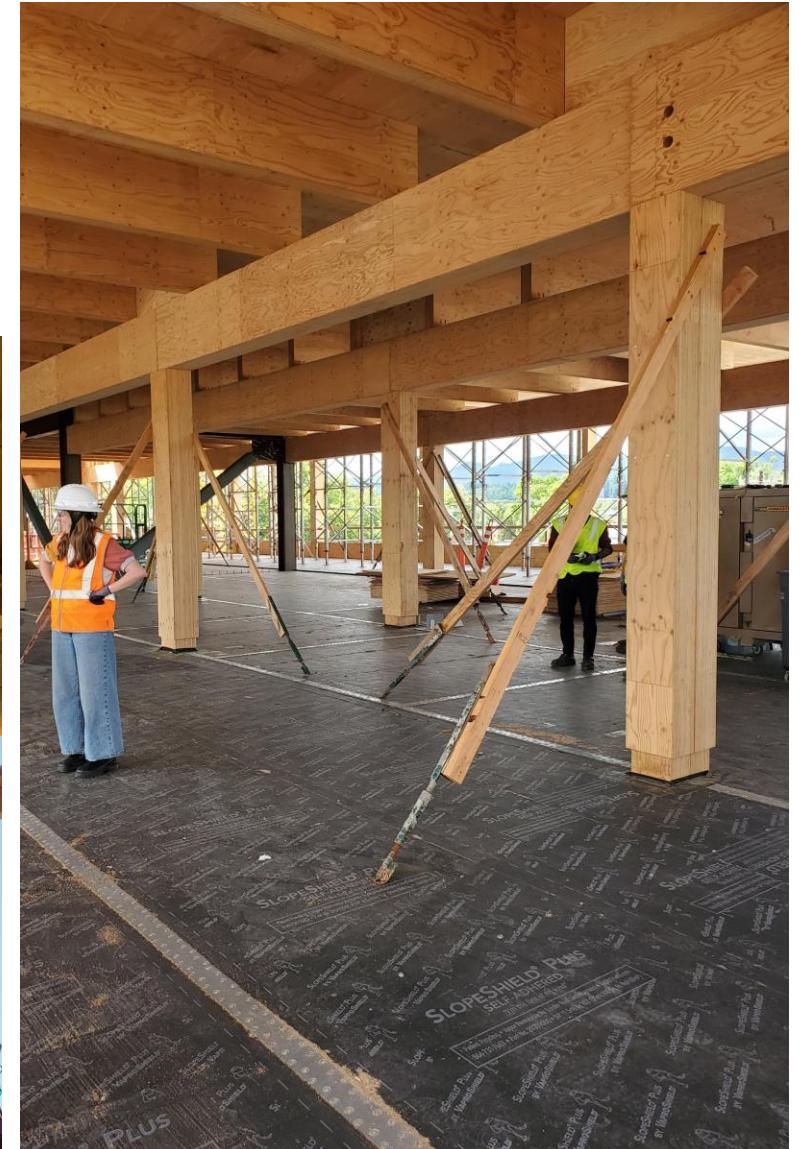
# But a significant amount is structural

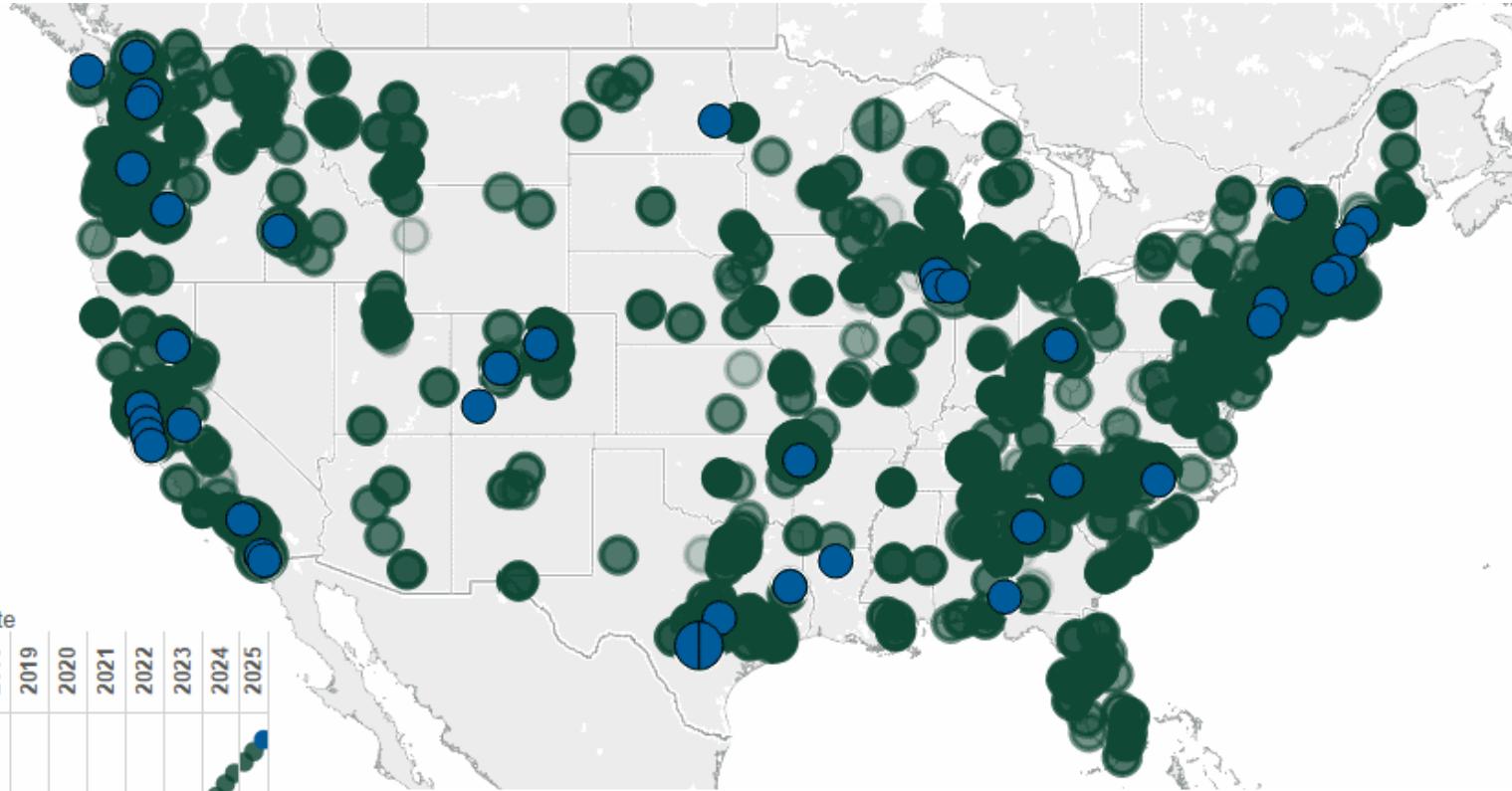
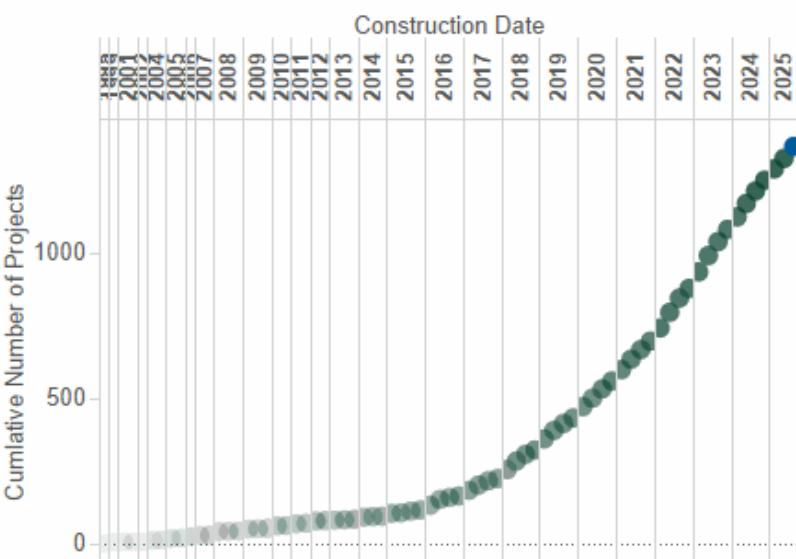




Mass timber is an emerging group of structural wood products

It can functionally replace  
other structural products





And its popularity is growing dramatically



# Using wood has many benefits

It enables  
innovative and  
resilient design

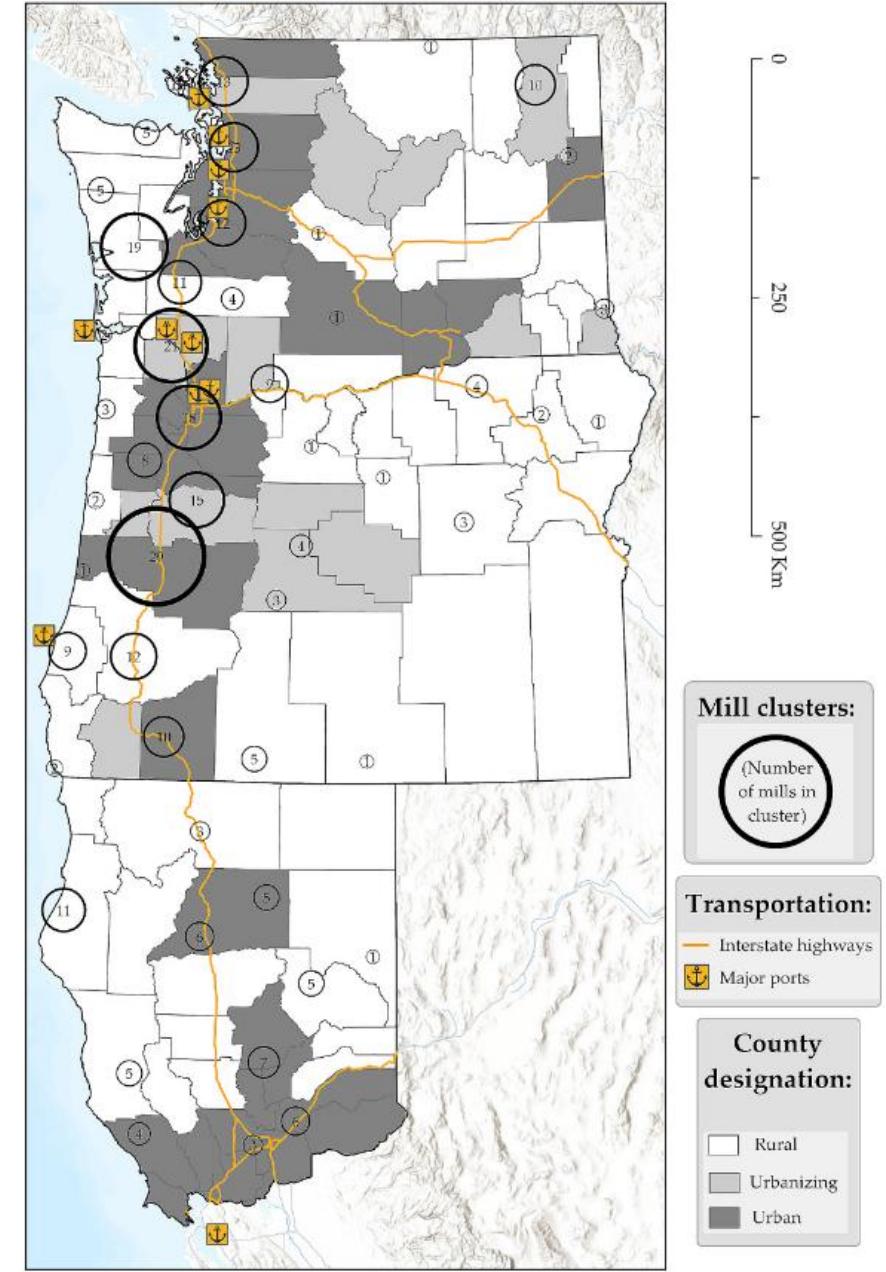
**Example A:**  
Earthquakes





## Example B: Fire

# It benefits rural economies



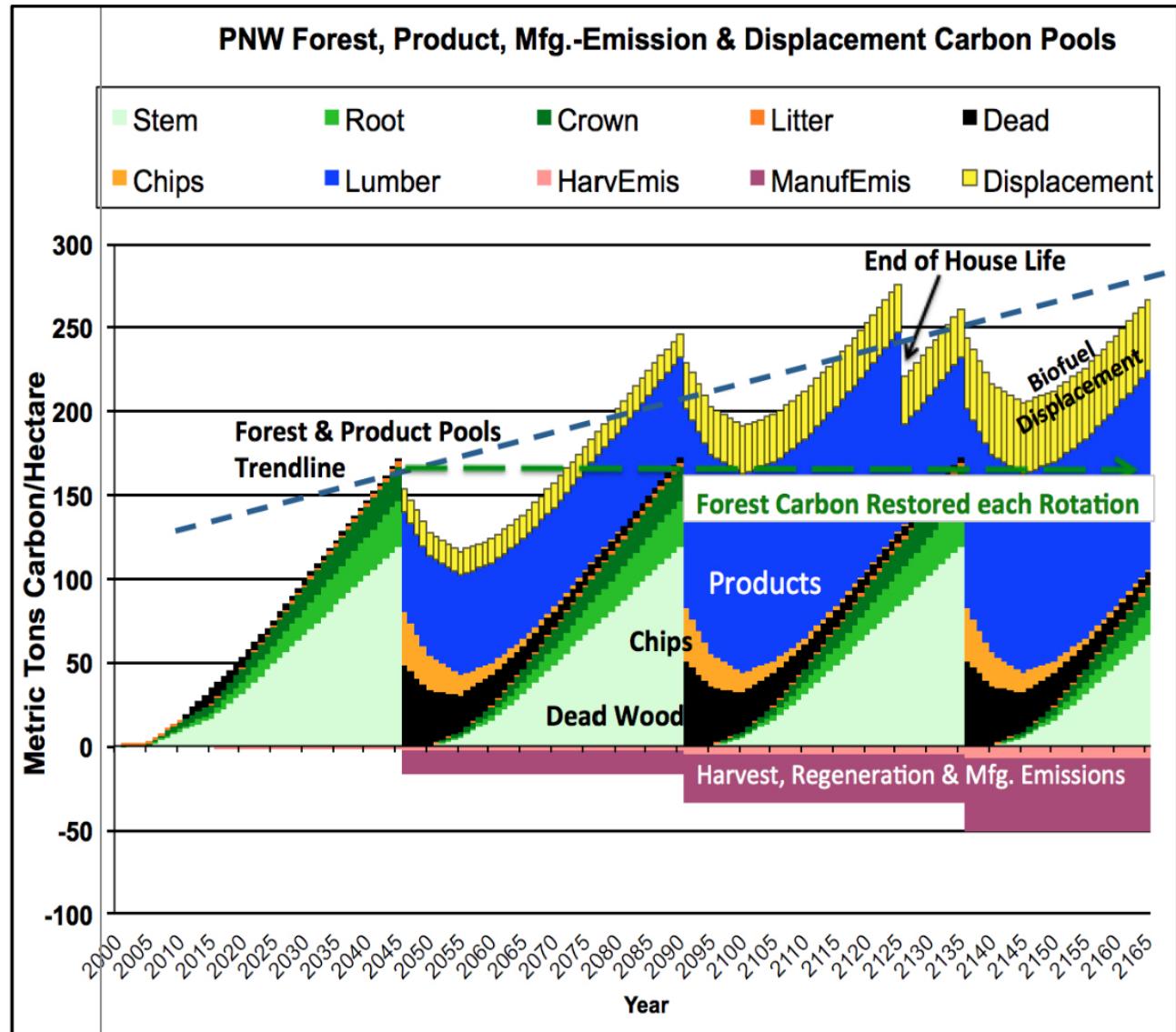
Construction  
can be much  
faster and  
less intrusive





**It is beautiful**

It is  
**Sustainable**  
in terms of  
renewability and  
carbon storage





**Especially when the source forests are managed for multiple values**





Tanoak  
*Notholithocarpus  
densiflorus*



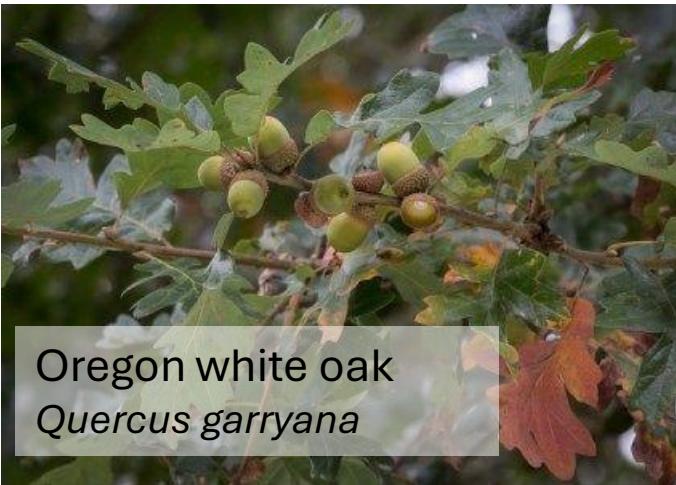
Red alder  
*Alnus rubra*



Bigleaf maple  
*Acer macrophyllum*



Myrtlewood  
*Umbellularia californica*



Oregon white oak  
*Quercus garryana*



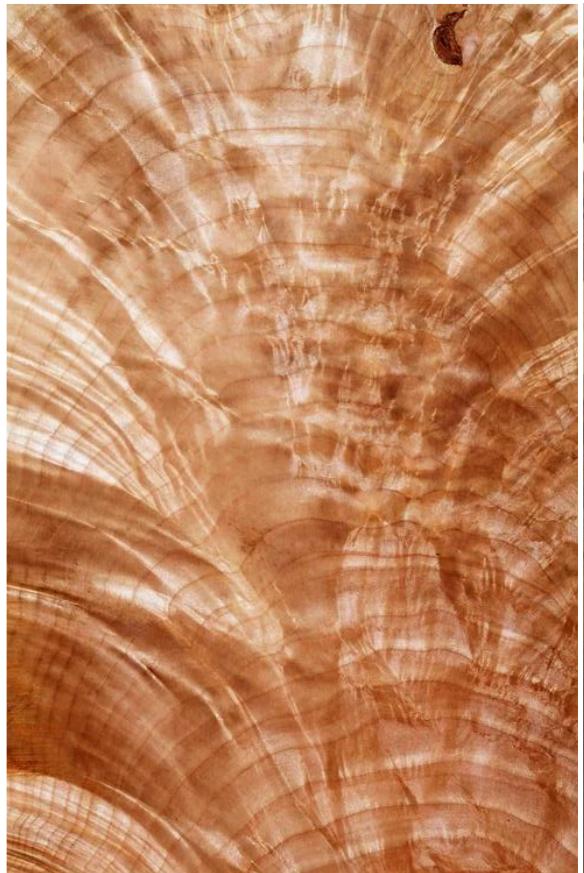
Madrone  
*Arbutus menziesii*



Oregon Ash  
*Fraxinus latifolia*

# Oregon's hardwood resource

# Wood with a story



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[www.tallwoodinstitute.org](http://www.tallwoodinstitute.org)

## Thank you!

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# Resources for Further Reading

- Anderson, R., Spiritos, E., Sills, N., & Slavin, K. (2025). *PNW Regional Mass Timber Market Study*. Pacific Northwest Mass Timber Tech Hub. <https://drive.google.com/file/d/18TfAdFVTdnfs5oqeeGaKnTtlglPIQIQ1/view>
- Diederichs, V., Crandall, M. S., & Hansen, E. (2025). Unique Dynamics and Challenges of the Oregon and Washington Hardwood Manufacturing Sector. *Journal of Forestry*, 123(3), 359–368. <https://doi.org/10.1007/s44392-025-00018-z>
- FAO. (2024). *The State of the World's Forests 2024. Forest-sector innovations towards a more sustainable future*. FAO. <https://doi.org/10.4060/cd1211en>
- Lippke, B., Puettmann, M., & O'Neil, E. (2020). *Effective Uses of Forest-Derived Products to Reduce Carbon Emissions* (CORRIM Technical Note). Consortium for Research on Renewable Industrial Materials. <https://corrim.org/wp-content/uploads/2020/02/CarbonTechNote-Jan-2020-revised.pdf>
- *Mass Timber Projects in Design & Constructed*. (n.d.). WoodWorks | Wood Products Council. Retrieved November 20, 2025, from <https://www.woodworks.org/resources/mapping-mass-timber/>
- Pei, S., Ryan, K. L., Berman, J. W., van de Lindt, J. W., Pryor, S., Huang, D., Wichman, S., Busch, A., Roser, W., Wynn, S. L., Ji, Y., Hutchinson, T., Sorosh, S., Zimmerman, R. B., & Dolan, J. (2024). Shake-Table Testing of a Full-Scale 10-Story Resilient Mass Timber Building. *Journal of Structural Engineering*, 150(12), 04024183. <https://doi.org/10.1061/JSENDH.STENG-13752>
- Ross, R. J. (Ed.). (2010). *Wood handbook: Wood as an engineering material* (General Technical Report No. FPL-GTR-190; p. 509). U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. <https://research.fs.usda.gov/treeresearch/37440>