

Testimony in Opposition HB 4105

TO: Oregon House Committee On Agriculture, Land Use, Natural Resources and Water
From: Ernie Niemi, President, Natural Resource Economics **February 12, 2026**

Economic Costs to Oregonians from Logging Will Far Exceed the Benefits

I. Qualifications

- Professional economist, economic importance of natural resources: ECONorthwest and Natural Resource Economics. (1978–present)
- Co-author: The Economic Costs of Climate Change for Oregonians: A First Look. (2024. Forum on Oregon Climate Economics)

II. Summary

- Logging on State lands will impose costs on all Oregonians by degrading ecosystems, reducing jobs and incomes in growth sectors of the economy, increasing the cost of living, and diminishing quality of life. Economists call these “external costs” because they are borne primarily by workers, families, and businesses external to logging operations.
- Extensive evidence shows the external costs from logging on State Lands exceed the benefits.
- Industrial clearcut logging on State lands would intensify the external costs.
- Extensive evidence shows managing State lands to support conservation, restoration, outdoor recreation, and related activities would generate increasing levels of jobs, personal income, and tax revenues. In contrast, these variables will shrink with future logging.
- Yesterday is gone. Logging no longer generates a dominant share of Oregon’s economic activity. For many years, the economic costs from negative impacts on ecosystems have exceeded the value of the logs. This differential is growing, so that logging in the future will have an even larger, net negative impact on the well-being of all but a few Oregonians.

III. External Costs

Logging alters the use and the structure of Oregon’s natural resources. In today’s world these disturbances have negative economic impacts, i.e., they impose economic costs on affected workers, families, businesses, and communities. Economists commonly apply the term, “external costs” to describe costs that accrue to workers, families, businesses, and communities not directly involved in the logging.

External costs from logging of State lands will materialize whenever it causes people and entities to lose something important to them. Although some of the external costs might involve the loss of something traded in markets, many – probably most – of the external costs will involve the loss of things not traded in markets. For example, the adjacent diagram shows that industrial clearcut logging can reduce streamflows by 50 percent.¹ With degradation of the

¹ Green Oregon. 2021. [Drinking Water](#). Oregon Public Broadcasting and Pro Publica.

quality and quantity of water in streams, Oregonians lose habitat for salmon and other species, suffer reductions in the populations of these species, and lose opportunities for commercial and recreational jobs associated with these species. Negative ecological impacts on watersheds also deprive some communities of the safe drinking water they otherwise would have drawn from a nearby stream.²

Logging on State lands – especially industrial clearcut logging – hurts Oregonians by diminishing the flow of highly valuable ecosystem services in three

ways: (1) it degrades ecosystems directly by eliminating habitat, degrading soils with road-building and the use of heavy vehicles, reducing tree cover, and exposing lands to sunshine and higher ambient temperatures; (2) it degrades forests through so-called edge effects and by generating pollution that flows downstream; and (3) it precludes alternative management practices that would restore and conserve the health and productivity of ecosystems degraded by past logging.

IV. External Costs of Logging Will Exceed Benefits

Extensive evidence, some of which is summarized below, demonstrates Legislators and all Oregonians should expect that the external costs from the negative impacts of logging on biodiversity and ecosystems will be greater – and probably much greater – than the benefits. Research findings just now coming available, for example, substantiate this conclusion with a high level of confidence:³

“Ecosystem degradation is occurring across all regions [of the world]. Every critical ecosystem is on a pathway to collapse ([i.e.] irreversible loss of function beyond repair).”

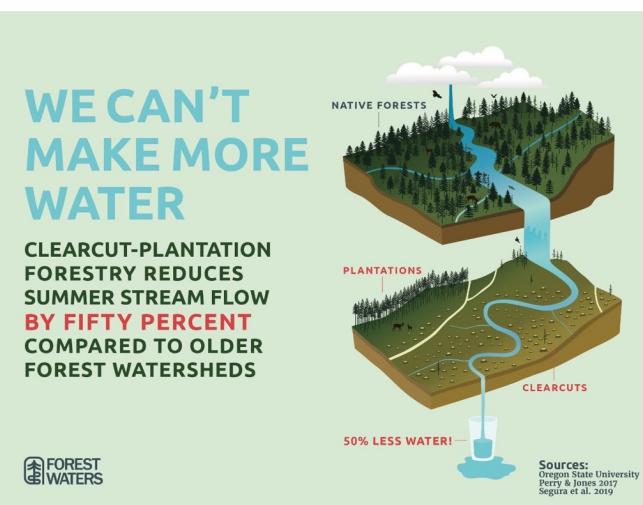
Research findings published in August, 2025, reinforce the conclusion that degradation of ecosystems and biodiversity – across the globe and especially in Western Oregon – is so severe that further degradation, from development or other activities, might trigger catastrophic environmental, economic, and social outcomes.⁴

A recent, global assessment of the economic importance of biodiversity and ecosystems – *The Economics of Biodiversity: The Dasgupta Review* – concluded that, because the degradation of ecosystems is so extensive and severe, the net benefits – to local communities and global society – from activities that restore and conserve the ability of ecosystems to provide goods and services, typically will be more than 4 times the net benefits from industrial activities, such

² “Using data and satellite imagery from NASA collected between 1997 and 2023, four researchers from the agency’s Oregon Coast Range Ecological Conservation Team were able to look at logging impacts in forests within 80 Oregon Coast watersheds identified by Oregon Wild. About one-third of the forested land in those 80 watersheds – nearly 600 square miles – had been logged during the last 20 years, according to the study.” [Baumhardt, A. 2023. [NASA Imagery Shows Scale, Impact of Logging in Drinking Water Watersheds in Oregon](#).]

³ Lucas, C., and others. 2026. [It’s Ecological Breakdown that Should Put Us on a War-Footing: Official](#). Resilience. Website.

⁴ Stenzel, F., and others. 2025. [Breaching Planetary Boundaries: Over Half of Global Land Area Suffers Critical Losses in Biosphere Integrity](#). One Earth.



as logging, that diminish this ability.⁵ These findings indicate that it would be prudent for Legislators and all Oregonians to anticipate, as a default assumption, that the external costs from future logging's negative impacts on biodiversity and ecosystems will exceed the value of the logs produced by more than 4-to-1. The ratio for individual logging projects might be lower or, more likely, higher.

Additional evidence – even more recent and extensive – buttresses the expectation that the external costs of logging State lands will exceed the economic benefits. This evidence comes from the just-released evaluation of the current state of the global environment.⁶ Its “Key Messages” include:

“[Our] planet has already entered into uncharted territory, facing global environmental crises of climate change, biodiversity loss, land degradation and desertification, and pollution and waste.”

“These environmental crises are causing substantial economic and social damage, including to infrastructure, transport, and basic services, harming jobs, livelihoods, economic growth and security, and undermining human health and well-being, food, energy and water security.” [bold emphasis added]

Further support for this conclusion – that the external costs from industrial logging of State lands will exceed the economic benefits – comes from Washington’s Department of Natural Resources (DNR). After comparing two alternatives – one that would allow logging to proceed, and another that would restrict logging to protect potential nesting sites for northern spotted owls – DNR concluded that the economic benefits of protecting the habitat are 2-5 times the benefits from logging.⁷

Legislators should not look away from these findings because they contradict industry-supported marketing campaigns that glorify the economic benefits of logging, or because they have a wider focus than just Oregon’s State lands. Instead, the broad scope of these findings should strengthen both your obligation and your dedication to avoid approving actions that would impose substantial economic harms on Oregonians by degrading Oregon’s already degraded forest ecosystems.

V. Climate Pollution from Logging State Lands Generates Huge Economic Costs

Logging in Oregon increases the amount of carbon dioxide in the atmosphere and the amount is substantial. Figure 1 shows logging has been responsible for about one-third of Oregon’s total greenhouse-gas (GHG) emissions, more than any other source.⁸ Three separate analyses have confirmed this conclusion.⁹

Logging-related CO₂ in the atmosphere imposes economic costs on Oregonians and others. In 2016, researchers for the Bureau of Land Management (BLM) traced the overall impact of logging on the amounts of carbon dioxide in the atmosphere. They showed that, when

⁵ HM Treasury. 2021. [The Economics of Biodiversity: The Dasgupta Review](#).

⁶ United Nations Environment Programme, and others. 2025. [Global Environment Outlook Seventh edition-2025](#).

⁷ Krug, D., 2007. [Preliminary Economic Analysis: Forest Practices Rulemaking Affecting Northern Spotted Owl Conservation](#). Olympia, WA: Department of Natural Resources.

⁸ Segerstrom, C. 2018. [Timber is Oregon’s Biggest Carbon Polluter](#).

⁹ Law, B.E. and others. 2018. [Land Use Strategies to Mitigate Climate Change in Carbon Dense Temperate Forests](#). PNAS; Hudiberg, T.W., and others. 2019. [Meeting GHG Reduction Targets Requires Accounting for All Forest Sector Emissions](#). Environmental Research Letters; and Talberth, J., and E. Carlson. 2024. [Forest Carbon Tax and Reward: Regulating Greenhouse Gas Emissions from Industrial Logging and Deforestation in the US](#). Environment, Development and Sustainability.

compared with the agency's Preferred Alternative, for alternatives that would have increased log output, the economic costs to society from the additional carbon dioxide emitted into the atmosphere would exceed the value of the additional logs by more than 4-to-1. And vice versa for alternatives that would have decreased log output.¹⁰ These findings rest on an expectation that each metric ton of CO₂ added to the atmosphere causes about \$50 of economic damage by intensifying storms, wildfires, heatwaves, etc. Since then, research indicates that social cost per ton exceeds \$1,000.¹¹ In other words, the carbon-related external costs of logging on State lands exceeds the value of the logs by at least 20-to-1.

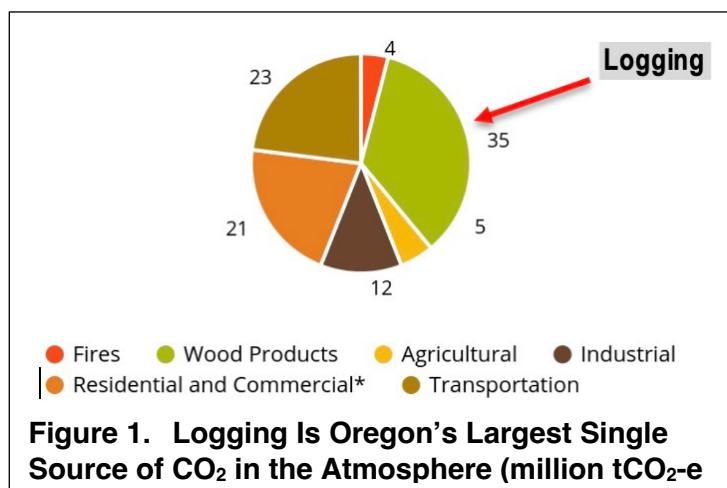


Figure 1. Logging Is Oregon's Largest Single Source of CO₂ in the Atmosphere (million tCO₂-e)

Research published this week by a team led by an OSU scientist highlights the reality that carbon-related warming perhaps has passed levels that can trigger catastrophic economic, social, and ecological impacts.¹² They warn that the danger is *"a compelling reason for immediate precautionary action. In short, we may be approaching a perilous threshold, with rapidly dwindling opportunities to prevent dangerous and unmanageable climate outcomes. Addressing the various threats requires stronger policy frameworks that accelerate emissions reductions."* [bold emphasis added]

VI. Outdoor Recreation, Not Logging, Will Boost Jobs, Incomes, Tax Revenues

Oregonians often hear that continued industrial timber production is necessary for thousands of workers to have well-paying jobs. In reality, though, the reverse is true. The timber industry aggressively eliminates jobs. The negative economic impacts of timber production extend beyond timber-industry workers to the communities where the industry and its workers reside. Extensive research has documented the industry's negative impacts on local communities. A summary of this research, compiled by the National Research Council, concluded that a higher concentration of timber-related activity "seemed to hurt rather than help communities."¹³ Much of this "hurt" comes directly from the industry's impacts on workers. Eliminating industry jobs, for example, increases unemployment and the incidence of families in poverty throughout the local community.

Figure 2 reinforces this message. It shows that timber harvest and employment in wood-products manufacturing in Oregon both declined by about one-third after 2006, in what many economists call the "Great Recession." By 2013 timber production recovered to earlier levels.

¹⁰ BLM. 2016. [Proposed Resource Management Plan/Final Environmental Impact Statement: Western Oregon](#). p. 657.

¹¹ Bilal, A., and D.R. Kanzig. 2024. [The Macroeconomic Impact of Climate Change: Global vs. Local Temperature](#). National Bureau of Economic Research.

¹² Ripple, W. and others. 2026. [The Risk of Hothouse Earth](#). One Earth.

¹³ National Research Council. 2000. [Environmental Issues in Pacific Northwest Forest Management](#).

Timber employment, however, did not, as the industry permanently eliminated about 10,000 workers, one-third of the pre-recession number.

The negative relationship between timber and the social health of communities was reaffirmed by the Bureau of Land Management, which examined the relationship between log production and local economies. It found that the timber industry is among the world's most volatile, and this volatility has negative spillover impacts on local communities. As a result, the BLM concluded that proposed increases in log production likely would destabilize, rather than stabilize, the economy of nearby rural communities.¹⁴

Recent research provides additional detail to the negative effects on local economies, by showing a strong statistical correlation between logging and negative economic indicators. Figure 3 illustrates. It shows that, in western Oregon, counties with more logging have lower median wages, and a higher percentage of the population lives in poverty.¹⁵

Substantial evidence indicates that the economic and social outlook could be different if the Legislature curtailed timber production and, instead, managed the State lands with an emphasis on conservation and restoration. Some of this evidence comes from research conducted in Oregon, which found that proximity to conserved forestlands typically correlates with faster growth in community wealth. Specifically, communities within 10 miles of land designated for species protection "experienced higher growth in community wealth than communities more than 10 miles from...protected land, even among those that were dependent upon logging."¹⁶

Figure 2. Oregon Timber Harvest Recovered from the Great Recession

...But Mill Jobs Did Not

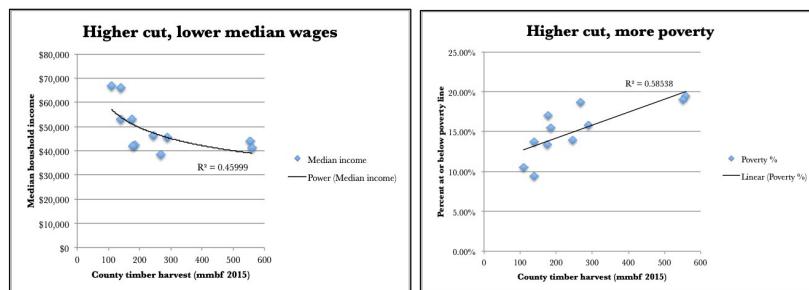
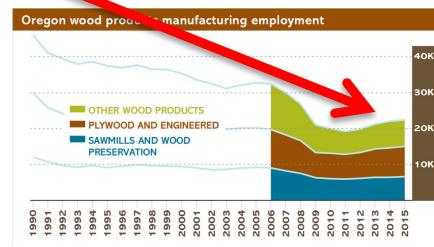
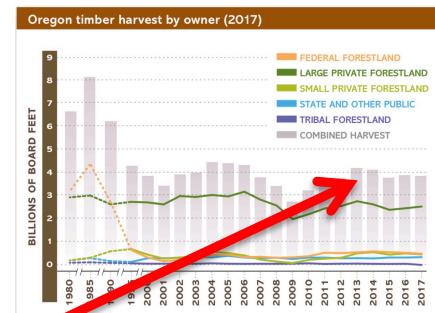


Figure 3. In Counties in Western Oregon with Significant Timber Harvest, More Logging Correlates with Lower Wages and More Poverty.

¹⁴ Bureau of Land Management, 2014. Final Environmental Impact Statement for the Proposed Resource Management Plan for Western Oregon, page 702. Portland, OR: USDI Bureau of Land Management, Oregon State Office.

¹⁵ County harvest data courtesy of Oregon Department of Forestry. Poverty and median wage data are taken from the U.S. Census. See Talberth, J., 2017. Modernizing State Forest Practices Laws to Halt and Reverse Deforestation. West Linn, OR: Center for Sustainable Economy.

¹⁶ Weber, Bruce, and Yong Chen. 2012. ["Federal Forest Policy and Community Prosperity in the Pacific Northwest."](#) Choices. 27(1).

Table 1 shows results from a recent analysis of 2022 contributions to Oregon's economy from the state's outdoor-recreation industry. These data reflect only the economic contributions from trip-related expenditures and do not include contributions from outdoor-recreation-related expenditures on recreation gear, apparel, etc. The data show that, for just the four counties shown, which contain or are adjacent to most State forest lands, recreation-related expenditures supported 44,575 jobs. This number is approximately five times 8,869, the number of jobs, statewide, in the forestry and logging industry in 2021.¹⁷ Trip-related expenditures for outdoor recreation in the five counties produced \$1.756 billion income for workers. The expenditures and income generated \$380 million tax revenues for state and local governments.

Table 1. Contributions to Oregon's Economy from the Outdoor-Recreation, 2022

County	Employment	Labor Income (million)	State and local Tax (million)
Clatsop	9,096	\$401	\$82
Columbia	516	\$18	\$4
Tillamook	8,535	\$319	\$76
Lincoln	26,428	\$1,019	\$218
Total	44,575	\$1,756	\$380

VII. Conclusion

Increases in industrial clearcut logging on State lands will reduce the overall well-being of Oregonians by imposing external economic costs on them that far exceed the value of the logs. I encourage Legislators to oppose HB 4105

¹⁷ Rooney, B. 2023. [Oregon's Forestry and Logging Industry: From Planting to Harvest](#). Southern Oregon Business. Website.