

Cite as: M. G. Betts *et al.*, *Science*
10.1126/science.adx4908 (2025).

Benefits of onshoring forestry rely on science

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US Executive Orders to reduce wood imports (1) and ramp up domestic production (2) signal a transformation in forest policy. Portrayed as addressing supply chain and national security concerns, these orders have the potential to reduce substantial environmental effects of US-driven wood consumption overseas (3). However, achieving overall environmental benefits and resilient wood supply hinges on sustainable domestic forestry on federal lands—a goal endangered by recent firings of federal scientific and technical experts (4).

As one of the world's largest wood importers (3), the US has substantially influenced logging's environmental impacts abroad through its shifting policies. For example, logging restrictions under the Northwest Forest Plan moved about 1.3 million m³ of harvesting from US land into Canada (5), driving sharp declines in Canadian old-forest biodiversity and carbon (6). Between 2001 and 2015, US agricultural and forestry imports drove range losses of vertebrates that depend on forests internationally at five times the domestic rate (7). Judicious onshoring could therefore reduce the considerable climate and habitat effects of US-driven harvesting, including in highly sensitive ecosystems in countries such as Mexico, Vietnam, and Brazil (3, 7, 8).

However, cuts to evidence-based forestry (4) exacerbate threats to the policy's potential environmental benefits and the goal of long-term wood security. Many US forests harbor large carbon stores and threatened species that are vulnerable to increased logging and weakening of environmental regulations (2). For example, the Pacific Northwest's rainforests support 5 billion tonnes of irrecoverable carbon (9) and remaining populations of the marbled murrelet and the spotted owl (7). In addition, intensifying management of federal lands for production risks undermining other ecosystem values and timber's resilience to escalating pest and wildfire threats (10). Finally, reduced US demand for responsibly sourced timber abroad could weaken efforts against unsustainable logging worldwide (11).

Achieving global socioenvironmental benefits and national wood security is possible through improved management of federal forests. Landscape-scale management that

protects old-growth forests (6), directs more-intensive harvests toward areas with existing degraded forests, and expands sustainable forestry practices can promote productive, biodiverse, and resilient forests that sustain timber supply (12). Reducing waste and promoting long-lasting wood products can further bolster wood security (8). However, maximizing long-term productivity, ensuring wildfire resilience, and minimizing environmental harm require evidence-based and socially acceptable management.

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COMPETING INTERESTS

M.G.B. and J.J.B. have collaborations with federal scientists, including those at the US Forest Service (USFS). M.G.B. has an active research project funded partly by the USFS.

Published online 17 April 2025
10.1126/science.adx4908