

PART ONE COMMENTARY

MIXED SIGNALS

FROM THE FOREST SERVICE ON

URBAN & SALVAGED WOOD

A \$15 Billion, 46 Million Tonne Problem

the Agency's Own Research Documents



Part One of a Two-Part Federal Policy Analysis
The American Urban & Salvaged Wood Initiative

By Paul Hickman

Founder and CEO, Urban Ashes®

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About This Document

This commentary is Part One of a two-part federal policy analysis from Urban Ashes®. Part One sets out the analytical case: the contradiction between Forest Service research and grant policy, the economic and climate cost of that contradiction, and the strategic direction the urban and salvaged wood coalition needs to take to advance federal policy reform.

Part Two will be a Policy Recommendations Brief produced through the Michigan Roundtable on Urban and Salvaged Wood Policy (MRUSWP), a federal policy convening Urban Ashes is targeting to host at the University of Michigan's Erb Institute on August 20, 2026. The brief will translate the strategic direction of Part One into proposed statutory language for the 2027 Farm Bill, proposed Wood Innovations scoring criteria modifications, cost estimates, implementation pathways, and specific federal asks.

Together, Part One and Part Two provide both the analytical case and the operational policy product the urban and salvaged wood sector needs to advance federal policy reform.

About the Author

Paul Hickman has worked in the U.S. urban and salvaged wood sector for 27 years with direct experience across all sectors of the supply chain: policy development, municipal systems design, milling and manufacturing, retail, certification, chain-of-custody systems, and federal program engagement. He founded Urban Ashes in 2009, building on the original 2005 Ann Arbor UrbanWood Project, and has worked across municipal log recovery system design, sector certification framework development, federal grant program engagement, and corporate procurement channel development. Hickman is the lead author of the Climate Smart Wood Group Procurement Guidance section on urban and salvaged wood, contributor to USRW certification framework development, and federal policy lead for Urban Ashes.

About Urban Ashes

Urban Ashes was founded in 2009 as a direct outgrowth of the original 2005 Ann Arbor UrbanWood Project, one of the first municipal urban and salvaged wood utilization programs in the United States. From 2009 to 2019 Urban Ashes operated as a national urban and salvaged wood manufacturer reaching 250 retail partners across 43 states. Since 2019 Urban Ashes has shifted to consulting and systems development, with active deployments in Ann Arbor, Detroit, Lansing, Portland Oregon, Columbus Ohio, Vancouver Washington, Atlanta Georgia, and other cities. Urban Ashes operates the proprietary Gnarbit chain-of-custody and carbon accounting platform, has developed and deployed the Circular UrbanWood Triconomy Model (CUT Model), and is system architect for two active NextCycle Michigan projects building Michigan's first integrated municipal log recovery yards: the Detroit Urban Wood Circular Recovery System and the Washtenaw County Municipal Log Recovery Yard.

The analysis and recommendations that follow are based off of that operational track record. They reflect what two decades of building urban and salvaged wood systems have shown to work, and what federal policy would need to do to support the sector's growth at the scale the resource and the climate moment require.

The Scale of What Federal Policy Is Treating as a Low Priority or Even a Non-Priority

Forest Service research documents that U.S. urban tree mortality generates approximately 46 million tonnes of fresh weight merchantable wood annually (Nowak, Greenfield, and Ash 2019), enough to produce 7.2 billion board feet of lumber, more than the total annual harvest from the entire National Forest System. Independent research validates this baseline (MacFarlane 2009).

At real market prices for kiln dried urban and salvaged hardwood lumber, the lumber grade subset of this resource (roughly 12.7 million tonnes annually) represents \$7.5 to \$15 billion in foregone annual product value. Adding documented disposal cost recovery, orchard grower revenue, carbon market value, and workforce wages brings the total annual public cost of current federal policy to a conservative \$10 billion and a realistic \$20 to \$30 billion when climate damages and health costs are included.

On the climate side, the same lumber grade volume represents 31.5 million tonnes of CO₂e in annual foregone climate benefit at full lumber capture, or 6.3 million tonnes at the Urban Wood Network's conservative 20% capture target. At the EPA's social cost of carbon, that climate cost alone is \$1.2 to \$6 billion annually.

These figures are derived from the Forest Service's own peer reviewed research, independent academic research over more than 15 years, and accepted federal cost accounting methodology. The agency's grant programs treat the resource as low priority anyway. This paper documents that contradiction and what it costs.

The combined annual financial benefit captured by industrial timber and biomass interests under current policy framing is roughly \$1 to \$3 billion in protected revenue, capital subsidies, and compliance cost savings. The combined annual public cost is \$10 to \$30 billion. The ratio of public cost to concentrated private benefit is approximately ten to one. That ratio, not any individual policy choice, is the central finding of this paper.

The USDA Forest Service is putting out two conflicting messages about urban and salvaged wood at the same time. Communities, whether urban, suburban, or rural, are all dealing with the ongoing growth of tree mortality driven by the five key feedstock drivers discussed below. All of these communities deserve to know what that contradiction is, what it costs, who benefits from it, and what can be done.

Urban and Salvaged Wood Definition: Any wood, from any tree that came down for any reason other than its wood value. It can come from urban, suburban, or rural areas.

The Contradiction

In April 2026, Forest Service Research and Development highlighted new agency science (Bassett et al., *Arboriculture and Urban Forestry*, March 2026) confirming what the urban and salvaged wood industry has long known. The annual volume of trees that define urban and salvaged wood is growing quickly. For the past 20 years, roughly twice as many trees have been removed annually due to storm damage, blight, disease, age, safety, or development from U.S. urban areas as have been harvested from the entire National Forest System. MacFarlane (2009) reached the same conclusion over 15 years ago: since 2000, the volume of urban tree and woody yard residues has exceeded the volume of wood harvested from U.S. National Forests. Yet the vast majority of this viable, merchantable resource, literally on the ground and ready to be milled, is routed to the lowest value uses available. Most goes through the chipper, into biomass cogeneration, landscaping, or into landfills that are already at or beyond capacity. This includes large mill grade logs.

The resource is real and significant, the supply data has been consistent for two decades, and the markets that would absorb this material are growing across multiple channels, slowly and in spite of the uneven playing field. Yet the urban and salvaged wood supply chain across the board remains significantly underfunded and structurally under-supported, while our national and state forests are currently being targeted for more and more extraction and market development.

The urban and salvaged wood consumer market is real and growing. The Bassett et al. (2026) survey across Baltimore, Denver, Austin, Houston, Portland, and St. Louis found that 15% of residential landowners had already purchased or acquired urban and salvaged wood products, with meaningful expressed interest in expanding that purchasing across product tiers from mulch and firewood to furniture and building lumber. Scaled against the 220 million U.S. urban residents identified in the study, that 15% baseline represents approximately 33 million adults who have already participated in urban and salvaged wood markets. That is not a speculative future demand curve. It is current, documented buyer behavior. This documented buyer behavior exists despite minimal federal investment in urban and salvaged wood market development.

The broader wood products market is expanding rapidly, and urban and salvaged wood fits the growth drivers directly. The U.S. furniture market and the global sustainable wood products market are both growing steadily. Industry estimates place global wood furniture market growth at roughly 4% to 6% annually and sustainable wood products market growth at roughly 7% annually, well above overall GDP growth rates of 2% to 3% (Grand View Research; Allied Market Research; Business Research Insights; Data Bridge Market Research; 2024 to 2026 industry reports). Growth drivers documented across multiple market analyses include a 50% rise in FSC-certified demand, a 30% increase in hospitality investment in wood, 35% growth in modular urban furniture, and 40% growth in eco-furniture adoption. Consumers are paying premiums for sustainably sourced wood, locally sourced wood, and wood with documented story of origin. Urban and salvaged wood hits all three of these demand criteria by definition: it is the most local wood available (salvaged from the buyer's own community), it carries the strongest provenance story in the market (traceable to a specific tree on a specific street), and when processed to established standards it meets or usually exceeds sustainability claims that certified virgin timber relies on supply chain documentation to prove.

Mass timber is the fastest growing structural wood category and the largest single demand channel for urban and salvaged wood over the next decade. The U.S. timber construction market was \$4.12 billion in 2024 and is projected to reach \$9.08 billion by 2033 at a 9.3% annual growth rate, with cross-laminated timber (CLT) growing at 14.9% globally and engineered wood at 9.8% annually in the U.S. (Grand View Research). Per WoodWorks September 2024 tracking, U.S. mass timber projects have grown nearly tenfold to 2,253 built or in design, with projects in all 50 states.

The geography is nationwide. Milwaukee leads on tall mass timber (the 25-story Ascent MKE completed in 2022 and the 31-story Edison breaking ground in 2025 to become the tallest mass timber building in the Western Hemisphere). Portland pioneered domestic CLT construction (Albina Yard, Carbon12). Seattle built the first project as-of-right under the 2021 IBC (Heartwood). T3 buildings by Hines now anchor Minneapolis, Atlanta, Nashville, and Denver. Apple's first mass timber building is in Miami. Walmart's new Bentonville headquarters is built at an unprecedented corporate scale in mass timber. The University of Arkansas has the Anthony Timberlands Center. San Francisco is developing the largest mass timber commercial building planned in North America at Pier 70. Los Angeles, Boston, Dallas, New York, Chicago, Charlotte, Philadelphia, Houston, and Washington DC all have multiple projects in construction or design. Nearly every one of these buildings currently sources CLT from Canada, Austria, or Pacific Northwest softwoods. Hardwood CLT and Nail-Laminated Timber (NLT) research at Oregon State, Virginia Tech, Penn State, Michigan State, and Michigan Tech opens a direct pathway for urban and salvaged hardwood species to enter this feedstock stream.

Michigan, Urban Ashes home state, is one of the most compelling regions in the country to prove the urban and salvaged hardwood-to-mass timber value chain. Every element exists here at a scale few other states can match. On the supply side, MacFarlane (2009) documented 367,000 to 517,000 dry tonnes of annual urban wood biomass from just the 13-county southeastern Michigan region (2% of U.S. urban area), and that baseline predates the full EAB destruction cycle, the past decade of storm losses, and ongoing development pressure. On the demand side, MassTimber@MSU (Sandra Lupien, director) tracks 16 completed mass timber projects, more than 30 in design, and 55 in the pipeline, spanning from New Buffalo to Newberry Michigan. The flagship is SouthTown in Ann Arbor, an 8-story, 247,000 square foot, \$140 million mixed use development (221 apartments, 119 affordable or workforce) targeted to be at least net zero and slated for completion in summer 2026. Michigan State's STEM Teaching and Learning Facility (East Lansing, 2021) was the state's first mass timber building.

The state policy, research, and workforce infrastructure is in place and accelerating. The Michigan DNR's Mass Timber Catalyst Program (administered by Patrick Mohny, Office of Public Lands) awarded funding in February 2026 to nine projects across Detroit, Grand Rapids, Traverse City, East Lansing, Mt. Pleasant, Highland Park, Lansing, Harrison Township, and Adrian, with sponsorship from Bedrock, Rossetti, the Michigan Regional Council of Carpenters and Millwrights, and The Christman Company. Michigan State successfully tested urban, salvaged and reclaimed wood for mass timber and successfully pushed state code adoption of 2021 IBC provisions. Michigan Tech is developing hardwood CLT specifically using red maple, with Professor Xinfeng Xie leading a U.S. Forest Service-funded hardwood mass timber project in partnership with the Forest Products Laboratory in Madison.

MSU and the Sam Beauford Woodworking Institute in Adrian are developing the nation's first non-union mass timber workforce curriculum. Detroit riverfront planning is actively integrating a mass timber economic corridor strategy. MSU economist Pokharel estimates a single Michigan mass timber production plant would create approximately 90 jobs. What Michigan does not yet have is the urban and salvaged wood aggregation, sawmilling, kiln drying, and fabrication capacity that would connect municipal and state right of way tree mortality to the CLT and NLT buildings already being designed and built across the state. Closing that gap, including the merchantable wood currently mulched from MDOT rights of way, is both a Michigan economic development opportunity and a national proof of concept for the urban and salvaged hardwood CLT and NLT value chain.

Urban Ashes has been operating across this growth landscape for 17 years. Founded in 2009 as an outgrowth of the 2005 Ann Arbor UrbanWood Project, Urban Ashes built and operated a national urban and salvaged wood manufacturing business from 2009 to 2019 specifically to showcase the viability of durable urban and salvaged wood products at scale. After 10 years they were distributing to more than 250 retail partners and dozens of OEM partners across 43 states and demonstrating that operator-led urban and salvaged wood manufacturing could reach national scale through specialty retail and OEM channels. In 2019 the company shifted strategically to its current consulting and systems development model, deploying regional urban and salvaged wood economy infrastructure in Ann Arbor, Detroit, Lansing, Portland Oregon, Columbus Ohio, Vancouver Washington, Atlanta Georgia, and other cities, with active engagements spanning municipal forestry partnerships, state department of transportation rights of way wood recovery, utility line clearance integration, regional sawmill and aggregation hub development, corporate procurement supply chain design, mass timber feedstock pathway research, and carbon credit methodology development.

Urban Ashes operates the proprietary Gnarbit, an urban and salvaged wood chain-of-custody and carbon accounting platform, has developed and deployed the Circular UrbanWood Triconomy Model (CUT Model) as a comprehensive framework for integrating municipal, utility, and corporate wood recovery streams into regionally-anchored circular supply chains, was a founding member of the Urban Wood Network (UWN), and co-lead the transition team that took UWN from a project hosted under the Sustainable Resources Institute into the standalone 501(c)(3) national coalition organization that the sector now operates within. The 17-year operational track record across 43 states and the multi-city consulting deployments demonstrate that the urban and salvaged wood sector includes long-tenured operator-led firms with national reach who have been doing this work since before the Forest Service Research and Development confirmation Bassett et al. (2026) just published.

Green building certification channels are already configured to accept urban and salvaged wood. USGBC LEED awards regional materials credits for wood sourced within 500 miles of the project site, which urban and salvaged wood meets by definition. The NAHB National Green Building Standard recognizes renewable and regionally sourced wood. FSC's Controlled Wood standard explicitly includes salvaged wood from urban tree removals. The Programme for the Endorsement of Forest Certification approved its Trees Outside Forests guidelines in 2018, creating an internationally recognized pathway for urban forest management and urban forest products. SCS Global Services operates a Salvaged Wood and Fiber Verification program that specifically recognizes urban wood as eligible material. Dovetail Partners 2018 analysis documented that these pathways

exist today, are underutilized, and represent immediate market access for urban and salvaged wood operators able to document sourcing.

Corporate ESG procurement is scaling faster than policy. Room and Board's Urban Wood Project has expanded from Baltimore to Anaheim, Sacramento, San Francisco, Detroit, Minneapolis, and New York City, with 180,000 board feet of urban and salvaged lumber rescued and sold through retail furniture channels since inception. Cambium Carbon has built corporate offtake relationships that monetize urban and salvaged wood as both product and carbon story. Large corporate buyers with ESG commitments, including Microsoft, Google, Meta, Salesforce, and major hospitality chains, have demonstrated willingness to specify urban and salvaged wood in campus and facility projects when supply chains can support them. Buildings framed in wood release 26% less carbon than steel-framed and 31% less than concrete-framed buildings, giving ESG-focused buyers a documented climate argument for specifying urban and salvaged wood as the highest storage subset.

Regional models prove the market works at scale across every U.S. region and through both municipal in-house programs and public-private partnerships that federal policy should support.

The 20-year track record of cooperative regional supply chains is anchored by the original UrbanWood Project in SE Michigan, launched in 2005 and the direct operational lineage of Urban Ashes, with subsequent Forest Service Full Circle grant funding scaling the cooperative supply chain framework into the national Urban Wood Network that Urban Ashes was a founding member of and that Paul Hickman co-led the transition team for as it became a standalone 501(c)(3) coalition organization. The project demonstrated the cooperative supply chain model connecting municipal arborists, small sawyers, and local makers into a functioning regional urban and salvaged wood economy that has now operated continuously for more than two decades, with participating mills like Tervol's Wood Products (founded 1994 in North Adams, Michigan) operating alongside the project from its early years through today.

Midwest. Columbus Ohio (municipal in-house) operates a fully integrated in-house municipal urban and salvaged wood program through its Department of Recreation and Parks, processing roughly 1,000 tree removals annually into lumber and finished products that displace commercial furniture purchases across City facilities. Milwaukee (public-private partnership) partners with Kettle Moraine Hardwoods (founded 1986 in Hartford, Wisconsin) to process 2,500 tons of city-felled trees annually into urban and salvaged lumber that has gone into Fiserv Forum, Clock Shadow Building, and DoMUS apartments, saving the City over \$51,000 in avoided landfill costs in 2021 alone. Tervol's Wood Products (independent business with municipal supply), founded 1994 in North Adams, Michigan, mills approximately 250,000+ board feet of urban hardwoods annually from tree trimming, construction sites, and municipal partnerships into kiln-dried lumber, slabs, flooring, and millwork. Wood from the Hood (independent business with municipal supply), founded in Minneapolis in 2008, has grown from a single backyard ash tree into a near seven-figure operation milling Twin Cities trees into custom tables, slabs, lumber, and consumer products, with each log tagged by neighborhood zip code through the entire manufacturing process.

California. Far West Forest Products in Sheridan (independent business with significant municipal supply), sources over 95% of its lumber from within a 200 mile radius. Evan Shively has operated as one of the longest continuously active urban and salvaged wood specialists in the country, beginning in the 1990s as an early

supplier to first-generation sustainable wood distributors and now operating Arborica in West Marin (independent business with significant salvage supply), where he processes massive salvaged hardwood and softwood from Bay Area tree mortality, storm damage, and removals across an operational track record approaching three decades. Street Tree Revival (public-private partnership), a 25-year-old urban and salvaged wood recycling program operated by West Coast Arborists, Inc. (which serves 330+ California and Arizona cities, counties, and school districts), processes urban trees at facilities in Ontario.

Pacific Northwest. Urban Lumber Company (independent business with municipal supply), based in Springfield Oregon, operates one of the largest custom slab saws in the nation and acquired Urban Hardwoods (founded 2001 in Seattle) in 2020, integrating two regional operations into a single multi-state urban and salvaged wood manufacturer that sources 90% of materials within a 20 mile radius of operations in both Springfield and Seattle.

Mountain West. Fort Collins, Colorado (public-private partnership) has operated its Forestry Division on a zero-waste basis since 2009, partnering with private mills including Sears Trostel Lumber and Millwork (founded 1929) and Baldwin Hardwoods to repurpose all urban forest wood waste into value-added products, with formal wood utilization program codification adopted in city code through the March 2025 Urban Forest Strategic Plan. JAMCo Woodworks (independent business) operates as one of Colorado's leading urban and salvaged wood manufacturers.

Mid-Atlantic and South. Baltimore's Camp Small program (municipal in-house) documented that municipal utilization yards can generate net revenue after initial capital investment. The Virginia Department of Forestry's Urban Wood Program (state-coordinated public-private partnership), launched in 2017 with USDA Forest Service Southern Region support, coordinates a statewide network of municipalities and private operators, including the City of Harrisonburg's award-winning Urban Wood Utilization Program (Governor's Environmental Excellence Gold Award, 2022) and the Town of Woodstock's adopted urban wood use plan, demonstrating the state-level coordinating model federal policy could replicate nationally.

Texas and other regions. Texas Urban Sawmill, Harvest Lumber in Austin, and dozens more across 40 states are operating profitable urban and salvaged wood businesses today, supplying both public and private wood streams.

National-tier firms. The sector now also includes firms operating across multiple states through different national-scale models, each building from foundational federal research and Forest Service partnerships including the Baltimore Urban Wood Project that has demonstrated regional wood economy viability since 2012. Cambium Carbon, founded in 2019 as a Public Benefit Corporation headquartered in Washington DC, operates a venture-funded national platform built around its Carbon Smart Wood chain-of-custody and carbon storage tracking system, has raised \$28.5 million in venture capital including a \$18.5 million Series A in 2025, and supplies salvaged urban wood to corporate buyers including Amazon, Equinox, Patagonia, National Geographic, Room and Board, Steelcase, and Gensler with recent expansion into mass timber CLT production. Unified Wood Economy (UWE), a national 501(c)(3) nonprofit, develops Wood Upcycling Campuses as regional hubs for wood collection, sorting, and processing, and recently announced a national partnership with Cambium Carbon to coordinate wood recovery infrastructure with corporate market access. Urban Ashes, founded in 2009 as the operational outgrowth of the 2005 Ann Arbor UrbanWood Project, operates as a national consulting and

systems development firm with multi-city deployments and a proprietary chain-of-custody and carbon accounting platform, with founding-member roles in the Urban Wood Network and Climate Smart Wood Group steering committee. Together these national-tier firms, building from regional operator foundations and federal research infrastructure, represent the operational and platform layer through which urban and salvaged wood is scaling beyond regional boundaries, each requiring different forms of federal policy support and recognition.

These are functioning businesses and programs generating verifiable revenue across every region of the country and through every viable structural model, demonstrating that the only meaningful gap between the current sector and the scale federal policy should be enabling is structural support, not feasibility.

The global context reinforces the opportunity. E-commerce has opened up the market. Global online furniture sales hit \$257 billion in 2025, with U.S. online furniture and homeware sales at \$120 billion in 2023. Direct to consumer retail now accounts for 65% of new wood furniture buyer preference. Urban and salvaged wood producers with distinctive story of origin branding are exactly the small batch specialty suppliers this channel favors.

The picture is consistent across every market indicator available. Consumer interest is documented. The broader wood market is growing at a 5% to 7% CAGR. Mass timber is growing at 9% to 15% CAGR. Corporate ESG procurement is expanding faster than federal policy. Regional operators are proving the business model works. Green building certification pathways are configured and underutilized. What is missing is the supply chain infrastructure, capital access, and policy recognition that would allow urban and salvaged wood to further develop and scale into the markets that already want it.

At the same time, the agency's FY26 Wood Innovations, Community Wood, and Wood Products Infrastructure Assistance grant programs are aligned almost exclusively to National Forest System byproducts, rural mill retooling, and hazardous fuels reduction. The Wood Products Infrastructure Assistance program now requires facilities to source roughly 50% of raw material from federal or Tribal lands, which structurally excludes urban and salvaged wood operations. Program staff have stated directly that urban and salvaged wood is an extremely low to no priority under current guidance unless the end use is biofuel.

That policy choice has a price tag in the tens of billions of dollars annually.

The Feedstock Is Real, Growing, and Not Going Away

Urban and salvaged wood is not a marginal resource waiting to be created. It exists at scale and the forces driving it are accelerating. The top five reasons trees come down in the United States for reasons other than commercial timber harvest are all growing quickly.

1. **Development and Land Clearing.** The largest driver by volume. Forest Service research (Nowak and Greenfield, 2018) documents a net loss of roughly 36 million trees per year across U.S. urban and community areas, with about 40% of new impervious surfaces coming from former tree cover. Development removes healthy, mature, high quality specimens with the most board foot yield per removal. U.S. urban area is projected to grow from 60 million acres today to 163 million acres by 2060.
2. **Invasive Pests and Insects.** The fastest growing driver. Hudgins et al. (2022) project 1.4 million street trees killed by invasive insects between 2020 and 2050, with emerald ash borer responsible for 90% of that mortality and projected to destroy 98.8% of ash trees across more than 6,000 communities. Broader forest pest mortality totaled 8.4 million acres in 2022 alone. The Michigan case study is instructive. Between 2002 and 2005, widespread EAB death supplied an additional 200,000 dry tonnes of ash biomass to a single power station in the Detroit metropolitan area (MacFarlane, 2009), demonstrating how quickly pest driven feedstock can concentrate geographically.
3. **Storm Damage.** The most episodic but cumulatively massive driver. The 2020 Midwest derecho damaged or destroyed an estimated 14 million trees in Iowa alone. Hurricane Katrina damaged or destroyed roughly 320 million trees across Gulf Coast states. Ice storms disproportionately take down large mature specimens best suited for slab and specialty lumber. Climate change is increasing both frequency and severity, with the 2025 and 2026 winter seasons producing two of the most consequential ice storms in recent memory.

The March 28-30, 2025 northern Michigan ice storm damaged an estimated 3 million acres of forest across 30 counties, including approximately 900,000 acres of state forest representing nearly one quarter of the state forest acreage Michigan DNR manages.

Less than ten months later, Winter Storm Fern struck Nashville on January 25, 2026. Metro Parks officials estimated approximately 6,000 trees damaged or destroyed within Metro Parks alone, with citywide totals substantially higher. The Winter Storm Fern collection volume was roughly 22 times NDOT's normal annual collection in just over two months. The vast majority of this debris, including substantial volumes of mill-grade logs from large mature specimens, was routed through the chipper to mulch processing as the only available disposition pathway.

The two storms together demonstrate the federal policy gap with unusual clarity. Michigan's rural and forest land had an existing timber industry that mobilized to capture some salvage value, even as that industry acknowledged it could not process the full surge. Nashville's urban canopy had no analogous urban and salvaged wood processing infrastructure, routing nearly 2 million cubic yards through the chipper as the only available pathway. The contrast is not regional, and it is not a function of feedstock.

It is a function of whether urban and salvaged wood aggregation, sawmilling, kiln drying, fabrication and market infrastructure has been federally supported into existence in a given geography.

4. Disease and Blight. Chronic and accelerating. Dutch elm disease, oak wilt, beech bark disease, beech leaf disease, sudden oak death, laurel wilt, and thousand cankers disease are all active. Fei et al. (2019) documented widespread risk of mortality from insect and disease invasions across U.S. forestland, with a majority of surveyed species infested by at least one exotic agent. Disease-killed trees remain structurally sound for milling if processed within 12 to 24 months.
5. Aged Out Agricultural and Orchard Trees. A concentrated, predictable, almost entirely underutilized stream. The Almond Board of California estimates 30,000 to 40,000 acres of almond orchards removed annually in California alone over the coming decade, with each acre containing up to 80 tons of woody biomass. Apple, pear, cherry, pecan, citrus, walnut, and avocado orchards add substantially more nationally. Current practice sends most of this to whole orchard recycling or biomass cogeneration, both low-value carbon and low-value dollar outcomes. Orchard hardwoods like walnut, cherry, apple, and pecan are among the highest value specialty woods in the furniture and instrument markets.

The combined picture. Every driver is growing. The annual non-commercial U.S. tree mortality base is well north of 40 million trees, meaningfully larger than the National Forest System's annual timber harvest. Treating this feedstock as low priority is a national wood resource strategy problem.

What the Agency's Own Research Says the Lost Opportunity Is Worth

The Forest Service's foundational urban and salvaged wood study (Nowak, Greenfield, and Ash, 2019) established the national baseline: approximately 46 million tonnes of fresh weight merchantable wood generated annually from U.S. urban tree mortality, enough for 7.2 billion board feet of lumber or 16 million cords of firewood. The potential annual value ranges from \$89 million if chipped to \$786 million if milled into lumber.

MacFarlane (2009) independently validated this at the regional level. In a 13-county area of southeastern Michigan alone (2% of U.S. urban area), annual urban tree mortality yields 367,000 to 517,000 dry tonnes of biomass. Scaled nationally, MacFarlane calculated 22.2 million dry tonnes of urban and salvaged wood biomass per year, with enough lumber potential to build more than 285,000 homes annually, roughly equivalent to the 245,000 U.S. homes demolished each year through planned demolition or disaster. Put directly: the annual urban tree mortality stream alone could rebuild every American home that comes down each year.

Using only the agency's own peer reviewed figures: approximately \$697 million in foregone product value every year that policy steers this resource to the lowest value pathway.

Applied to the subset that meets saw log specifications, roughly 12.7 million tonnes of lumber grade urban and salvaged logs annually, real market prices for kiln dried urban hardwood lumber (\$600 to \$1,200 per tonne gross product value) put the realistic annual foregone product value at \$7.5 to \$15 billion. The 2022 circular utilization study in One Earth and Quantified Ventures 2019 market analysis reached compatible conclusions.

Dovetail Partners 2018 Urban Wood and Green Market Opportunities analysis identified additional value channels that Nowak's baseline does not capture: green building program credits under LEED and the NAHB National Green Building Standard, third-party certification pathways through FSC Controlled Wood and the Programme for the Endorsement of Forest Certification's newly approved Trees Outside Forests guidelines, and regional chain of custody programs like SCS Global Services Salvaged Wood and Fiber Verification. These channels convert urban and salvaged wood from an unrecognized input into a certified, specifiable, premium priced building material, with price premiums of 15% to 40% documented in some green building projects.

The Carbon Cost Is Larger Than the Dollar Cost

Biofuel policy treats urban and salvaged wood as carbon neutral because the biogenic carbon would have decomposed anyway. That accounting is technically defensible but strategically wrong. It ignores what the same wood could have done as lumber: sequester carbon for 30 to 100 years while displacing higher carbon materials like concrete and steel and lowering the stress on working forests.

MacFarlane (2009) quantified this directly with CO₂ impact factors showing the relative climate cost of liberating carbon from different wood pools. The impact factor for burning wood from landfilled trees and trimmings is 6.59. The impact factor for urban trees kept as durable products is 1.16. Burning urban and salvaged wood is roughly 5.7 times more damaging to the climate than keeping that same wood in long term product use.

MacFarlane's conclusion, published 15 years before the current Forest Service grant framing: "Using urban wood residues for wood products may provide the best balance of economic and environmental values for utilization."

Drawing on the Forest Service's own life cycle assessment (Bergman et al., 2022), IPCC methodology, and the 2022 One Earth study: the biofuel pathway releases approximately 1.0 to 1.4 tonnes CO₂e per oven-dry tonne of urban and salvaged wood combusted, after fossil fuel substitution credit. The lumber pathway sequesters a net 2.0 to 3.0 tonnes CO₂e per oven-dry tonne, reflecting long term carbon storage plus substitution of higher carbon building materials, minus milling and kiln drying emissions.

Per tonne swing between the two pathways: roughly 2.5 tonnes CO₂e on average, with the upper bound of the swing reaching 4.4 tonnes for the most carbon intensive substitution comparisons.

Scaled to the 12.7 million tonnes of lumber grade urban and salvaged logs generated each year, at full capture to lumber, approximately 31.5 million tonnes CO₂e annually in foregone climate benefit. At Urban Wood Network's conservative 20% capture target, approximately 6.3 million tonnes CO₂e annually.

For context, 6.3 million tonnes CO₂e annually is equivalent to taking 1.4 million passenger vehicles off U.S. roads, the annual emissions of roughly 780,000 American homes, or 1.6 coal-fired power plants operating for a year. The 31.5 million tonne full capture number approaches the entire annual emissions of a small U.S. state.

The 2022 One Earth study evaluated every major urban and salvaged wood utilization pathway and reached a conclusion the Forest Service's grant priorities do not reflect: the lowest climate impact combination is merchantable logs to lumber, with residues to biochar. Biofuel did not rank first in any scenario modeled.

The Working Forest Connection: What Urban and Salvaged Wood Saves Beyond Itself

The carbon and economic cases above describe what urban and salvaged wood is worth on its own terms. It understates the full benefit. Every tonne of urban and salvaged wood that becomes lumber is a tonne that does not need to come from a working forest. The substitution effect is real, measurable, and large.

Urban Ashes' 2025 analysis (Hickman, Environmental, Social and Economic Value of Urban Lumber: Red Oak Case) quantified this connection using red oak as a model species representative of broader urban hardwood recovery. At 40% recovery of U.S. urban and salvaged wood into lumber, approximately 4.99 million metric tonnes of urban lumber would substitute for an equivalent volume of commercial harvest. That deferred harvest represents approximately 12.3 million mature trees per year that remain standing in working forests rather than being cut.

The combined climate benefit is striking. Urban and salvaged lumber stores approximately 9.15 million tonnes CO₂e in long-lived products. The deferred commercial harvest accumulates an additional 10.45 million tonnes CO₂e in continued forest growth over a 15 year period. Total combined climate impact: approximately 19.6 million tonnes CO₂e annually at 40% recovery.

The standing forest also continues to deliver ecosystem services that a harvested forest cannot. Wildlife habitat, hydrological regulation, soil retention, biodiversity, and stand resilience are all preserved when commercial harvest is deferred. Conservative benefit transfer valuation puts those services at approximately \$1,240 per deferred tree over 15 years, with wildlife habitat valued at \$338, stand resilience at \$225, water and soil services at \$188, and additional carbon storage in the standing tree at \$43. Across 12.3 million deferred trees, total ecosystem services value is approximately \$15.24 billion over 15 years, on top of the \$0.46 billion in carbon value stored in the urban lumber itself. Combined monetized environmental value: approximately \$15.7 billion.

These numbers position urban and salvaged wood recovery against the federal climate technologies the agency and Congress are funding heavily. Direct air capture (DAC) is currently the most heavily subsidized federal climate intervention, with the Stratos facility in Texas (the world's largest DAC project) designed to remove 500,000 tonnes of CO₂ per year. The 19.6 million tonne combined annual climate impact of 40% urban and salvaged wood recovery is equivalent to 39.2 years of Stratos output. The cost effectiveness comparison is more striking. On an operational basis (excluding build-out embodied carbon and operational lifecycle emissions for both technologies), DAC currently removes 1 to 3 kilograms of CO₂ per dollar spent. Urban and salvaged wood recovery achieves 10 to 40 kilograms of CO₂ benefit per dollar, an order of magnitude better climate value per dollar, while simultaneously creating local jobs, reducing waste, lowering transport emissions, and recirculating value within the communities where the trees originated.

Lifecycle accounting strengthens rather than weakens this comparison. Published DAC lifecycle assessments show build-out embodied carbon and operational lifecycle emissions ranging from 25% to 75% of captured CO₂e depending on technology and grid mix. Urban and salvaged wood infrastructure lifecycle accounting shows comparable or smaller percentages, with build-out embodied carbon paid back within three to six months of operations and operational lifecycle emissions of approximately 5% to 15% of captured CO₂e. The captured carbon scale gap (19.6 million tonnes per year for urban and salvaged wood at 40% recovery versus 500,000

tonnes per year for Stratos) is a factor of 39 difference at any level of accounting. Federal climate policy is investing billions in DAC. It is currently investing essentially nothing in urban and salvaged wood recovery infrastructure. The cost benefit calculation does not support that allocation at the operational level and does not support it at the lifecycle level.

The dollar flow comparison is equally striking, and the question of whose jobs and where matters more than the carbon arithmetic alone. Stratos is owned by a joint venture between an American oil major's carbon capture subsidiary (Houston-based) and a global asset manager's infrastructure fund, built on Direct Air Capture technology developed and still anchored at a Canadian climate technology company in British Columbia. The bulk of the \$1.3 billion project capital flows through global infrastructure capital and fossil fuel industry channels, with technology acquisition payments flowing to Canada and ongoing R&D operations remaining in British Columbia. Stratos itself, located in Texas, employs approximately 1,000 temporary construction workers and 75 permanent operations workers, with carbon credit revenue flowing to large American technology buyers and European aerospace buyers at \$500 to \$1,100 per tonne. Federal climate subsidy dollars under this structure deliver 75 permanent American jobs in one Texas county.

By contrast, urban and salvaged wood recovery at the proposed 40% recovery rate would distribute investment across thousands of overwhelmingly American small and mid-sized businesses operating in American communities with American workforces sourcing American feedstock. The operators are American family businesses, regional sawmills, municipal partnerships, and nonprofit programs across all 50 states. The equipment supply chain (sawmills, kilns, mobile processing, fabrication) is overwhelmingly American or North American. The retail and corporate offtake is American. The mass timber projects driving demand are American buildings employing American architects, contractors, and trades. MSU economist Pokharel estimates a single Michigan mass timber production plant alone would create approximately 90 jobs, and industry analyses of forest products employment multipliers suggest national-scale urban and salvaged wood infrastructure would generate tens of thousands of direct jobs plus larger numbers of indirect and induced jobs in all 50 states.

Federal climate policy is choosing concentrated investment in one Texas facility owned by an oil-industry-and-international-finance joint venture employing 75 permanent workers, with technology and R&D anchored in Canada, over distributed investment in American regional supply chains employing tens of thousands of American workers across every U.S. region. The cost benefit calculation does not support that allocation on carbon grounds, on dollar efficiency grounds, on lifecycle grounds, on regional economic development grounds, or on American jobs grounds.

Simply put, US federal climate policy is funding with US taxpayer dollars one Texas DAC facility owned by the fossil fuel industry and global infrastructure capital, built on Canadian technology, employing 75 American workers, instead of American urban and salvaged wood infrastructure built predominately with American technology and equipment that would create tens of thousands of skilled trades and manufacturing jobs across all 50 states.

The working forest connection also reframes who has a stake in federal urban and salvaged wood policy. The current commentary speaks to municipal officials, urban and salvaged wood operators, climate-focused audiences, and federal grant program reformers. The deferred harvest argument speaks additionally to

sustainable forestry advocates whose interests align with reduced harvest pressure on intact stands; conservation organizations including The Nature Conservancy, Audubon, the Wilderness Society, Trust for Public Land, and state conservation groups; working forest landowners and family forest associations; tribal nations whose lands face harvest pressure; wildlife and watershed advocates whose constituencies depend on standing forest ecosystem services; and rural forest economy advocates who can be brought into the urban and salvaged wood conversation when it is framed as complementary to, rather than competitive with, sustainable forestry.

Federal urban and salvaged wood policy is a municipal cause and a working forest cause. Every commercial tree left standing longer because urban and salvaged wood filled the demand is a tree that continues to store carbon, hold soil, regulate water, shelter wildlife, and support the rural economies that depend on healthy working forest landscapes. Conservation and forestry advocacy organizations whose missions align with reducing harvest pressure on working forests should recognize urban and salvaged wood as among the most cost effective interventions available to advance their core objectives.

The companion analysis from Urban Ashes (Hickman, 2025) provides the full methodology, species assumptions, benefit transfer values, and limitations. The figures cited here are conservative, generalized to a representative species, and intended to demonstrate magnitude rather than to substitute for project level appraisal. Local species composition, growth rates, site conditions, and product life will refine the totals but are not expected to alter the order of magnitude or the policy implication.

The Economics of Disposal and Why Cities Should Already Be Doing This

Beyond product value and carbon value, urban and salvaged wood utilization competes directly with municipal disposal costs that cities pay whether or not the wood gets used. MacFarlane's analysis documents that urban and salvaged wood biomass carries a total benefit to operators of \$48 to \$132 per tonne across U.S. regions, calculated as landfill costs avoided plus material revenue. Regional breakdown: Northeast \$132 per tonne total benefit, Mid-Atlantic \$106, Midwest \$93, West \$96, South \$89. In high tipping fee regions, avoided landfill costs alone justify the utilization infrastructure before any product revenue is counted.

Tipping fees have tripled nationwide between 1985 and 2005 and have continued rising since. A city that builds a utilization program captures both avoided disposal cost and community product revenue. A city that does not, keeps paying the full disposal cost indefinitely. Baltimore's Camp Small program documented this directly: utilization yards reduce net per tree disposal cost below landfill and chip and haul alternatives, and at scale generate net revenue. The Michigan study found that 58% of wood residues in the 13-county study region were discarded annually, with 48% of those going to landfill, representing 28% of total wood residues going to the least valuable end use available.

MacFarlane's Michigan regional data demonstrates the scale: the 13-county study area alone produces annual urban and salvaged wood biomass equivalent to 1.2 to 1.7 million barrels of oil, or the dimensional lumber to frame more than 5,500 average U.S. homes per year. This is from one region representing 2% of U.S. urban area.

State-level regulatory infrastructure is now compounding the disposal economics in cities' favor. Michigan's regulatory structure illustrates the pattern. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Materials Management Plan requirement, established under Public Act 451 as amended in December 2022 and initiated by the EGLE Director in January 2024, requires every Michigan county to replace its Solid Waste Management Plan with a Materials Management Plan that targets a 45% overall recycling rate (interim benchmark of 30% by 2029) with explicit inclusion of wood in the materials management hierarchy. The Renew Michigan Fund supports county planning at \$60,000 per year plus \$0.50 per resident with regional collaboration incentives. Counties that do not comply will have plans imposed by EGLE while remaining responsible for funding implementation but ineligible for grant support.

This state-level regulatory pull is a national pattern, not a Michigan exception. California's SB 1383 (2016) requires 75% reduction in statewide disposal of organic waste by 2025 with explicit wood diversion mandates. Maryland's 2012 Recycling Act sets mandatory county recycling rates with long-term 2040 goals of 80% recycling and 85% waste diversion. Vermont's 2012 universal recycling and composting law banned clean wood from landfills in 2016. Pennsylvania's Act 101 (1988) mandates county recycling planning. Maine's Materials Management Plan framework requires five-year updates from the Maine DEP. Connecticut, Washington, Massachusetts, New York, the District of Columbia, and others have parallel mandatory diversion frameworks. Roughly half of all U.S. states, covering substantially more than half of U.S. population, now operate state-level regulatory pull on waste diversion that explicitly or implicitly includes urban and salvaged wood.

The federal policy gap is now bracketed by state regulation on one side and operator capacity on the other. The missing piece is federal infrastructure investment that connects state-mandated diversion targets to operator-led utilization capacity. Federal urban and salvaged wood infrastructure investment would directly help states

meet statutorily mandated diversion goals, would directly help counties avoid the disposal costs that current landfill routing imposes, and would directly serve the operator economics that already make urban and salvaged wood utilization profitable in regions where infrastructure and markets exist. The cost benefit calculation runs in three directions simultaneously: state regulatory compliance, municipal disposal cost avoidance, and operator/market revenue capture, all served by the same federal infrastructure investment.

Who Gets Paid, and Who Pays the Bill

The contradiction between the research arm and the grantmaking arm is not abstract. Real dollars flow to specific companies and sectors. Real costs fall on specific communities, workers, and taxpayers. Here is who benefits financially and who is damaged, in concrete terms.

Who Benefits Financially Under Current Policy

Industrial timber trade associations and their members. The American Forest Resource Council, American Forest and Paper Association, Federal Forest Resource Coalition, and National Alliance of Forest Owners represent operators with combined annual revenues in the tens of billions. The FY26 grant framing directs the \$95 million Wood Innovations pool toward their members business needs: capital for mill retooling, guaranteed federal feedstock supply, and protection from urban and salvaged wood competing for the same dollars. Member companies like Hampton Lumber, Sierra Pacific Industries, Roseburg Forest Products, and Idaho Forest Group are direct financial beneficiaries.

The wood pellet export industry. Enviva, the largest U.S. wood pellet producer, ships several million tonnes annually to European and Asian utilities. Drax, the UK's largest single site power generator, consumes U.S. wood pellets at industrial scale. The global wood pellet trade has grown from near zero in 2008 to over 10 million tonnes annually. Every tonne of urban and salvaged wood categorized as biofuel expands this industry's feedstock pool without requiring new federal timber contracts. Financial benefit to the pellet sector from protected biofuel status on urban and salvaged wood: hundreds of millions of dollars annually in secured feedstock access.

California biomass cogeneration plants. Roughly 20 operating biomass power plants in California, many clustered in the San Joaquin Valley, depend on orchard removals and other urban and salvaged wood chips as guaranteed feedstock. Power purchase agreements worth hundreds of millions of dollars annually are underwritten by that feedstock supply. The Genesee Power Station in Michigan, a 35 MW facility designed specifically for burning urban and salvaged wood, is another example of infrastructure built around the biofuel pathway. If orchard and urban and salvaged wood shifted to a tiered utilization platform, these plants would lose some of their supply base. Current policy protects them.

Biomass conversion equipment manufacturers. Grinder manufacturers (Morbark, Bandit, Vermeer, Peterson), pellet mill manufacturers, and industrial boiler manufacturers sell tens of millions of dollars in equipment annually to operators processing urban and agricultural wood into biofuel. Every new biomass project creates equipment sales.

The Carbon Credit Methodology Gap. A structural failure in current federal climate policy compounds every issue this commentary documents. Voluntary carbon market registries (Verra, Climate Action Reserve, American Carbon Registry, Gold Standard) have approved methodologies for biomass combustion projects that generate tradeable credits at \$5 to \$25 per tonne. They have also approved methodologies for direct air capture that generate tradeable credits at \$500 to \$1,100 per tonne. They have not approved a comprehensive methodology for crediting carbon stored in urban and salvaged wood durable products that would otherwise have been

combusted, chipped, or landfilled. The gap is not that the methodology is impossible. The gap is that the political economy of voluntary carbon markets has not aligned with developing it.

The methodology gap shapes the federal policy landscape this commentary describes in multiple directions. Operator economics tilt against utilization because urban and salvaged wood producers cannot stack credit revenue on lumber, slab, and product revenue the way DAC operators stack credit revenue on capture revenue. Disposal economics tilt against utilization because the MacFarlane \$48 to \$132 per tonne operator benefit excludes the \$90 to \$180 per tonne in CO₂e durable product sequestration value that credit recognition would unlock. Federal climate spending allocation tilts toward DAC because federal policy compares one technology with a fully developed credit market against another technology with no credit market access. Storm response economics tilt against salvage because storm wood that gets sawmilled cannot earn credit revenue that would partially offset the salvage timber price discount. Mass timber adoption tilts toward imported softwood because hardwood CLT and NLT from urban and salvaged faces feedstock cost disadvantages that durable product sequestration credits would partially or fully offset. Corporate ESG procurement tilts toward credit purchase rather than supply chain investment because corporate buyers find it administratively easier to purchase \$1,000 per tonne DAC credits than to invest in urban and salvaged wood supply chain infrastructure that delivers carbon storage at lower cost without credit revenue.

The political economy of the methodology gap involves multiple interests with status quo preferences and active big industry advocacy aligning federal climate policy in specific directions. Carbon credit brokers, biomass offset developers, biomass-to-energy operators, voluntary carbon market registries, and DAC industry advocates all earn revenue or hold institutional position within the existing methodology framework. None of them advocates explicitly against urban and salvaged wood methodology development, but they collectively produce a status quo bias that has prevented federal agencies, registries, and corporate buyers from championing the methodology work that would close the gap.

Federal policy support for urban and salvaged wood durable product sequestration carbon credit methodology development would change every economic argument in this commentary. Operator revenue would gain \$25 to \$75 per tonne CO₂e or more in credit revenue stacking on existing product revenue. Federal infrastructure investment would be matched by private capital flowing to credit-eligible operators. Corporate ESG demand would shift toward urban and salvaged wood credits that align with American supply chain, distributed jobs, and regional economic development narratives better than DAC or biomass combustion credits do. State regulatory compliance frameworks would gain a new revenue stream supporting county-level diversion infrastructure. Storm response economics would gain credit revenue that partially offsets salvage timber price discounts. Mass timber competitiveness for urban and salvaged wood would improve against imported and rural softwood. Working forest preservation strategy would gain direct credit valuation for the 12.3 million trees per year deferred from commercial harvest. Federal carbon accounting would more accurately reflect the full carbon storage potential of urban and salvaged wood, which strengthens U.S. climate commitments and reduces the apparent need for higher-cost DAC investment to meet emission reduction targets.

The federal policy recommendation is direct. USDA Forest Service, EPA, DOE, and DOI should jointly support urban and salvaged wood durable product sequestration carbon credit methodology development through interagency coordination, registry technical assistance, and corporate buyer engagement. The methodology gap

is closeable. The political economy that has kept it open is a federal policy choice that has been made by inaction rather than by deliberate decision. Closing the gap is the highest-leverage federal climate policy intervention available for urban and salvaged wood, and it costs almost nothing in direct federal spending compared to the multi-billion dollar DAC subsidy frameworks already in place.

Utilities co-firing biomass with coal or natural gas. Duke Energy, Dominion, and other utilities co-fire biomass to meet state renewable portfolio standard requirements without building new capacity. Cheap biomass credits from urban and salvaged wood combustion lower their compliance costs.

Current USDA political leadership and their constituencies. Current Forest Service leadership, whose background in the timber industry positions the agency to execute the March 2025 Executive Order on Immediate Expansion of American Timber Production. Rural Western political constituencies benefit politically from the recent Forest Service headquarters relocation from Washington DC to Salt Lake City and the broader rural timber framing of agency priorities.

Rural sawmill operators in federal lands adjacent regions. Sawmills positioned to receive Wood Products Infrastructure Assistance grants get capital subsidies of up to \$20 million per facility for retooling and expansion. Mills in non-federal-lands regions (most of the South, the Midwest, the Northeast, and urban areas nationwide) do not qualify. The 50% federal lands sourcing requirement concentrates hundreds of millions of dollars in capital support into a geographically narrow set of operators.

Who Pays the Bill Financially and Otherwise

Municipal governments and their taxpayers. Cities pay for tree removal regardless of what happens to the wood afterward. Average municipal tree removal cost ranges from \$500 to \$2,500 per tree. Disposal (chipping, hauling, landfilling) adds \$50 to \$300 per tree on top of removal. MacFarlane's nationwide analysis puts the total benefit of urban and salvaged wood utilization at \$48 to \$132 per tonne depending on region. A mid-sized city managing 5,000 removals per year spends \$3 million to \$14 million on removal and disposal combined. Federal grant policy that excludes urban and salvaged wood utilization infrastructure means cities cannot access capital to build utilization programs that would offset those costs. Estimated aggregate cost to U.S. municipalities: \$2 to \$5 billion annually in disposal expenditure that utilization could partially recover.

Small and mid-sized urban sawyers, kilns, and wood product manufacturers. Roughly 200 Urban Wood Network member operators, plus several hundred other independent urban sawyers and small mills, operate across the country. These are small businesses with annual revenues ranging from under \$100,000 to several million. They cannot access the capital for growth that Wood Innovations grants provide to rural federal-lands sawmills. Their feedstock is categorized by federal policy as biofuel, which means their buyers have no federal incentive to choose urban and salvaged wood lumber over conventional lumber. Aggregate lost revenue to the urban and salvaged wood industry: conservatively \$700 million annually and realistically \$7.5 to \$15 billion annually at full market capture.

Workers, especially those with employment barriers. The urban and salvaged wood industry is more structurally positioned within urban and peri-urban communities where workers with employment barriers live: formerly incarcerated, long-term unemployed, workers without high school diplomas, workers in recovery, and workers

displaced from industries that have left their communities. Detroit, San Francisco, Philadelphia, Memphis, Minneapolis, and other operators have integrated workforce development with barrier populations as a structural feature of how the industry operates. These are \$15 to \$25 per hour jobs with career pathways into millwork, fabrication, equipment operation, management positions and business ownership.

Biofuel and biomass-to-energy pathways do not produce comparable workforce outcomes; biomass facilities are typically rural-sited, require specialized industrial skills, and operate at labor intensity an order of magnitude or lower per tonne processed than urban and salvaged wood operations. The traditional timber industry employs primarily rural workers in established forest products regions and serves a different workforce constituency. Federal policy that supports both industries serves both. At 12.7 million tonnes of lumber grade urban and salvaged logs annually, full capture to lumber would support approximately 60,000 to 120,000 direct, indirect, and induced jobs nationally, concentrated in workers with employment barriers and urban communities across all 50 states. Workers and communities currently lose approximately \$1.75 billion to \$4.6 billion in aggregate annual wages and regional economic activity that current disposal pathways foreclose. Federal urban and salvaged wood infrastructure investment is therefore the most direct workforce development investment available for urban and peri-urban communities and workers with employment barriers in the federal climate policy portfolio.

Lower income urban neighborhoods. When urban and salvaged wood is disposed of instead of utilized at high value, lower income neighborhoods pay the costs of canopy loss without recovering any of the value the removed trees represented, which could aid in new plantings, while wealthier neighborhoods replace canopy through private investment regardless of what happens to the wood. The absence of utilization infrastructure facilitates lower income neighborhoods in losing canopy permanently while paying the compounding costs through higher household energy bills (air conditioning costs rise 10% to 25% in heat island areas), higher health costs flowing through Medicaid co-pays and out-of-pocket expenses, lower property values that erode household wealth across generations, regressive municipal tax and utility ratepayer burden, and reduced workforce employment because biomass combustion and landfill pathways extract feedstock value without returning jobs to the neighborhoods where the trees originated. Federal urban and salvaged wood infrastructure investment reverses the value flow by directing utilization revenue back into the neighborhoods where the trees came from, funding canopy replacement, maintenance, workforce employment, quality of life and community wealth building that disposal pathways cannot fund.

Orchard growers. California almond, walnut, pistachio, and other orchard growers face mandatory removal cycles every 20 to 40 years. Current infrastructure forces them into two options: whole orchard recycling (grinding into the soil, which has agronomic benefits but zero revenue recovery) or biomass cogeneration (which pays roughly \$15 to \$30 per green tonne at the gate, barely covering transport). Orchard hardwoods in lumber markets are worth \$400 to \$1,500 per tonne as kiln dried lumber. Aggregate foregone value to U.S. orchard growers: \$500 million to \$2 billion annually.

Mass timber developers and architects committed to urban and salvaged wood. Mass timber is the fastest growing U.S. wood construction category, projected to reach \$1.5 billion in annual construction value by 2030. Developers and architects specifying urban and salvaged wood content face supply chain uncertainty that could be greatly decreased if federal policy did support the aggregation infrastructure and markets that would

increase urban and salvaged wood supply at commercial scale. Lost opportunity to the mass timber sector: hundreds of millions annually in foregone differentiated product premium.

The climate and climate exposed communities. 6.3 to 31.5 million tonnes CO₂e annually released or foregone. Monetized at the EPA's social cost of carbon (\$190 per tonne CO₂e as of 2024 updates), that represents \$1.2 to \$6 billion annually in damages to climate exposed communities worldwide, concentrated on vulnerable populations in flood zones, heat stressed cities, drought affected agricultural regions, and coastal areas.

Forest Service scientists and research infrastructure. Researchers at the Northern Research Station, Urban Field Stations in Baltimore, New York, Philadelphia, Chicago, and Denver, and the Forest Products Laboratory in Madison have built two decades of urban and salvaged wood science. The current reorganization threatens their positions, their labs, and the continuity of research that underlies everything in this document. Rebuilding this capacity later, if it is ever rebuilt, costs orders of magnitude more than preserving it now.

The Public-Private Cost Ratio

On the benefits side: a few dozen large corporate operators, including significant foreign-owned and foreign-headquartered firms, one industrial trade association bloc, a handful of biomass conversion equipment manufacturers, a small number of political constituencies, and a narrow set of carbon credit intermediaries. Combined annual financial benefit from current policy framing: likely \$1 to \$3 billion in protected revenue, capital subsidies, and compliance cost savings.

On the cost side: every municipality in the United States, every taxpayer funding those municipalities, hundreds to thousands of urban and salvaged wood industry operators, thousands of potential workers, orchard growers across multiple agricultural sectors, lower income urban neighborhoods bearing canopy loss, mass timber developers, climate exposed communities globally, and the Forest Service's own research workforce. Combined annual cost: conservatively \$10 billion and realistically \$20 to \$30 billion or more when climate damages, health costs, and lost economic activity are included.

The ratio is roughly 1 to 10 or worse. A small, concentrated group captures modest financial benefits while a large, distributed group absorbs substantially larger costs. That ratio is consistent with documented patterns of regulatory capture in academic policy literature.

Summary

The public is paying four times. Once through taxes that fund the research documenting the opportunity, again through taxes that fund grant programs steering the country away from capturing it, one more time in economic losses and lastly through real negative environmental and health impacts. This is what happens when a distributed public interest meets a concentrated private one inside a federal agency and the concentrated side has vastly more money and better access to the people writing the rules.

This is not a critique of the industrial timber sector or the biomass industry for pursuing their financial interests. That is what industries do. It is a critique of a federal grant structure that treats the financial interests of a small number of large operators as identical to the public interest, when the agency's own science demonstrates they

are not, and when the resulting cost to the public is an order of magnitude larger than the benefit to the private beneficiaries.

Is This the Forest Service's Fault?

No. Not primarily. The agency is where the contradiction becomes visible, but it is downstream of the actual drivers, not the source. In fact, when the agency was given the funding, authority, and political support to invest in urban forestry at scale, it delivered substantially.

What the Forest Service did with the IRA UCF appropriation deserves direct credit. The 2022 Inflation Reduction Act represented the most consequential federal investment in urban forestry in U.S. history and the closest the federal government has ever come to enabling urban and salvaged wood industry development at scale. Section 23003 appropriated \$1.5 billion to the USDA Forest Service Urban and Community Forestry Program, with \$1.223 billion awarded across all 50 states, the District of Columbia, two U.S. territories, and three Pacific affiliated islands by January 2025. The agency built a competitive grant program from a standing start, opened the funding pathway to community-based organizations and tribal entities that had never previously been eligible for Forest Service grants at this scale, prioritized investments in disadvantaged communities, funded paid training experience for urban forestry crews and youth employment opportunities, supported workforce development integration with employment barrier populations including formerly incarcerated workers and long-term unemployed workers, and reached more than 7,500 communities with direct funding and technical assistance.

The IRA UCF investment funded the upstream urban canopy management, workforce pipeline, storm response capacity, pest response capacity, and community engagement infrastructure that urban and salvaged wood operations require to scale. While the appropriation did not directly fund sawmilling, kiln drying, or fabrication infrastructure, it funded the conditions under which urban and salvaged wood feedstock generation and the workforce capacity to process it would have been built out across the country over the FY22 through FY31 period. With state-level regulatory pull from materials management plans in Michigan, California, Maryland, Vermont, Pennsylvania, Maine, Florida, Massachusetts, Connecticut, Washington, New York, and others driving wood diversion targets, the IRA UCF was poised to be the federal funding bridge that connected state-mandated diversion infrastructure to the operator-led utilization capacity this commentary documents. This was a genuinely game-changing investment, executed by a Forest Service that delivered on the legislative intent more effectively and equitably than nearly any other federal agency executing IRA funding.

The Forest Service's track record on urban forestry infrastructure development extends well beyond IRA UCF execution. The agency's i-Tree suite of free, peer-reviewed software tools, developed through Northern Research Station capacity in partnership with Davey Tree Expert Company, the Arbor Day Foundation, the Society of Municipal Arborists, the International Society of Arboriculture, Casey Trees, and SUNY ESF, is the internationally recognized standard for quantifying urban forest structure, environmental services, and economic value. Cities, counties, state agencies, and consulting firms across the country and internationally use i-Tree for urban forest planning, budgeting, ESG reporting, and grant applications. The same Northern Research Station capacity that built i-Tree produced the Bassett et al. (2026) research this commentary anchors its feedstock argument with and the Baltimore Urban Wood Project research that established the federal framework for urban and salvaged wood economy development.

The current administration eliminated that investment before it could fully connect. The January 20, 2025 “Unleashing American Energy” executive order paused IRA disbursements. USDA subsequently attempted to terminate IRA UCF grant awards through what Earthjustice characterized as “a barely-edited form letter.” Multiple federal courts ruled the freezes and terminations unlawful (Judge McConnell, January 2025; Judge AliKhan, February 2025; Judge McElroy, April 2025; Urban Sustainability Directors Network v. USDA partial preliminary injunction, August 2025). Federal urban forestry databases were taken offline. Section 10201 of the One Big Beautiful Bill Act of 2025 rescinded the \$476.5 million in unobligated IRA UCF funds that would have funded additional grant rounds through September 30, 2031. The IRA UCF funding pipeline is now effectively closed for new applications. The bridge to scaled urban and salvaged wood industry development was dismantled before it could fully connect.

On December 5, 2025, the USDA Forest Service indefinitely halted the cooperative agreement with Davey Tree Expert Company that has funded the i-Tree suite of peer-reviewed urban forestry assessment tools since 2006, citing a new agency IT policy that eliminates the funding mechanism. The i-Tree team has stated that without replacement funding the tools “could eventually cease to function,” foreclosing the most likely federal pathway for extending urban forestry methodology to urban and salvaged wood durable product carbon storage quantification just as the underlying federal scientific capacity to address it is being eliminated.

The real drivers of the broader federal policy contradiction. Beyond the IRA UCF rescission and i-Tree impacts, multiple structural drivers shape current Forest Service grant framing in ways the agency itself does not control:

- The March 2025 Executive Order on Immediate Expansion of American Timber Production is the proximate driver of the FY26 grant framing. The Forest Service is legally obligated to execute it.
- The 2018 Farm Bill statutory language focuses Wood Innovations programs on National Forest System and other forest lands and hazardous fuels reduction. Permanent change requires congressional action on the 2027 reauthorization.
- The Infrastructure Investment and Jobs Act wrote the 50% federal lands sourcing requirement into WPIA statute. The agency cannot waive it administratively.
- Decades of sustained industry lobbying built the current framing across multiple administrations. This is not a Trump specific phenomenon.
- Congressional committee structure routes Forest Service oversight through Agriculture Committees dominated by rural timber producing states.
- The wood pellet export industry grew from near zero in 2008 to over 10 million tonnes annually, building supply chains and political relationships specifically to secure feedstock access.
- State level regulatory infrastructure built around biomass (California SJV Air Pollution Control District subsidies, state RPS programs crediting biomass combustion) creates downstream demand that federal priorities reflect rather than cause.
- International carbon accounting conventions established in the 1990s favor biomass combustion for tradeable credit generation.

- The urban and salvaged wood coalition lacks a federally focused lobby proportional to the industrial timber and biomass lobbies.

What the Forest Service can be held accountable for. Scoring urban and salvaged wood proposals more favorably within existing Wood Innovations authority, preserving Urban Field Station and Northern Research Station capacity during reorganization, engaging practitioners more substantively in NUCFAC work, and communicating transparently about the tension between research findings and grant priorities. These are fair criticisms, but second order compared to the structural drivers and to the IRA UCF rescission that the agency did not request and could not prevent.

Why this matters for strategy. Blaming the Forest Service produces the wrong approach. The agency delivered when given the IRA UCF appropriation. The agency is now executing under legal obligations and administrative directives it does not set. Effective pressure has to go where the actual decisions are made: Congress (for statutory authority and appropriations), the White House (for executive order direction and congressional pressure), and industry coalitions (for the lobbying capacity that has shaped federal forestry policy for decades). Agency scientists and mid-career staff often share the policy concerns this commentary raises. Positioning the agency itself as the opposition alienates the staff most likely to support reform internally.

The Full Picture of What's Being Left on the Table

Every year that Forest Service grant policy directs urban and salvaged wood toward biofuel rather than the higher valued tiers such as lumber, the United States forgoes:

- \$700 million to \$15 billion in product value
- 6.3 to 31.5 million tonnes of CO₂e benefit, equal to \$1.2 to \$6 billion in climate damages at the EPA social cost of carbon
- Hundreds of millions to \$1.7 billion in carbon market value at 20% capture
- 20,000 to 50,000 direct jobs in milling, drying, manufacturing, and retail at full tiered urban and salvaged wood capture
- \$2 to \$5 billion in municipal disposal costs that utilization could partially recover
- 10.45 million tonnes CO₂e annually in additional climate benefit from deferred commercial harvest, plus continued ecosystem services in working forests valued at approximately \$15.24 billion over 15 years
- An order of magnitude better climate value per dollar than direct air capture (10 to 40 kg CO₂ per dollar versus 1 to 3 kg per dollar for DAC), making urban and salvaged wood recovery one of the most cost effective federal climate interventions available
- Green building price premiums of 15% to 40% that certified urban and salvaged wood commands in LEED and NGBS projects

Total public cost of current policy: conservatively \$10 billion annually, realistically \$20 to \$30 billion when climate and health damages are included.

Total private benefit to the industrial timber and biomass coalition: roughly \$1 to \$3 billion annually.

This resource exists, and the five drivers behind it are accelerating. The question is whether or not this valuable wood becomes lumber, flooring, furniture, and community assets, or smoke, chips, and landfill.

Strategic Direction

The federal grant fight on its current terms is not winnable in the short term. The executive order is in force, the statutes are what they are until Congress changes them, and the FY26 rubric is set. But a multi-front strategy operating on realistic timeframes can change the outcome within three to ten years. This commentary outlines the strategic direction. The companion Policy Recommendations Brief (Part Two), produced through the Michigan Roundtable on Urban and Salvaged Wood Policy on August 20, 2026, will provide the specific federal policy proposals, statutory language, cost estimates, and implementation pathways that operationalize this direction.

Near Term (0 to 12 Months)

The NUCFAC Ten-Year Urban Forestry Action Plan comment period, open through June 30, 2026, is the highest impact federal action available right now. This is where urban and salvaged wood can be written into the document the Forest Service, states, and partners will reference for the next decade. A coordinated comment campaign across Urban Wood Network, Climate Smart Wood Group, USRW, American Forests, Arbor Day Foundation, Society of Municipal Arborists, ISA, SAF, Dovetail Partners, aligned academics, and municipal officials would carry substantially more weight than individual submissions. Other operators in the sector, including those not invited to MRUSWP, are encouraged to file their own NUCFAC comments. Federal record participation is open to all and broader sector participation strengthens the policy case.

Begin building the 2027 Farm Bill coalition now. Urban and salvaged wood needs explicit statutory language recognizing municipal, private, agricultural, and storm salvage removals as eligible feedstock categories, with dedicated funding and modifications to the 50% federal lands sourcing requirement. The groundwork happens during the 12 to 18 months before reauthorization. Specific statutory language proposals will be developed through MRUSWP and published in the Policy Recommendations Brief in October 2026.

Pursue state level legislative wins: procurement preferences for urban and salvaged wood in public building projects, orchard biomass redirection incentives, deconstruction ordinances following the Portland and Milwaukee models, municipal tree utilization mandates, and urban and salvaged wood eligibility in existing state urban forestry grant programs. State wins happen faster and build upward pressure.

Current Michigan implementation demonstrates what this infrastructure looks like in practice. Two active Urban Ashes projects funded through NextCycle Michigan in 2026 are building the operational models federal policy should enable nationally. The Detroit Urban Wood Circular Recovery System, partnered with the Architectural Salvage Warehouse of Detroit and Greenstreet Tree Care, is projected to process 1,200 to 1,800 tons of urban and salvaged wood annually, divert 900 to 1,300 tons from disposal, and produce 150,000 to 250,000 board feet of recovered lumber each year. The Washtenaw County Municipal Log Recovery Yard, partnered with Greenstreet Tree Care, will be Michigan's first integrated Municipal Log Recovery Yard. Both systems deploy Urban Ashes proprietary Gnarbit tracking infrastructure to document chain of custody, diversion outcomes, carbon storage, and CO₂e impacts in a form that meets federal accountability standards. These are not pilot

projects. They are funded, community owned, measurable, and replicable, and they represent the kind of municipal circular wood infrastructure federal policy should be accelerating across every U.S. city.

Medium Term (1 to 3 Years)

Build federal advocacy infrastructure proportional to the opposition. The industrial timber coalition has been at this for 40 years. The urban and salvaged wood coalition needs a dedicated federal policy operation, whether through internal expansion at Urban Wood Network, a shared lobbying retainer, or a new federated entity. Budget needed: \$500,000 to \$1 million annually for a small effective operation. This is the single biggest structural gap.

Develop durable wood product carbon market methodology competitive with biomass combustion credits. Work with Verra, Gold Standard, Climate Action Reserve, and the American Carbon Registry on methodology handling service life, additionality, substitution credits, and credit generation speed. MacFarlane's 6.59 to 1.16 impact factor differential provides the empirical basis for methodology that captures the real climate value of durable wood products. Climate Smart Wood Group's building sector expertise, Urban Wood Network's urban and salvaged wood specificity, and USRW's certification framework are the natural co-leads. Tracking infrastructure like Urban Ashes Gnarbit system, which measures chain of custody, diversion, carbon storage, and CO₂e impact across the full wood lifecycle, provides the operational measurement backbone such methodology requires.

Pursue the green building certification pathways Dovetail identified. The Programme for the Endorsement of Forest Certification approved its Trees Outside Forests guidelines in 2018, providing an internationally recognized pathway for urban forest management and urban forest products to achieve third-party certification. FSC's Controlled Wood category already includes salvaged wood from urban sources, including wood from orchard clearance, wood from road clearance, and urban harvested wood. SCS Global Services Salvaged Wood and Fiber Verification program specifically recognizes urban wood as an eligible material. These pathways exist today and are underutilized. Active pursuit would open LEED credit eligibility and NAHB NGBS compliance for urban and salvaged wood at scale.

Scale corporate offtake and ESG procurement channels. Target \$500 million to \$1 billion in annual corporate offtake demand within five years, independent of federal grants. Major campus development (Microsoft, Google, Meta, Salesforce), hospitality chains, institutional buyers (universities, hospitals, museums), and retail operations are reachable markets.

Invest in workforce development as a political asset. Scale the Baltimore Wood Project outcomes through community colleges, building trades unions, and reentry organizations. Target 2,000 to 5,000 documented jobs across 20 to 30 city partnerships within three years. Urban and salvaged wood becomes a workforce story, not just an environmental story, which picks up new political allies.

Long Term (3 to 10 Years)

International carbon accounting reform through IPCC methodology working groups, UNFCCC processes, and EU biomass policy reform. Slow work, but the prize is global rules treating durable wood products as climate superior to biomass combustion.

Mass timber integration. Hardwood CLT research is advancing at Oregon State, Virginia Tech, and Penn State. If urban and salvaged wood becomes even 10% of U.S. mass timber feedstock within a decade, the economics transform permanently. Climate Smart Wood Group's procurement guidance work becomes critical here.

Municipal revenue model development. Scale the Baltimore Camp Small model to 50 to 100 cities through federal, state, and philanthropic capital, standardized operational playbooks, corporate procurement linkage, and performance contracts. Cities running net positive utilization yards become political allies rather than reluctant participants.

The Role of Key Coalition Organizations

Urban Wood Network anchors the supply side and the industry voice. As the leading international organization representing the urban and salvaged wood industry with roughly 200 member organizations, UWN is the natural lead on federal policy coordination, industry data, supplier network organization, industry standards, and state level policy work. UWN's biggest strategic need is substantially expanded federal policy capacity, ideally three to five times current budget, to close the lobbying gap with the industrial timber coalition.

USRW (Urban Salvaged and Reclaimed Wood) provides the certification and chain of custody infrastructure that makes urban and salvaged wood credible in the marketplace. Co-developed by Urban Ashes and Paul Hickman among other contributors, USRW operates as a national 501(c)(3) third-party certification body that verifies the sourcing, processing, quality, and labeling of urban and salvaged wood products. USRW certification is the mechanism that converts urban and salvaged wood from an unrecognized input into a specifiable, premium priced building material for architects, developers, and corporate procurement. Scaling USRW certification adoption across Urban Wood Network members and peer operators is a near term priority.

Climate Smart Wood Group anchors the demand side bridge into the building sector. Launched in 2019 and jointly managed by FSC US, Ecotrust, Sustainable Northwest, Northwest Natural Resource Group, and Washington Environmental Council, CSWG produces procurement guidance helping developers, architects, and contractors specify climate smart wood, with urban and salvaged wood and salvaged material as one of three core procurement pathways alongside FSC-certified virgin wood and restoration sourced wood. CSWG operates through working groups composed of member organizations across the supply, demand, and certification sides of the climate smart wood economy. CSWG is the natural lead on mass timber integration, building sector education, FSC framework alignment, supply chain verification, and architect and developer engagement.

Dovetail Partners provides the research and analytical infrastructure the coalition needs. Dovetail's 2016, 2018, and ongoing work on urban and salvaged wood market opportunities, green building certification pathways, carbon storage in wood products, and municipal utilization barriers constitutes the broadest national analysis of urban and salvaged wood economic and market dynamics available. Dovetail also administers the Right of Way Stewardship Council, which connects utility vegetation management (a significant urban and salvaged wood feedstock stream) to certification frameworks.

Where UWN, USRW, CSWG, and Dovetail should coordinate deliberately: standards and metrics alignment so industry branding maps cleanly onto building sector procurement categories, joint corporate engagement, mass timber integration leadership, carbon market methodology development, and shared data infrastructure. Formal coordination is a near term priority that strengthens the coalition without any organization expanding beyond its core mission.

Coalition gaps not fully filled by current organizations: federal advocacy at the required scale, a national workforce and community anchor organization, municipal and mayoral political engagement at scale, and agricultural and orchard feedstock integration. American Forests, Arbor Day Foundation, Society of Municipal Arborists, and Cities4Forests have partial capacity. Workforce and equity work currently happens at the city

level (Baltimore, Milwaukee, Detroit, Sacramento, Ann Arbor) without a national anchor. Agricultural work needs new partnerships with the Almond Board of California, agricultural commodity groups, and UC Davis Whole Orchard Recycling program. Filling these gaps is a strategic priority.

What the Forest Service Should Do

Within the discretion it actually has:

Restore explicit eligibility and competitive scoring for urban and salvaged wood utilization across the full value chain, not only biomass and biofuel, within Wood Innovations and related programs.

Recognize municipal, private, agricultural, and storm salvage tree removals as legitimate feedstock categories alongside National Forest System byproducts, consistent with the agency's own Urban FIA and Urban National Landowner Survey research, and with MacFarlane's 15 year old peer reviewed findings that urban and salvaged wood exceeds National Forest harvest volume.

Protect the Northern Research Station, Urban Field Stations, and Forest Products Laboratory capacity that produces the supporting science.

Engage NUCFAC, Urban Wood Network, USRW, Climate Smart Wood Group, Dovetail Partners, and urban and salvaged wood practitioners substantively in shaping the next Ten-Year Urban Forestry Action Plan.

Communicate transparently about the tension between published research and current grant priorities rather than treating them as consistent.

The Choice

The Forest Service's own peer reviewed research, plus 15 years of independent academic research from MacFarlane at Michigan State, Dovetail Partners, Yale, Purdue, Oregon State, and UC Davis, converges on a single conclusion: urban and salvaged wood is worth up to nine times more as lumber than as chips, locks carbon away 5.7 times more effectively than burning does, and creates jobs biofuel does not. Its current grant priorities say urban and salvaged wood is a non-priority except as biofuel.

One position reflects what the science, the markets, and the communities are telling us. The other reflects a policy choice shaped by a concentrated industry coalition with deep Washington access, executing priorities set above the agency by executive order, statute, and decades of accumulated lobbying. That choice transfers roughly \$10 to \$30 billion annually from the public to private beneficiaries who capture roughly \$1 to \$3 billion in direct financial benefit. The remainder is economic loss absorbed by municipalities, workers, residents, growers, and the climate.

Fixing the contradiction requires working every venue where decisions actually get made: Congress on the 2027 Farm Bill, state legislatures on procurement and municipal programs, NUCFAC on the next action plan, corporate ESG channels on procurement commitments, carbon markets on methodology, green building certification bodies on inclusion, and international standards bodies on biogenic carbon accounting. The Forest Service should be engaged as a partner where possible. Agency scientists and mid-career staff often share the policy concerns this commentary raises. Current leadership reflects political direction they did not choose.

Cities, arborists, sawyers, manufacturers, residents, and growers are already doing the work. A coalition built around Urban Wood Network on the industry side, USRW on the certification side, Climate Smart Wood Group on the building sector side, and Dovetail Partners on the research side, properly resourced and coordinated with the workforce, community, municipal, and agricultural partners currently operating in parallel, can change the outcome. The resource exists. The science is done and has been done for 15 years. The markets are real. The feedstock is growing and will keep growing for decades.

What is missing is the political and structural infrastructure to convert those advantages into policy outcomes. Building it is the work of the next five years. The climate, the economy, and the communities bearing the cost of tree mortality cannot wait longer than that.

Part Two of this analysis, the Policy Recommendations Brief, will be produced through the Michigan Roundtable on Urban and Salvaged Wood Policy at the University of Michigan's Erb Institute on August 20, 2026. The brief will translate the strategic direction in this commentary into specific federal policy proposals: proposed statutory language for the 2027 Farm Bill, proposed Wood Innovations scoring criteria modifications, cost estimates and budget implications, implementation pathways and lead agency assignments, and defined success metrics. The brief will publish in October 2026 as the operational federal policy companion to this commentary.

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Mixed Signals from the Forest Service on Urban and Salvaged Wood

Part One of a Two-Part Federal Policy Analysis

The American Urban & Salvaged Wood Initiative

Convened by Urban Ashes® | Federal policy work led by Paul Hickman