City of Tacoma Standing Committee Memorandum

TO: Hyun Kim, Interim City Manager
FROM: Ramiro A. Chavez, P.E. PgMP, Director, Environmental Services Department
COPY: Infrastructure, Planning, and Sustainability Committee; Anna Le
PRESENTER: Ryan Hebert, Urban Forestry Analyst; Mike Carey, Urban Forestry Program Manager
SUBJECT: Evaluating Tacoma's Wood Waste Streams and Circular Economy Potential
DATE: January 28, 2026

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PRESENTATION TYPE:
Informational Briefing

SUMMARY:
Per the request of City Council, staff from the Urban Forestry Program will present the findings of the Urban Wood Reuse Analysis conducted by Cambium Carbon in partnership with Tacoma Environmental Services Department's Urban Forestry Program and Solid Waste Division. The intent of this briefing is to set a baseline of understanding for the Infrastructure Planning and Sustainability (IPS) Committee on current practices surrounding wood waste generation and disposal in Tacoma, as well as opportunities for improving wood waste diversion from the landfill to higher and better uses. During this briefing, staff will also identify opportunities to align climate action, circular economy, and workforce development while advancing goals identified in the Urban Forest Management Plan (UFMP) and Sustainable Materials Management Plan (SMMP).

Topics that will be covered during this briefing include:

- Background and project motivations
- Analysis of wood waste generation and disposal current practices
- Barriers to wood reuse
- Recent wood reuse successes and misses
- Opportunities to improve wood reuse systems
- Paths to implementation

Throughout the briefing, staff will highlight gaps within existing processes and differing levels of opportunities for improving wood waste utilization. The intent is for staff to provide an overview of the findings from the wood reuse study to the IPS Committee. Staff will plan to return to IPS at a future date with a proposed Implementation Strategy, with the intent to receive direction from the IPS Committee on which strategies they may want to pursue and move toward implementation. Potential opportunities for implementation are outlined in the attached "Tacoma Urban Wood Reuse: Evaluating Tacoma's Wood Waste Streams and Circular Economy Potential" technical report.

BACKGROUND:
The City Council has adopted policies in support of increasing healthy tree canopy, increasing urban forestry level of service, diverting 70 percent of Tacoma's waste from landfills, and establishing protocols for tree debris management, wood utilization, and wood waste diversion for routine tree maintenance, removals, and storm response. Relevant adopted policies include: **(2015) Sustainable Materials Management Plan** (RES38907), **(2016) Environmental Action Plan** (RES39427), **(2019) Urban Forest Management Plan** (RES40492), **(2019) Climate Emergency Resolution** (RES40509), and **(2021) Climate Action Plan** (RES40878).

City of Tacoma Sustainable Materials Management Plan (SMMP)

Adopted by Council in May 2014 (RES38907), the SMMP reaffirmed the City's commitment to divert 70 percent of Tacoma's solid waste from landfills by 2028. This goal was first articulated in the Tacoma-Pierce County Solid Waste Management Plan of 2008. The resolution called for the development of a sustainable materials management plan to "ensure that the diversion goal of 70 percent or more by 2028 is met and it defined sustainable materials management as "an approach that includes waste prevention and discard management, while seeking to reduce environmental impacts by managing materials through all stages of their life."

City of Tacoma Urban Forest Management Plan (UFMP)

Adopted by Council in December 2019 (RES40492), the UFMP consolidates and clarifies City goals and policies, prioritizes strategies and actions for improving urban forest management, and establishes targets to assess progress annually. This UFMP serves as a road map outlining meaningful, high-priority actions the City will take between 2020 and 2030 to strive towards a goal of a healthy, thriving, 30 percent overall tree canopy coverage. Management & Policy goal 1B.9: "Establish protocols for tree debris management, wood utilization, and wood waste diversion for routine tree maintenance, removals, and storm response."

In 2023, the City began a small pilot program that enabled the diversion of waste from hazardous trees within historically underserved communities by coordinating a partnership between the City's on-call tree work contractor and a hyper-local mill. This program illustrated a great deal of promise, but expansion requires a more robust understanding of the wood waste stream and biomass processing solutions.

On November 5, 2024, Council passed Resolution 41555, sponsored by Council Members John Hines, Sarah Rumbaugh, and Kristina Walker, authorizing the one-time use of Council Contingency Funds, in the amount of $20,000, to support an urban wood reuse program assessment and action strategy. The City's Solid Waste Management Division matched the Council contingency fund with an additional $20,000 to cover the full cost of the assessment, as it aligned with goals for waste reduction. The intent of the assessment, as identified in the associated Council Action Memorandum dated October 30, 2024, was to evaluate the wood waste stream, engage with key stakeholders, develop an ecosystem map, provide a complete economic and market analysis of biomass processing solutions, and submit a proposed collective action strategy.

In March 2025, Environmental Services Urban Forestry and Solid Waste contracted with Cambium Carbon, a public benefit corporation and leader in wood reuse technical assistance, to conduct the City-wide analysis. The purpose was to support Tacoma in building a self-sustaining, equitable, and climate-aligned wood utilization framework that:

- Improves adaptive management of natural resources;
- Advances waste diversion and emissions-reduction targets;
- Expands pathways for green jobs and circular economy development; and,
- Enables the City of Tacoma's Urban Forestry Team to set up the first formal urban wood reuse program within the city.

To achieve these objectives, the study focused on three core tasks:

1. **Biomass Characterization & Analysis:** Aggregate and interpret existing forest data (e.g., active tree inventory, demographic data, anticipated tree removals) and conduct market analysis of wood utilization technologies.
2. **Collaborator Engagement & Communication:** Interview key collaborators to understand current biomass management practices and identify opportunities and barriers to value-added reuse.
3. **Best Use Assessment & Action Planning:** Evaluate potential end uses for material of various species and grades and present a recommended operational model and program design.

The attached technical report "Tacoma Urban Wood Reuse: Evaluating Tacoma's Wood Waste Streams and Circular Economy Potential" includes the full analysis and recommendations that will be summarized at the January 28, 2026 IPS presentation.

ISSUE:
Tacoma's urban forest is a vital public asset that delivers a host of intersectional benefits to public health, climate, stormwater management, and ecology. Maintaining this asset requires routine pruning, hazard mitigation, and whole tree removals, all of which generate woody material which needs to be managed and disposed of properly. Additionally, pressure to increase housing density, climate-related stressors (heat, drought, pests, and diseases), and necessary infrastructure improvements are expected to increase the volume of woody material generated in the coming decades. Current practices prioritize disposal over reuse, regardless of reuse potential. Further, a lack of understanding of potential reuse strategies, and underdeveloped coordination between stakeholders that remove trees, results in much of the wood being disposed of as waste in a landfill or turned into low-grade products such as wood chips.

Disposal of woody material in landfills not only goes against adopted policies of waste diversion, but also increases the cost of routine tree maintenance and construction activities and has negative impacts on adopted climate and sustainability initiatives.

ALTERNATIVES:
This is an informational briefing, however, opportunities for improving wood waste diversion from the landfill to higher and better uses are included in the attached report and will be presented by staff. If requested by the IPS Committee, Urban Forestry staff may return at a later date to present a potential implementation plan to pursue some of the options for implementation. Alternatively, the IPS Committee may choose not to advance suggestions from the Wood Reuse Analysis findings or to narrow/redirect the scope of the suggestions. A no action alternative will limit the City's ability to increase wood waste utilization, and salvageable material will continue to be disposed of as waste, and disposal costs of tree maintenance and removals will remain.

FISCAL IMPACT:
This is an informational briefing only and there is no further fiscal impact at this time. However, there are varying degrees of potential fiscal impacts presented in the Wood Reuse Analysis ranging from minimal to significant depending on the implementation pathways. Some research and background for recommended fiscal notes has been completed, and general estimates can be found within the attached technical report. Under the direction of the IPS Committee, Staff can present a proposed Implementation Strategy at a future IPS Committee meeting which will include any potential fiscal impacts at that time.

RECOMMENDATION:
Staff requests the IPS Committee to provide feedback to staff on which, if any, implementation pathways from the report to consider for further discussion and/or for potential inclusion in an Implementation Strategy.

ATTACHMENTS:
Tacoma Urban Wood Reuse: Evaluating Tacoma's Wood Waste Streams and Circular Economy Potential.