



THE
URBAN WOOD
TOOLKIT

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NETWORK

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THE URBAN WOOD TOOLKIT

Bulletin #1- A Guide to Creating Urban Wood Utilization Plan

Bulletin #2- Building Organizational & Community Support for Urban Wood

Bulletin #3: Exploring Products Options for Urban Wood Utilization

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Most people view forests as valuable, whether trees are standing in a wooded grove or loaded into a truck as logs. Strangely, we don't value our urban trees in quite the same way.

Cities, neighborhoods, and homeowners lovingly plant and nurture trees to give streets beauty and value, resulting in the four billion trees that make up America's urban forests. But when these trees have to be removed due to death, disease, or development, their stories end. They become just another thing to discard.

The Urban Wood Network believes that our trees deserve a better ending. We aim to find the highest and best use for every urban tree and to invest that value back into the local community. If recovered and repurposed, wood from our country's urban forests could produce nearly four billion board feet of lumber each year, along with useful products like mulch and firewood. Shouldn't we use this resource to boost local economies, reduce community expenses, and provide sustainable, renewable materials to beautify our homes?

Repurposing urban trees after they are removed is a big shift in the way landowners manage them. And, it changes the way industry sees its supply chain. People who manage urban forests or work with wood may find it difficult to connect with partners and learn about opportunities in the emerging urban forest products market.

The Urban Wood Network was launched in Illinois, Michigan, Missouri and Wisconsin to support the industry. We work to connect people all along the supply chain to build community, business, and consumer confidence in urban wood.

We are working together to build a common understanding, language, commitment, and eventually, brand for the urban wood marketplace. Whether you are looking to expand your existing operation, start a new business dedicated to urban wood, join a statewide network, or start your own, we can help make it happen.

URBAN WOOD NETWORK

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THE URBAN WOOD TOOLKIT

BULLETIN #1: A GUIDE FOR CREATING URBAN WOOD UTILIZATION PLANS

WHAT IS THE URBAN WOOD TOOLKIT?

Urban wood utilization and marketing is increasingly recognized as an important component for quality urban forest management programs. Using wood from urban and community tree care residues is an effective way to reduce municipal forestry costs and waste, promote stronger linkages with the forest products industry, and produce new economic opportunities.

While it may seem challenging at first, finding value-added uses for wood generated through urban forestry practices can be a pragmatic way to provide benefits to your community. Most examples of successful urban wood projects share some features: they have dedicated leaders who prioritize the unique needs and capacities of their communities, and they depend on private partnerships. These models can provide useful information on other communities' solutions, but don't necessarily provide a blueprint for a program that will meet your specific needs.

This Urban Wood Toolkit was created to walk users through the process of building an urban wood use plan. While not every question may be relevant to your specific situation, each may help you reflect on the major issues, opportunities, and challenges that you are likely to encounter, while anchoring your decisions in what will be most meaningful to your own community.

PLANNING GUIDE OVERVIEW

This planning guide is divided into seven sections, each as a one-page worksheet to help you assess your current capabilities, identify the resources needed, and explore different potential opportunities. In order to help you track progress, a simplified list of the guide's components is shown in the left sidebar.

The Toolkit is designed to be used by municipal foresters, city managers, community volunteers, or students. Each worksheet offers a discrete snapshot of one part of the wood use planning process, making it easier to tackle the work in separate segments over time as scheduling allows. Additional bulletins are available in the Urban Wood Toolkit series and can provide further details on many of the ideas presented here.

Once you complete all of the sections, you will be armed with information to prioritize the most important goals and objectives for your community's wood, recognize the types of information or resources necessary to advance, and identify the types of services that you need from additional partners.



SECTION 1: GETTING STARTED

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- What are the basic structures of your current wood disposal handling system?
- Do you use outside contractors for tree removal? Or, do it in-house? Full or part-time?
- Where do logs and other wood residues go immediately after trees are removed?
 - Into your own collection yard or to a private collection yard
 - Landfill
 - Disposal via private contract
 - Used by contractors to produce specific products
 - Other (please explain)
- Do you already produce anything from this wood? And what do you do with it?
 - Firewood Use / Sell / Give away
 - Mulch Use / Sell / Give away
 - Fuel chips Use / Sell / Give away
 - Compost Use / Sell / Give away
 - Logs Use / Sell / Give away
 - Lumber Use / Sell / Give away
- Who has the authority to establish or authorize wood disposal protocols within your organization?
- Are there formal procedures in place for any wood that is sold or given away?

GATHER INFORMATION

- Regarding wood disposal, do your municipality's records show:
 - How much you spend annually (including tipping fees, transportation, handling, etc.)?
 - How much wood you dispose of (by volume)?
 - How much staff time is used?
 - How much you spend on related expenses (chipping, grinding, equipment, etc.)?
 - How much (if any) you spend on purchases of wood products (mulch, compost, fuel, etc.)?
 - If you lose money? Make money? Break even?

EVALUATE OPPORTUNITIES

Provide a quick reaction to the following questions. These issues will be reviewed in more depth later on.

- How satisfied are you with your current wood disposal process? What is working well? What isn't?
- How much flexibility do you have in your forestry planning and implementation?
- Does your department or community have any obvious wood product needs?
- Will your staff support a wood use initiative? Will your management? Will your community?
- What are your municipality's goals? Cost reduction? Waste reduction? Sustainability? Something else?
- What are your biggest concerns about starting a new urban wood use plan?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 2: UNDERSTANDING YOUR WOOD RESOURCES

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Does your community already have an urban tree inventory?
 - If yes, does it include both street and park trees? Do you have data on planned removals?
 - If no, is your community planning an inventory soon? Is there still time to provide input?
- Does your community have a plan in place (formal or informal) for how and when tree removals occur?
- Do you have a plan that already dictates how wood handling will occur? Can you transport large logs?
- Do you already have logs from previous removals?
- How many trees do you expect to remove in the next year?
- Who else has a significant tree removal responsibility in your community (private operations, land conservancies, school campuses, utilities, etc.)? Could they act as partners to produce a larger wood supply? Do you know how they manage wood handling and disposal?

GATHER INFORMATION

- For existing stockpiled logs or for anticipated future removals, what do you know about the quality, quantity, and accessibility of the logs? What volume is in good condition vs. hollow or rotten?
- Can you collect information on the following for pending tree removals or stockpiled logs? (Knowing these characteristics will help with future planning.)
 - *Diameter* – Typically measured as DBH, or diameter at breast height (taken 4.5' from the ground), logs should be at least a 10-12" DBH to be millable. Some mills require even larger logs. How many trees or logs surpass this minimum standard?
 - *Height to first branching* – Typically, at least an 8' log is desirable for milling, but shorter logs may have value depending on the types of products planned.
 - *Accessibility* – Can the tree be felled safely without cutting the log into lengths shorter than 8 feet? Can the logs be hauled out easily? Is there room to navigate where logs are stockpiled?
 - *Quality* – Do trees have obvious damage, metal, or other issues that would restrict their use?
 - *Species* – What species are available? This may affect suitability for some products.

EVALUATE OPPORTUNITIES

- Do you have enough good quality logs available to explore higher-value wood use options?
- What do you know about your lower-value residues? Do you need to explore new options for these?
- A successful urban wood program can be developed, even when municipal staff have little knowledge of log grading. But, having the ability to describe the quantity and quality of your wood will help in developing partnerships. Do you feel that you know enough about your wood resources to discuss opportunities with producers and processors?
- Can partnering with another wood generator help supply enough wood to create more interest?
- As you learn more about identifying log quality, you may be better positioned to negotiate with potential buyers about the value of the wood you have available. What future steps could you take to better understand the quality and quantity of wood you generate?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 3: REVIEWING CAPACITY & PLANNING LOGISTICS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- How much staff time do you have available for the additional handling, sorting, or processing that you may need to create products from your trees? Can some of this work be outsourced through partnerships?
- What role do private contractors currently play in your tree care and removal operations? Are they receptive to wood recovery and reuse activities?
- What kinds of training do staff members or contractors currently have that would be helpful?
- What kinds of equipment do you have available, especially regarding transporting and sorting logs, chipping or grinding, and other processing? Can you handle processing wood for a variety of products?
- Do you already have a yard with space for collecting, sorting, and/or processing wood residues?
- Do you have appropriate areas to store processed lumber, firewood, mulch, or other products?

GATHER INFORMATION

- Which skills do you most need to develop for your staff? While expertise is not necessary in every area, some knowledge about the following will make wood use efforts more effective:
 - Species identification and log evaluation
 - Safe tree removal and log bucking
 - Wood retrieval and transportation
 - Equipment usage (including chainsaw safety)
 - Wood handling and sorting
 - Collection and storage
 - Processing and sales
 - Marketing and communication
- If you do not have capability to transport or store logs, can you find local services for hire?
- Are there any quarantine regulations (such as for emerald ash borer) or other local ordinances that pose restrictions on the processing and/or movement of your wood residues?
- Are there local ordinances, zoning, or other regulations that will affect wood processing capability?

EVALUATE OPPORTUNITIES

- How will you build the necessary skills for your team?
- When would you prefer to use outside professionals to meet your needs?
- Do you have funds for any needed equipment purchases? Can you rent or lease equipment instead?
- How will you streamline log collection after future tree removals to make it more efficient?
- Could you improve efficiency and cost by sharing transportation and collection of wood materials with neighboring communities and/or private arborists?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 4: MANAGING INTERNAL COMMUNICATIONS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Revisiting some earlier questions, how will your staff likely respond to a new wood use program, especially if you are already short-staffed or facing budget cuts? What about city management? Are you prepared to address their concerns?
- How does your community already handle private partnerships? What works and what could be improved?
- How does your community handle other surplus resource situations? Do these processes work well?
- What agreements or procedures will you need to review or create to enter into any partnerships?
 - Single comprehensive agreement vs. multiple agreements
 - Bid processes
 - **Insurance requirements**
 - Indemnification requirements
 - Liability requirements and waivers
 - Different handling for giveaways vs. sales
- Does your community already have a written urban forestry management plan? Does it include any mention of wood use planning?
- Who are the natural allies for this program among your staff and municipal management? How can you engage them in your planning process? Do you need to engage other departments?

GATHER INFORMATION

- Determine what information you will need to provide to get buy-in from staff and management. What elements of your plan will address their concerns?
- Build a list of the agreements, documentation, or plans that you will need to draw up and identify models for any that you still need to draft.
- Will you need to amend any plans or budgets before you can begin changing your wood use practices?
- What effect, if any, will changes in spending or cost reduction have on next year's budget? How will you handle this?

EVALUATE OPPORTUNITIES

- Could new regulatory structures, ordinances, or incentives help support wood recovery and reuse activities in your community?
- How will you include input from community leaders and the public as you develop your wood use plan? How will you encourage their input and feedback over time? How will you involve other departments?
- How will on-the-ground staff feedback influence the program's implementation?
- What evaluation and communications measures will you use to track progress toward goals, report your outcomes, and continue to build support?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 5: EXPLORING PRODUCT OPPORTUNITIES

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Does your department already use wood products? Do other parts of your municipal government use wood regularly? What do you or other community-based organizations (such as schools, green building projects, affordable housing, artist co-ops, etc.) need? Many wood products can benefit community operations, including, but not limited to:
 - Surfaced, kiln-dried lumber
 - Slabs
 - Rough-cut, air-dried lumber (such as utility boards for industrial use)
 - Burls (for woodworking)
 - Firewood
 - Mulch
 - Fuel chips
 - Animal bedding or playground cover
 - Compost
- How do the possible uses align with the types of wood resources you have available? Keep in mind that most municipal efforts produce a large quantity of low-value wood and a small volume of high-value logs, so plan accordingly.

GATHER INFORMATION

- Based on the information available, compile the following:
 - Expected characteristics, volume, and timeline for wood residue availability.
 - Desired products (if any) needed *within* your community, governmental or otherwise. (We'll talk about external markets in the next section.)
 - Expected processing capability needed beyond what your internal capacity allows.
- Research the various wood product options you identified to gain a better understanding about the wood quality and types of processing needed. (See Bulletin #3 in the Urban Wood Toolkit for ideas.)

EVALUATE OPPORTUNITIES

- Remember that communities rarely profit from wood use. Given that, revisit your goals: Do you hope to reduce disposal costs? Make products to meet municipal wood needs? Improve sustainability? Will the products you identified work toward those goals?
- How will you track outcomes and measure progress as you try new processing options? What metrics should you track from the start?
- Knowing that all tree removal operations produce wood of varying qualities, does your plan find the best use for your entire wood residue stream? For example, can you use good logs for lumber, smaller trees for firewood, branches for mulch, and stumps for compost?
- Compare your expected wood availability, desired products, and expected capacity for processing after researching product options. Are these realistic? Either reaffirm your plan or consider other options.

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 6: DEVELOPING WOOD INDUSTRY PARTNERSHIPS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Review your plans so far: where will you need outside help and what can you do in-house?
- Does your wood supply exceed what you can reasonably use within your own community?
- Do you need to contract out any removal, transportation, or processing activities?
- What services will you need from a partnership?
- What market demand already exists for urban wood in your region?
- Are there companies that would be interested in recovering and/or purchasing the material you have available?

GATHER INFORMATION

- Research existing wood industry members in your area, making sure to explore a variety of processors:
 - Services can vary greatly. Some companies offer processing for many different wood products in a single location (such as milling, firewood, mulch, kiln drying, and custom woodworking). Others specialize, offering fewer services. You may need a single provider or several.
 - Some may offer portable services, while others will require transportation for processing logs.
 - Be clear that you are looking for processors who handle urban logs. Not all forest products companies will work with urban logs, but some do specialize exclusively in urban wood.
- Develop a checklist of questions to ask about services, timelines, transportation, quality, volumes, etc. (See also Urban Wood Toolkit Bulletin #5 for more information.)
- Interview possible partners. In addition to reviewing their reputation and availability, document their capabilities, business practices, and product requirements.
- Recognize that the most successful public-private partnerships work when both parties benefit and build trust. Make sure that you each understand the needs of the other in this process.

EVALUATE OPPORTUNITIES

- Some first attempts at urban wood partnerships fail due to miscommunication and unmet expectations, especially when arborists and forest products professionals don't speak the same language regarding wood. How can you keep communication open, so that everyone is clear about specifications and services?
- Do any of the researched partners fit with your needs? Can they provide the services that you need from a partnership? Reach out to them to work out next steps together.
- Draft a formal agreement that articulates roles and responsibilities clearly. Review the needs you identified in your internal communications. What kinds of agreements or processes will need to take place before work can begin? Will your preferred partners qualify?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 7: BUILDING COMMUNITY SUPPORT

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- How does your community already respond to urban forestry programs? Do you expect challenges or support?
- Which benefits of urban wood use are your local citizens most likely to value? Why?
- Is there community support for local and environmental initiatives (such as farmers’ markets, green building programs, recycling, etc.)? How can you use existing interests to promote urban wood use?

GATHER INFORMATION

- Who are the natural allies for this program among public figures or local organizations? Can you work with them to produce messages that will resonate with your community? Some common themes or messages have proven successful with diverse audiences, such as showing how urban wood:
 - Is an important part of a “full circle” approach to good urban forest management,
 - Can lower wood disposal costs for communities,
 - Connects urban and suburban populations with forests and nature,
 - Supports the local economy and local job growth,
 - Produces sustainable “green” products that have been reclaimed, and
 - Reduces waste and prevents wood from entering landfills.
- Do any newsletters, mailing lists, events, survey tools, or other instruments already exist and hold potential for helping you to gauge public sentiment or spread positive messaging about urban wood?

EVALUATE OPPORTUNITIES

- Should you consider building a public relations plan for your wood use program? Careful, deliberate communications can make operations transparent, build support, and engage the community. How will you tell the story?
- How can you best leverage your champions and promote your message as you move forward? Are there natural opportunities that would be a perfect fit? (Such as citizen forestry programs.) Use those first!
- What kinds of events or promotions would involve or speak to your community? Demonstration projects or events? Creative signage? Media coverage? Public meetings? Social media outreach? Programs with schools? Collaborations with others?
- Are there others in your community who can help with promoting your wood use efforts?
 - Are there retail operations (especially reuse outlets) willing to carry local urban wood products?
 - Will local galleries, artist clubs, or woodworking groups showcase finished works?
 - Could environmental or recycling organizations endorse the green message of these products?
 - Might neighborhood associations rally around this as a way to improve urban forestry efforts?
- How will you continue to promote your wood use programming over time in a meaningful way?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:

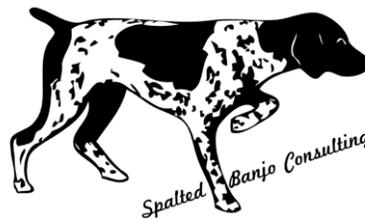


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THE URBAN WOOD TOOLKIT

BULLETIN #2: BUILDING ORGANIZATIONAL & COMMUNITY SUPPORT FOR URBAN WOOD

THE NEED FOR CHAMPIONS AND ADVOCATES

Successful urban wood programs are often led by a “champion” who is passionate about wood recovery. Longstanding urban wood programs also feature a base of support from enthusiastic internal management, motivated industry partners, and engaged public advocates. Interest and approval from these stakeholders simplifies partnership development, eliminates many challenging roadblocks, and often creates new market opportunities. This bulletin, the second in a series designed to provide tools for communities considering an urban wood use program, will provide an overview for developing strong advocates for urban wood both within and outside of your organization.

BUILDING ORGANIZATIONAL SUPPORT FOR URBAN WOOD

The following guidelines are recommended for communicating internally with staff and leadership in the beginning of your urban wood utilization planning process:

Step 1: Be educated on the topic.

- Review key resources on urban wood. (See Urban Wood Toolkit Bulletin #6 for suggested publications.)
- Know what your own community’s goals and objectives are with regards to wood use.
- Be prepared to discuss the benefits and challenges that you are most likely to experience.

Step 2: Identify relevant decision makers, staff, or other potential partners, and then consider their priorities.

- Target audiences may include:
 - Mayor/city commissioners
 - City manager/department officials
 - Field staff
 - Key partners from various organizations
- Priorities and important considerations may include:
 - Financial implications
 - Tax implications
 - Laws/public policy
 - Public response
 - Cultural traditions
 - Media response
 - Use of staff time
 - Roles of private industry
 - Perceived distraction from other priorities

Step 3: Be clear, concise and credible.

- Develop key messages that cite credible third parties.
- Develop messages that are easily understood by the target audience. Avoid forestry language and other technical jargon when communicating with non-forestry staff.
- Whenever possible, clearly address any priorities identified above.
- Offer straightforward information about your plans, including who will lead, what the expected implications are for staff, and how this is likely to affect the community’s resources.



SAMPLE STRATEGY FOR PROMOTING BENEFITS OF URBAN WOOD	
KEY MESSAGES	SUPPORTING INFORMATION
Urban wood utilization is more environmentally conscientious than traditional wood disposal.	<ol style="list-style-type: none"> 1. Reduces the amount of wood that would otherwise end up landfills. 2. Creates new options for reclaimed products. 3. Provides long-term carbon storage when compared to mulch or firewood.
Urban wood utilization helps to stimulate the local economy.	<ol style="list-style-type: none"> 1. Creates jobs within the operation. 2. Inspires unique partnerships between public institutions, artisan businesses, and larger industries. 3. Creates jobs in supporting businesses.
The community will respond positively to urban wood utilization.	<ol style="list-style-type: none"> 1. Increases visibility of the forestry department in a positive manner. 2. Promotes responsible management of local forests. 3. Provides new outreach and engagement opportunities.

- Other possible messages to use as talking points include:
 - Creating solid wood products that can store carbon and decreasing wood transportation can reduce a community’s impact on climate change.
 - Making, instead of purchasing, mulch and compost can create cost savings.
 - There are financial opportunities for communities using urban wood, including grants and economic development.
 - Using urban wood helps to reduce municipal wood disposal costs.
 - Using, instead of disposing of, community wood demonstrates holistic management.
 - Wood recycling can bring positive visibility to a forestry department, even after crises such as pest outbreaks or storm damage.
 - New urban wood utilization efforts are launching across the country. Communities have an opportunity to become a local leaders with these innovative and relevant practices.

Step 4: Prepare for questions.

- Urban wood use is a new concept for most, so expect many questions as stakeholders consider how new programs may affect ongoing priorities. You should be prepared to answer the following questions:
 - Will implementing an urban wood use program cause a lot of changes to the current tree removal process?
 - Will this waste valuable staff time?
 - Why should we prioritize wood utilization, when we struggle to keep up with maintenance, stump grinding, and plantings?
 - Will additional equipment need to be purchased?
 - Are our current removals worth utilizing?
 - What about metal contaminants and other common urban tree quality concerns?



- What are the costs, and will this affect the current operating budget?
- Will implementing this affect current forestry staffing needs?
- Will these requirements affect current contractor bid prices?
- Why should we prioritize this?
- Are there other forestry services that citizens would prefer?
- Can we just require our wood disposal contractor(s) to utilize the wood?
- Who are the potential partners?
- Are there potential funding sources for this work?
- What other stakeholders will be involved?

Step 5: Select the best medium for delivering your message.

- What is the best method for delivery: face-to-face, email, memo, public meeting, presentation, etc.?
- Use graphics and other visual aids to enhance key messages.
- Keep key messages brief; a reader should ideally spend less than 10 seconds per line.

Step 6: Plan a positive communication experience.

- The story of urban wood is an easy one for most people to connect with. When possible, provide a personal connection.
- Keep a positive tone. Messages should be solution-oriented and constructive. Try to balance negative messages with positive ones.
- Avoid unnecessary use of “absolute” words, such as no, not, never, nothing, and none.

BUILDING COMMUNITY SUPPORT FOR URBAN WOOD

Once your own organization is on board, it is also important to begin building support and enthusiasm for urban wood within the broader community. Remember that urban wood use can be a very positive story for the public, especially when many other newsworthy urban forestry stories (pest outbreaks, storm damage, etc.) can be negative. Turning a deceased, yet beloved, landscape tree into something like a family table is a meaningful “making lemonade from lemons” story that most people can easily connect to and feel good about. Keeping this in mind, the following steps may be used to build a communications strategy with the public:

Step 1. Establish the goal(s) for your outreach and communication plan.

- What is your ultimate goal? Why are you communicating these messages? Is there a desired outcome?
- Are you seeking to educate the audience or do you hope to influence certain behavior (such as guiding wood disposal activities, limiting wood movement, or encouraging purchase of urban wood products)?
- Do you hope to engage with diverse audiences on the value of your overall forest management practices, or will this promotion only focus on using urban wood?

Step 2. Define the audiences and consider segmenting in order to customize and optimize your outreach.

- Who do you ultimately want to influence?
- Why is it important to build support from this specific audience?
- How might your message need to differ depending on the specific audience (residents, homeowners, youth, potential funders, nonprofit organizations, etc.)?
- Is English the native language for this audience, or should any materials be translated?

Step 3. Identify key messages and determine the best medium to communicate these messages.

- What messages are going to resonate most strongly with these particular audiences? Are your examples relevant?



- Can you share different parts of the urban wood message with different groups? For instance, can you engage homeowners about using urban lumber for home improvements? Or hobbyists about woodworking opportunities? Or environmental advocates about reuse options in urban forestry?
- Which type of media will be best for reaching your audience?
 - Blogs
 - Articles in local newspapers
 - Brochures and flyers
 - Posters
 - Radio advertising or public service announcement
 - Local meetings
 - Information booths at farmers markets, street fairs, and other public events
 - Social media posts or marketing ads (including YouTube videos)
- Will this message come from a trusted source? Your message may be best delivered from a wood utilization partner, rather than the municipality. Recognize that existing community networks often have deep relationships with their stakeholders and may be a more effective way to disseminate information.

Step 4. Be clear, concise and credible.

- Will this information be easily understood by the target audience, even with no prior knowledge of urban forestry and wood disposal practices?
- Can you make technical concepts more accessible using relatable examples?

Forestry language:

“In SE Michigan, 2,600 companies disposed of 7.5 M cubic yards of urban wood per year.”

Audience language:

“SE Michigan companies disposed of enough wood to fill 354 football fields, 10 ft deep each year.”

- How will you relate the importance of the *story* while building support for urban wood? Most people have an emotional connection to trees, and similarly, can have an emotional connection to lasting products. These stories matter when communicating and when cultivating advocates.

Step 5. Develop materials and an outreach timeline.

- Keep the goals, audience, messages, method, and story in mind as you develop materials.
- Take advantage of the beauty of urban wood. Photos of finished products speak for themselves. Be sure to use them!
- How often are you communicating with the target audience? Remember, sending too many newsletters and/or email updates may cause your messages to be redirected into a person’s spam folder or directly into their trash. Overly aggressive outreach efforts may lead the audience member to unsubscribe.
- Are you tracking your outreach and communication efforts? How are people responding? Adjust your message if needed.

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SAMPLE COMMUNITY OUTREACH TEMPLATE



There are many benefits to an urban wood partnership for our city:

Economic Vitality:

One of our city's goals is to *[insert quote from city plans on fostering local economic growth]*. Our new urban wood program connects local tree care efforts, artisans, sawyers, and woodworkers to create a fully-functioning system that uses local resources to reinvest in our community.

Engaged Community:

Our community is committed to *[insert quote from city plans on fostering local engagement with community programs]*. The urban wood efforts will connect municipal government staff, private industry members, and citizens in innovative and mutually beneficial partnerships.

Responsible Resource Use:

We have an established commitment to sustainability, *[insert quote from city sustainability plans]*. By using tons of wood that would otherwise go to waste and diverting it to more valuable purposes, our urban wood program is paving the way towards a more sustainable future.

CITY NAME Wood:

An exciting new recycling program for our community's removed trees

WHAT IS URBAN WOOD?

Michigan is a state rich with beautiful, green forests. But too often, we forget about the trees that surround where we live and work. Whether they stand along busy downtown streets, in private backyards, or in other public spaces, urban trees bring joy and value to our lives. When these same trees must be removed due to pests, an ice storm, or road construction, they are usually chipped as mulch or burned as firewood, even when they contain quality logs. Many communities are now starting urban wood recycling programs to collect this valuable wood and find the best possible uses for it.

A NEW PARTNERSHIP FOR COMMUNITY SUSTAINABILITY

Did you know that our community produces _____ tons of wood waste each year? Together with private and community partners, we see this wood as an exciting opportunity to be better stewards of our natural and financial resources. Our hope for this program is to recover wood that can be used to meet community needs, while also saving the city up to \$_____ per year by avoiding expensive wood disposal costs.

WHY DOES THIS MATTER?

Our city has a wealth of natural resources, including *[name key feature here]* and our many green spaces. This is our opportunity to serve as a model for sustainability by showing that our beloved landscape trees can live on, even after they are removed from our streets and parks. We'll be working with *[name partners here]* to produce *[name products]* that will be *[used/sold/given at designated location]*. We expect that our work together will improve our urban forestry efforts, reduce waste in our community, support local businesses, and create beautiful and sustainable products for our citizens to enjoy.

HOW CAN I HELP?

Excited about how *[city name]* is paving the way towards a more sustainable future? There are plenty of ways that you can play a role!

- **Spread the word.** Tell your friends and neighbors about how this program is enriching our community's economy and improving our resource management.
- **Show your appreciation.** Let your public officials know that you support this partnership.
- **Support our partners.** Every recycling effort needs a market and customers in order to be successful. Shop local for all of your wood product needs.

LEARN MORE

- [City Urban and Community Forest Management Plan](#) *[add link]*
- [Michigan Urban Wood Network](#)

**Special thanks to Julie Katsnelson for assistance with this outreach template.*



THE URBAN WOOD TOOLKIT

BULLETIN #3: EXPLORING PRODUCT OPTIONS FOR URBAN WOOD UTILIZATION

TOOLS FOR UNDERSTANDING POSSIBLE USES AND MARKETS

Once a tree leaves the stump it can take many different paths. At first glance, navigating all of the possible directions for wood from urban and community trees can be challenging, especially when there are different industrial options, as well as opportunities to use wood within the municipality itself. This bulletin, the third in a series designed to provide tools for communities considering an urban wood use program, provides two visual guides to help users identify common pathways and product opportunities for urban wood production.

URBAN WOOD FLOWCHART

The simple *Urban Wood Flowchart* shows two main tracks for the flow of wood residues following municipal tree removals. The primary decision point comes near the center of the chart once wood enters a sorting and collection facility. From there, a municipality can set aside wood for industrial forest product markets (shown in green), while preparing other residues for use within the municipality (shown in yellow). The chart identifies appropriate producers or end products for each of these paths and types of wood residues.

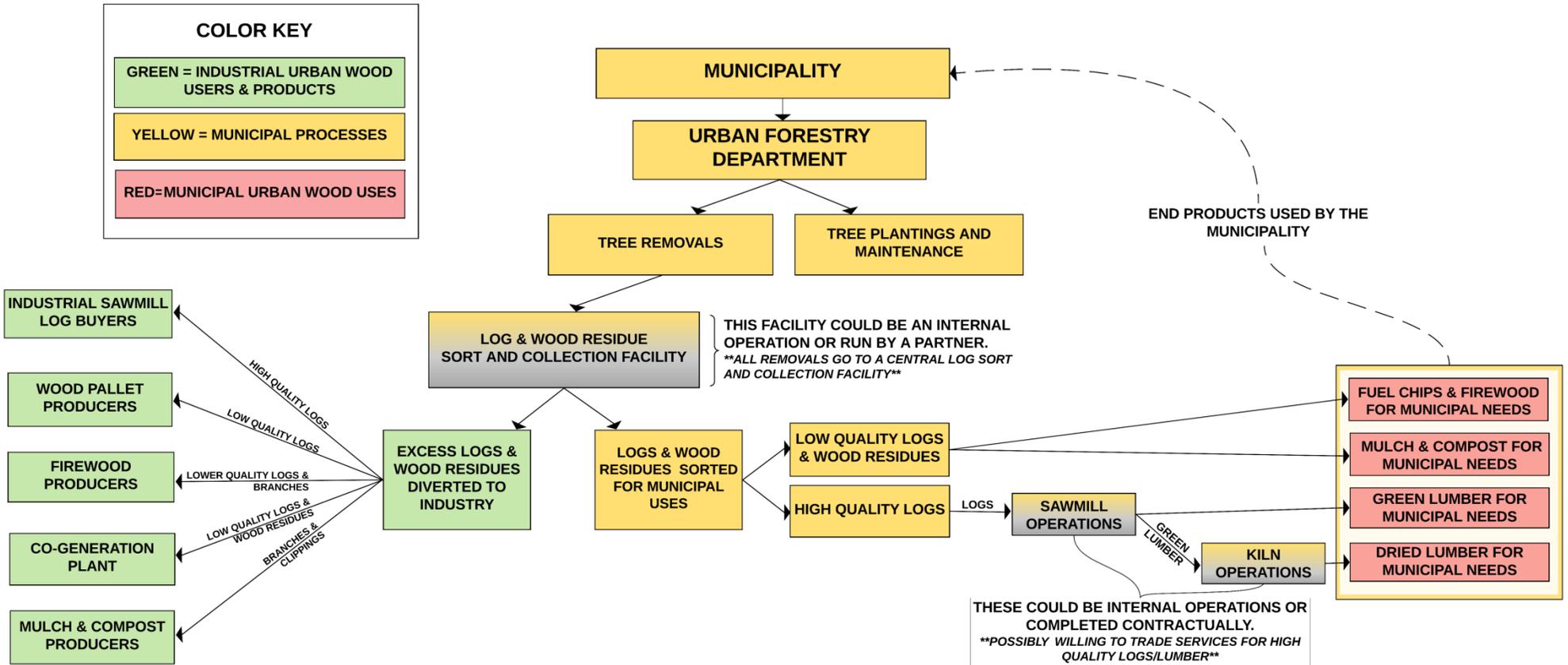
ARBORISTS' MARKETS FOR WOOD RESIDUES CHART

Using wood within a community is likely to be a familiar and intuitive process for most municipalities. Staff within the organization can usually easily identify possible uses for wood within ongoing operations, whether that be for landscape mulch, firewood for recreational programs, rough-cut lumber for maintenance activities, or dried and surfaced lumber for use in city building improvements. Understanding the market options in the industrial sector is likely to require more research and planning.

The *Arborists' Markets for Woody Residues from Urban and Community Trees* chart was previously developed by the Tree Care Industry Association to provide a general overview of product opportunities for urban wood. The chart captures three main classes of wood residues: low-value material (commonly suitable for large quantities and processed simply with minimal equipment), mid-range value products, and high-value material (suitable for a small fraction of the total wood residues and requiring significant expertise to process). For any particular starting material, the chart explains product suitability, processing types, likely partners, equipment needs, possible markets, and probable end users. Some product areas (such as mulch, fuel chips, and firewood) may be familiar to most urban forestry efforts, but the chart also describes unique, higher-value market opportunities.

Unlike traditional hardwood lumber, urban wood is not necessarily at its highest value when graded and sold by National Hardwood Lumber Association standards. Across the country, many mills and manufacturers are using ungraded, "character" wood (especially when in unusually long lengths and wide widths) for successful, high-end products, such as live edge slabs, rounds, etc. These product options should be considered as a unique marketing opportunity especially suited to urban wood's artisan character. High-value urban wood products can play an important promotional role for a wood use program, capturing the public's imagination, garnering media coverage, and rallying positive community response. When used together with a mix of mid-range and lower value products, this creates a comprehensive urban wood program that can reclaim as much value as possible from logs to sawdust.

URBAN WOOD FLOWCHART



ARBORISTS' MARKETS FOR WOODY RESIDUES FROM URBAN AND COMMUNITY TREES

This chart addresses the most typical market dynamics and is not meant to be inclusive of all situations. Higher quality wood in columns further to the right may also be used for lower uses in columns to the left.

	Lowest Value Products			Mid-Range Value Products		Highest Value Products	
Wood Form ¹	Chips & Ground Material			Stumps, branches, & log segments	Timbers & Whole Trees	Merchantable Logs (at least 8' long, 12" diameter)	
Log Grades ²	All			All	All	Grades 1 - 3	High grade & ungraded character wood
Species	All			Commercial species (i.e. hickory) or other, ash requires special treatment	All	All hardwoods	Commercial hardwood species
Quantity						High quantity	High quantity
End Uses ³	Compost	Fuel Chips	Mulch	Firewood ⁶	Timbers and all other uses	Pallets, Crates, Packaging, & Industrial Uses	Lumber, Cabinetry, Furniture, Millwork, Flooring, Gifts
Markets	Compost producers, reclamation yards, landscaping firms	Reclamation yards, biomass energy companies	Mulch producers, reclamation yards, landscaping firms	Firewood producers ⁷	Combined mulch & milling producers; Mix of forest products producers	Log buyers, small sawmills, or pallet/container mills	Small, typically portable, band mills
End Users	Residents, general public; local school & park districts; businesses, institutions & government	Power plants; export	Residents, general public; local school & park districts; businesses, institutions & government	Residents, general public	All	Construction contractors, manufacturers	Landowners, residents, general public; local school & park districts; businesses, institutions & government
Processing required ⁴	Chipping or grinding (Also, pre-sorting, processing to set dimensions, moisture control)			Sorting by species	None	Tree grading, Log grading, Log manufacturing	
Processing equipment ⁵	Chipper or grinder, trailer or other hauling equipment			Chain or hand saw, trailer or other hauling equipment	Log loader and crane; metal detection equipment		
Resources for contacting markets	State forestry department directories, Urban Forest Products Alliance LinkedIn group, state forestry trade associations						
	findacomposter.com	biomassthermal.org	mulchandsoilcouncil.org	firewoodlocator.com	timberframe.org	palletcentral.com	woodmizer.com woodweb.com

- (1) Transport of removed tree debris needs to be in compliance with quarantine zone requirements. For EAB, see USDA APHIS for interstate movement (http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/regulatory.shtml) or state department of agriculture for intrastate regulations.
- (2) Log grades are as used in the Morton Arboretum 2010 Tree Census funded by the U.S. Forest Service (<http://www.mortonarb.org/tree-census.html>). For a simplified version of USDA grading rules, see http://www.ncrs.fs.fed.us/pubs/ch/ch_7_03.pdf.
- (3) Potential products not included in this chart include: veneer, wood pellets, animal bedding, clean fill, engineered wood, sawdust, and carbon storage.
- (4) These suggestions are guidelines. Who does what is up to negotiation. Communicating harvesting procedures, on-site processing requirements, sorting, and storage details prior to removing trees is critical. Markets may want one or more category of wood forms. For more detail, see <http://www.emeraldashborer.info/wooduse.cfm#sthash.5Ml3FevJ.dpbs>.
- (5) In addition to equipment, staffing and storage are needed.
- (6) Firewood from quarantined areas requires additional treatment, necessitating a kiln, temperature monitors, and data collection equipment. Movement from these regions can only legally occur through an agreement with USDA-APHIS.
- (7) Legitimate vendors follow state firewood regulations. See <http://www.emeraldashborer.info/firewood.cfm#sthash.KdIPVjof.dpbs>.

This chart was first published in Annex E of ANSI A300 (Part 1) - 2017 Pruning Standard and has been reproduced with permission from the Tree Care Industry Association. Special thanks to Michele Beaulieux of Work in Motion.





THE URBAN WOOD TOOLKIT

BULLETIN 4: ESTABLISHING AN URBAN LOG COLLECTION AND SORTING YARD

NEW OPPORTUNITIES FOR WOOD RECOVERY AND REUSE

An urban or community tree has value at every life stage, including in the form of a log. Instead of thinking of removed trees as waste products to dispose of, communities across the country are prioritizing urban wood utilization and diverting valuable resources away from the waste streams and back into the local economy.

This bulletin, the fourth in a series designed to provide tools for communities considering an urban wood use program, explains specifications for establishing a municipal log collection and sorting yard. A log collection and sorting yard is a location where logs, branches, and other urban forest products can be brought after removal for aggregation, sorting, and trimming prior to processing, sales, or proper disposal. These yards provide community foresters or wood managers with the space necessary to manage and utilize all of the wood materials generated by a community and are a helpful first step toward finding higher value uses for wood from removed community trees.

Sorting community wood materials prior to processing helps ensure that high value products can be diverted to higher value markets rather than lumped into a single, more general use where the potential value is likely less (Dramm, 2002). For example, more value can be obtained by sorting out saw logs from pulp wood, or high quality butt logs from low quality logs. Additionally, wood materials that should not be mulched or composted can easily be separated from those that can be.

LOG COLLECTION AND SORTING YARDS VS. LOG LANDINGS

A log collection and sorting yard is a permanent location that is continuously utilized for aggregation and processing. A log landing is a temporary location used for sorting, log decking, and wood materials storage before transportation to a log yard. Log landings can also be used by community foresters or wood managers when a large quantity of wood is being generated in a specific area (e.g. removals from a community park or a municipal timber tract for expanded urban development). Either as a permanent operation or a temporary site, these collection areas help minimize transportation costs of wood material by storing it until a full load of wood is accumulated.

Permanent log sorting and collection yards are a common management tool used by timber producers and resource managers as a way to maximize profits and promote more accurate grading, scaling, and sorting. Log sorting and collection yards have gained in popularity recently among urban and municipal foresters and wood managers as states adopt waste reduction goals and implement new policies that restrict certain wood residues from entering landfills. The goal of a community log collection and sorting facility is to improve the quality and productivity of a municipality to process, utilize, and market urban wood and wood residues.

PLANNING AND ESTABLISHING A LOG COLLECTION & SORTING YARD

Wood Handling and Storage Regulations: It is important to understand all local, state, and federal regulatory requirements including site selection regulations, surface and groundwater regulations, permit applications, and acceptable accumulation and storage duration specifications that may affect the planning and implementation of an urban log sorting and collection facility. Michigan's Department of Environmental Quality promotes the



following preferences for residue handling: first, avoid waste generation, then utilize generated waste for beneficial purposes, and finally, properly dispose of what remains. (Similar guidance exists in other states as well.) Laws and regulations are continually being updated and changed in order to better implement these preferences. Although many communities treat municipal wood as a waste product, it is actually considered a “source separated material.” A source separated material can be separated and converted into raw materials or a new product, including but not limited to, compost. See Urban Wood Toolkit Bulletin #6 for links to more detailed wood handling and storage requirements and regulations.

Co-Locating with Other Logistics: Depending on availability, it may be advantageous for a municipality to co-locate the log collection and sort yard with other wood processing and storage activities. For example, a drum grinder located on site would allow otherwise non-viable debris and damaged/punk logs to be mulched, and for efficiency, a mulch storage area could logically be located within this same accessible secure area. Additionally, the storage for recycled asphalt/concrete and other viable bulk items like salt for the winter road crews could all be stored at the same site, reducing the need for multiple secure areas.

Size: The size of a log collection and sort yard is highly dependent on the volume of wood materials and logs to be handled and other complementary operations that may occur in this designated area (ex: mulch storage). According to a review of current log sort yard operations in the United States, researchers concluded that a medium-sized log sort yard facility should be approximately five acres in size for processing and sorting (Dramm, 2002). This estimate does not account for log decking or other storage needs. Whenever determining the facility size, consider transportation logistics, including space for a log truck turn-around, and equipment staging and storage. Additionally, when determining the yard size, consider how this project may grow and what expansion and storage needs you may have in the future.

Location & Accessibility: Many factors should be considered when determining a location for a log collection and sorting yard:

- Consider a choosing a site that will hold up under continued use by heavy equipment.
- Avoid establishing your log collection and sorting yard on or adjacent to any sensitive areas, such as riparian management zones, waterways, or other natural features.
- Contact local utility companies to ensure there are no conflicts or issues with the selected area.
- Consider aesthetics when planning log landings next to roadways and other visually sensitive areas.
- Consider establishing a yard on a road that is exempt for seasonal and/or other weight restrictions.
- Visibility and traffic should also be considered when determining the yard accessibility.
- Review all regulatory site-selection requirements, including local ordinances and zoning for limits restricting processing activities or equipment usage.
- When possible, consider a centrally located facility that would be accessible for the entire service area.

Depending on current practices and land availability, a log collection and sorting yard might be better suited on private land. For instance, a local mulch and compost producer may be willing to establish a sorting and storage facility on their property if they are allowed access to certain wood residues. These partnerships can be beneficial and may prove easier to obtain in the short term when compared to establishing a city-run yard.

Safety: Safety should always be the number one priority when considering your wood management options. Logs and other forest products are heavy, movable, and potentially dangerous. The Occupational Safety and Health Administration (OSHA) produced regulations pertaining to safety in logging operations, along with other safety information. These regulations include log loading and unloading procedures 1910.266(h)(6), transportation procedures, 1910.266(h)(7) and storage procedures 1910.266(h)(8). Complete [OSHA Logging Operation](#) procedures can be found online.



Security: Without clear communications, a log collection and sorting yard may be mistaken as a public dump or waste disposal site for wood. To ensure the safety of the community, consider posting clear and informative signage, gating all points of entry, staffing the facility, and/or periodic policing.

Sorting and Evaluation: In a log collection and sort yard, professionals can “grade” or separate logs for commodity or niche markets. Sorting is typically dependent on 1) species, 2) potential products (for example, pulpwood and sawlogs), and 3) other market requirements. Ideally, all higher quality sawlogs, which could potentially be sold to log buyers or sawyers, should be sorted and stored separately from the other materials. However, keep in mind, while knowledge of traditional log grading practices is useful, it is not necessarily required to market urban logs. Always consult the prospective buyer for their preferred specifications on how materials should be separated and/or stored.

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THE URBAN WOOD TOOLKIT

BULLETIN #5: BUILDING RELATIONSHIPS WITH WOOD INDUSTRY PARTNERS

BUILDING WOOD INDUSTRY SUPPORT FOR URBAN WOOD

Many of the urban wood projects operating across the country rely on unique public-private partnerships in order to maximize utilization and be successful. A variety of partnership opportunities exist, and it is critical to always prioritize the unique needs and capacities of your community when exploring your options. This bulletin, the fifth in a series designed to provide tools for communities considering an urban wood use plan, identifies resources for finding potential partners and discusses examples of how to build relationships with members of the wood industry.

GENERAL GUIDELINES TO BUILDING RELATIONSHIPS WITH WOOD INDUSTRY PARTNERS

Step 1: Develop a comprehensive list of potential wood industry partners.

- Consider a variety of possible partners across the full spectrum of the urban wood supply chain, including both members of the traditional forest products industry and organizations that operate only in the urban sector. Some options may include:
 - Tree service companies
 - Portable sawmills
 - Lumber companies
 - Log buyers
 - Loggers and timber companies
 - Mulch producers
 - Pallet producers
 - Woodworking organizations
 - Cogeneration plants or utility companies
- Use a variety of sources to identify potential partners in your service area. The following groups (or their local counterparts if you are outside of Michigan) may have good information or directories:
 - [Michigan Urban Wood Network](#)
 - [Firewood Scout](#)
 - [MDNR Forest Products Directory](#)
 - [Michigan Conservation Districts](#)
 - [Michigan State University Extension](#)
 - [Wood-Mizer Pro-Sawyer Network](#)
 - [Michigan Nursery and Landscape Association](#)
 - [Arboriculture Society of Michigan](#)
 - [Michigan Department of Environmental Quality Recycled Materials Directory](#)
 - [Michigan Association of Timbermen](#)
 - [Sustainable Resources Institute](#)
 - [Michigan Forest Biomaterials Institute](#)
 - [Michigan Green Industry Association](#)

Step 2: Prior to initiating a conversation, know your own partnership objectives.

- Why are you interested in finding partners? Are you looking to buy, sell, donate, or pay for services?
- What benefit will this partnership provide you? To your partners? To others?
- What specifics do you need to know about their services?
 - Do they provide the processing or other services you need?
 - Are they interested in single-log pickup or do they only want large quantities?
 - Who handles wood transportation? Will they bring their own equipment for loading?
 - What is their typical turnaround time?
 - Does availability vary by season?
 - Do they have limits on the species, size, quantities, and condition of wood they will accept?
 - Will they take all logs that you set aside? Will they take lower-value material?
 - Will your crews be expected to pre-screen or sort material in advance?
 - Can the processor train your staff to meet their log or other materials specifications?



- Do they have recommendations on sort yard practices?
- Is the potential partner conveniently located? Where will processing take place?
- What payment types will be considered?
- Will you be compensated, or can you trade goods for services?
- Will you be charged by the hour, by volume, or for additional fees?

Step 3: Select the best medium for effective communication.

- How will the conversation be best delivered: face-to-face, email, phone call, public meeting, etc.?
 - Not all potential partners will use or prioritize the same medium of communication.
 - Allow ample time for response, as many of these industry partners are working in the field and may not be able to check communication outlets frequently.
- Be sure to discuss the best methods for long-term communication if a partnership develops:
 - How would they like to be contacted when wood is available?
 - Do they want photos of available material before making a trip to your facility?
 - How far in advance would they like to be contacted for any new supply?

Step 4: Build trust and gather important information.

- Keep a positive tone and be prepared for questions, pushback, and hesitation.
- Ask the important questions, listen, and take notes on the information that is provided to you.
- Make sure to keep the conversation on track and be respectful of everyone's time. Many of these industry partners will be busy and only have a brief amount of time allotted.

Step 5: Have realistic expectations and a realistic implementation timeline.

- Like with any partnership endeavor, merging goals and objectives of all parties can be time-consuming. Be patient and flexible. Don't rush the process.
- Make sure expectations are clear and understood by all parties.
- Many mills already have an ample log supply and may only be interested in logs of a certain quality.
- Developing a partnership before removals occur is the best strategy. It is often difficult to find interest in wood that has already been stockpiled for a long time. It is even harder to find interest in wood from an urgent tree removal that must be dealt with immediately.

Step 6: Establish a mutually beneficial partnership agreement.

- Using the information you have collected, initiate a mutually beneficial agreement with clear terms.
- Start small and work towards a more comprehensive model. Incremental change may be the most feasible way for most communities to improve the sustainability of wood recovery options year-by-year. Any improvements in wood recovery, waste reduction, cost control, and partnership development is cause for celebration and is worthwhile.

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THE URBAN WOOD TOOLKIT

BULLETIN #6: RECOMMENDED RESOURCES FOR BUILDING AN URBAN WOOD USE PLAN

LEARNING OPPORTUNITIES FOR URBAN WOOD PLANNING

This bulletin, the sixth in a series designed to provide tools for communities considering an urban wood use plan, identifies valuable online resources for learning about today's best practices in urban wood utilization.

GENERAL URBAN WOOD USE GUIDES

[Harvesting Urban Timber](#)

[Recycling Municipal Trees: A Guide for Marketing Sawlogs from Street Tree Removals in Municipalities](#)

[Urban Forests & Urban Tree Use Opportunities on Local, State, National, and International Scales](#)

[Urban Wood Utilization and Why It Matters](#)

[Utilizing Municipal Trees: Ideas from Across the Country](#)

URBAN FOREST INVENTORY AND EVALUATION

[i-Tree](#)

[Measuring Standing Trees](#)

[My City's Trees](#)

[Quantifying Urban Saw Timber Abundance and Quality in Southeastern Lower Michigan](#)

[USDA Forest Service Urban Forest Inventory and Analysis Program](#)

PROCESSING AND LOGISTICS

[ElkhartWood Urban Wood Utilization Program - Available Log Inventory Sheet](#)

[Log Sort Yard Economics, Planning, and Feasibility](#)

[Understanding the Sample Timber Sale Contract](#)

[Urban Wood Waste: Maximizing Log Value for the Sawmill Market](#)

[Wisconsin Urban Wood Yard Protocol](#)

[Wisconsin Urban Wood Use Agreement](#)

WOOD HANDLING REGULATIONS

[Compost Operator Guidebook and Best Management Practices](#)

[Compost Wastewater & Storm Water Permit Information - Compliance Assistance for Composting Facilities](#)

[Industrial Storm Water Permits](#)

[Groundwater Discharge Permits](#)

[NPDES Individual Permits](#)

[Don't Move Firewood - Quarantine Map](#)

[Natural Resources and Environmental Protection Act \(Excerpt\) Act 451](#)

[Operator's Guide to EPA's Stormwater Permit Program](#)

[OSHA Logging eTool](#)

[Resource Conservation and Recovery Act of 1976](#)

[Scrap Wood Exemption](#)

[Scrap Wood Recycling Locations](#)



CITY WOOD UTILIZATION PLANS

- [Assessment of Urban Tree Utilization & Forestry Programs of Richmond, VA and Raleigh, NC](#)
- [City of Elkhart ElkhartWood Program Information for Decision-Makers](#)
- [City of Elkhart Forestry Division and Elkhart Environmental Center Partnership Roles](#)
- [City of Elkhart Urban Wood Ordinance](#)
- [City of Olympia Wood Waste Recycling](#)
- [Using Industrial Clusters to Build an Urban Wood Utilization Program: A Twin Cities Case Study](#)
- [Wisconsin Urban Wood Municipal Models](#)

EVALUATING PRODUCT OPPORTUNITIES

- [Estimates of Carbon Dioxide Withheld from the Atmosphere by Urban Hardwood Products](#)
- [Lumber from Urban and Construction-Site Trees](#)
- [Michigan Wood Energy](#)
- [Urban Wood and Traditional Wood: A Comparison of Properties and Uses](#)
- [Wood from Midwestern Trees](#)
- [Wood Utilization Options for Urban Trees Infested by Invasive Species](#)

NETWORKING AND EDUCATION

- [Urban Wood Network](#)
- [Urban Wood Network \(on LinkedIn\)](#)
- [USDA Forest Service Wood Education and Resource Center](#)

COMMUNICATING WITH THE PUBLIC

- [Is My Yard Tree Worth Money?](#)
- [My Ash Tree is Dead... Now What Do I Do?](#)
- [Why Your Next Wood Project Should Be Made Out of These Salvaged City Trees \(media sample\)](#)
- [Rising from the Ashes: Businesses Sprout to Recycle Wood from Trees Killed by EAB \(media sample\)](#)

GRANTS AND FUNDING

- [Recycling Grants in Michigan](#)
- [Michigan Department of Natural Resources Urban and Community Forestry Grants](#)

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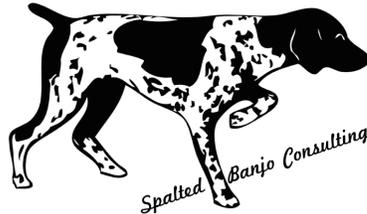


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Forest Resources Division
Forest Utilization and Marketing Program



Northeastern Area - State and Private Forestry
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URBAN WOOD NETWORK

Join the movement!
urbanwoodnetwork.org

info@urbanwoodnetwork.org / 906-875-3720

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