

Urban Wood Utilization: Issues Facing Industries



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Urban Wood Utilization

How do we capture the highest value form the urban forest resource?

Haul trees to convenient disposal sites?

Or

Find value using roving band mill & wood grinder?

What have the municipalities & industries been doing?

Saw Logs

Mulch/Co-Gen. fuel

Lumber

Cants

Pallet Stock

Rail Ties

Sales

Issues

- Log Staging sites
- Collecting log
- Who owns the logs?
- Sawing -- leasing, owning, mill owners
- Lumber storage and drying
- Training felling, bucking for grade
- Permanent system to manage urban logs from tree removals
- Revenue sources
- Public to attempts to recover value
- Cost of disposal now

Overview of Current Issues

- Treatments – Urban Forests
- Needs – Better Utilization
- Markets – Wood and Wood Fiber
- Barriers – Costs & Perceptions

Who are the major players?

- Municipalities
- Tree Care Companies
- Arborists
- Tree Removal Companies
- Wood mulch producers
- Firewood, Commercial
- Sawmills in the area
- Dry Kiln operators
- MDA
- MDNR
- Utility Companies – Detroit Edison and Consumer Energy
- Land Fills
- Power Plants
- Community Activists

Identifying value First Step



Urban Wood Residue Sources

- **Tree removals & trimmings**
(logs, limbs, stumps)
- **Manufacturing byproducts**
(edgings, cutoffs, chips, shavings)
- **Discarded packaging**
(pallets, skids, crates, dunnage)
- **Construction/demolition**
- **Railroad ties**
- **Telephone poles**



Why Wood Resource Inventories are Needed



Will show:

- Best economic options for processing & recycling wood
- Data for long-term, sustainable business plans
- Opportunities for new markets

What are the Primary Products:

- Chunks Leave on Ground – Ground or whole
- Firewood
- Fuel wood
- Mulches
- Chips -- Playground, Pulp, Composites
- Saw Logs
- Cants
- Particle board plant, possible
- Agriculture compost for animal manure

Woody Biomass

- We Normally focus on portion of the forest resource without traditional value added markets
- Such as tops & limbs, Small diameter timber
- Some form of wood manufacturing residue and some times brush
- Urban wood

What is Woody Biomass

- Biomass is simply any organic material living or dead
- Woody biomass includes entire living & dead trees, brush stems forest & also logs & residue material Generated throughout various forest product processing

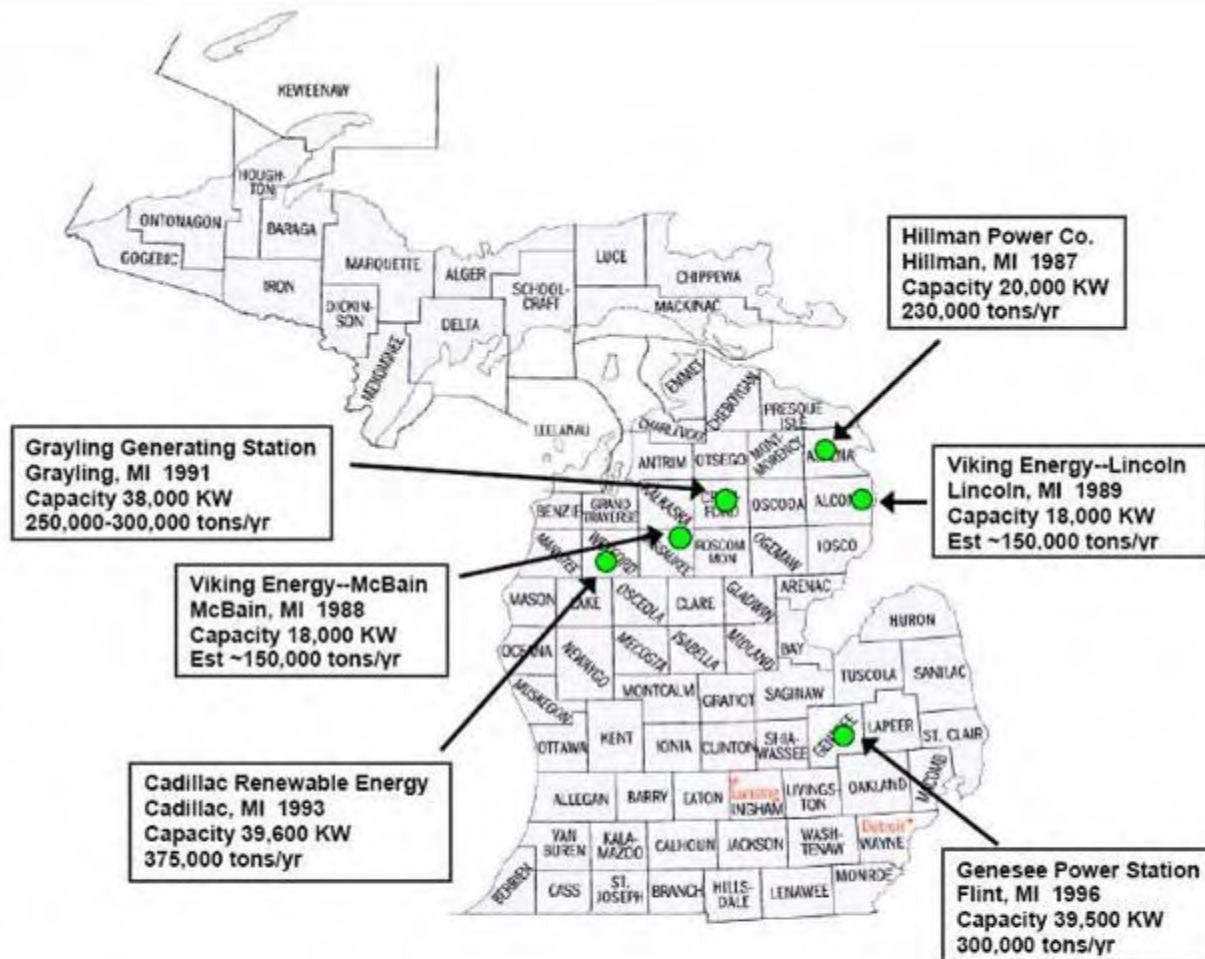


Table 1—Facilities Producing Wood Energy in Michigan

Source: REPIs, online at <http://www.nrel.gov/analysis/repis/>.

Type	Capacity (KW/year)
Michigan Total	368,170
Utility (six sites)	173,100
On-site Upper Peninsula	150,800
On-site Lower Peninsula	44,270

Key Questions

- The question is how to safely create value added products from ash logs?
- What sort of value added products can be created and how?
- What should we do to increase the utilization of ash resources?
- What lessons can we learn from this experience as related to the utilization of urban trees?

Goal of the Project

- The overall goal of our project is to develop strategies to promote a more efficient use of the important ash resource from urban and rural quarantined areas suddenly available in southern Michigan that will strengthen local economies and generate additional revenue to stakeholders

“ Demonstrating how the woody material (logs, limbs and bark) created in implementing the quarantine can be recycled into products, thus reducing the amount of material requiring disposal. This will reduce local disposal costs and in turn reduce the costs of quarantine implementation”

Potential for Wood Products



Most logs removed are saw logs and veneer logs that have a great potential for wood utilization

Poor Quality Logs



Unwanted Metal



Art Maybe But...



Firewood or Mulch



Possible Character Wood



Need Proper Manufacturing



Large log – Low quality

















Woodworkers and Artisans...

- Develop relationships (networks) with...

Woodworking Clubs

Artisan Groups

Crafters

These groups have passion for wood

Local Community and/or the General Public

- Sell lumber...to communities/citizens
- Sell value-added products...

PLACES TO FIND INFORMATION

- WWW.FORESTRYFORUM.COM
- WWW.WOODWEB.COM

Michigan Forest Industry Database

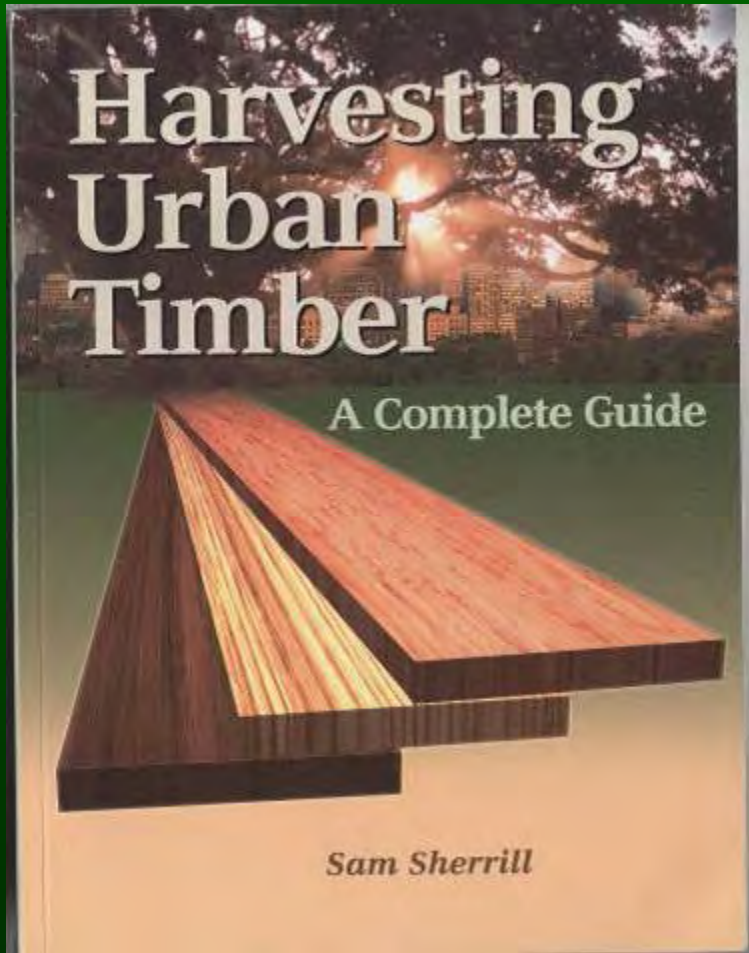
- **Michigan Forest Industry** – A Directory of Mills and Manufacturers
- Web site: www.michigandnr.com/wood

PUBLICATIONS

RECYCLING MUNICIPAL TREES

- A GUIDE FOR MARKETING SAWLOGS FROM STREET TREE REMOVALS IN MUNICIPALITIES
- USDA Forest Service Northeastern Area State and Private Forestry NA-TP-02-94

Publication on How To:



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www.harvestingurbantimber.com

Summary...

- We (society) need to better utilize municipal trees.
- “Good wood” can be found in metro areas.
- Many utilization options exist.
- Technical assistance is available.

For additional information...

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