

Navigating Economic Development In Forestry In The South: Sustainably Growing Trees, Opportunities & Jobs

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TAKE-HOME MESSAGES

- Huge Economic Contributions
- Abundant natural resource
- Original “green” industry- Sustainable!
- Rural jobs aplenty!!
- *State forestry agencies & others are key partners for forest economic development*

Forestry!



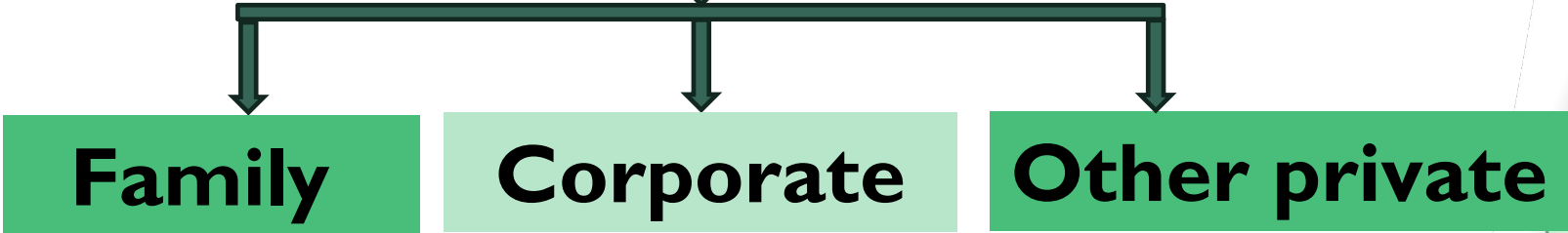
ONE-THIRD OF THE NATION'S FORESTLAND IS FOUND IN THE SOUTH

- >800 million acres nationwide!
- 245 million acres of in the South
- **32%** of all **US forestland**
- **40%** of total southern **land area**



86% OF SOUTHERN FORESTLAND IS PRIVATELY-OWNED

Private Ownership



Family

Families, individuals, trusts, estates, family partnerships

Corporate

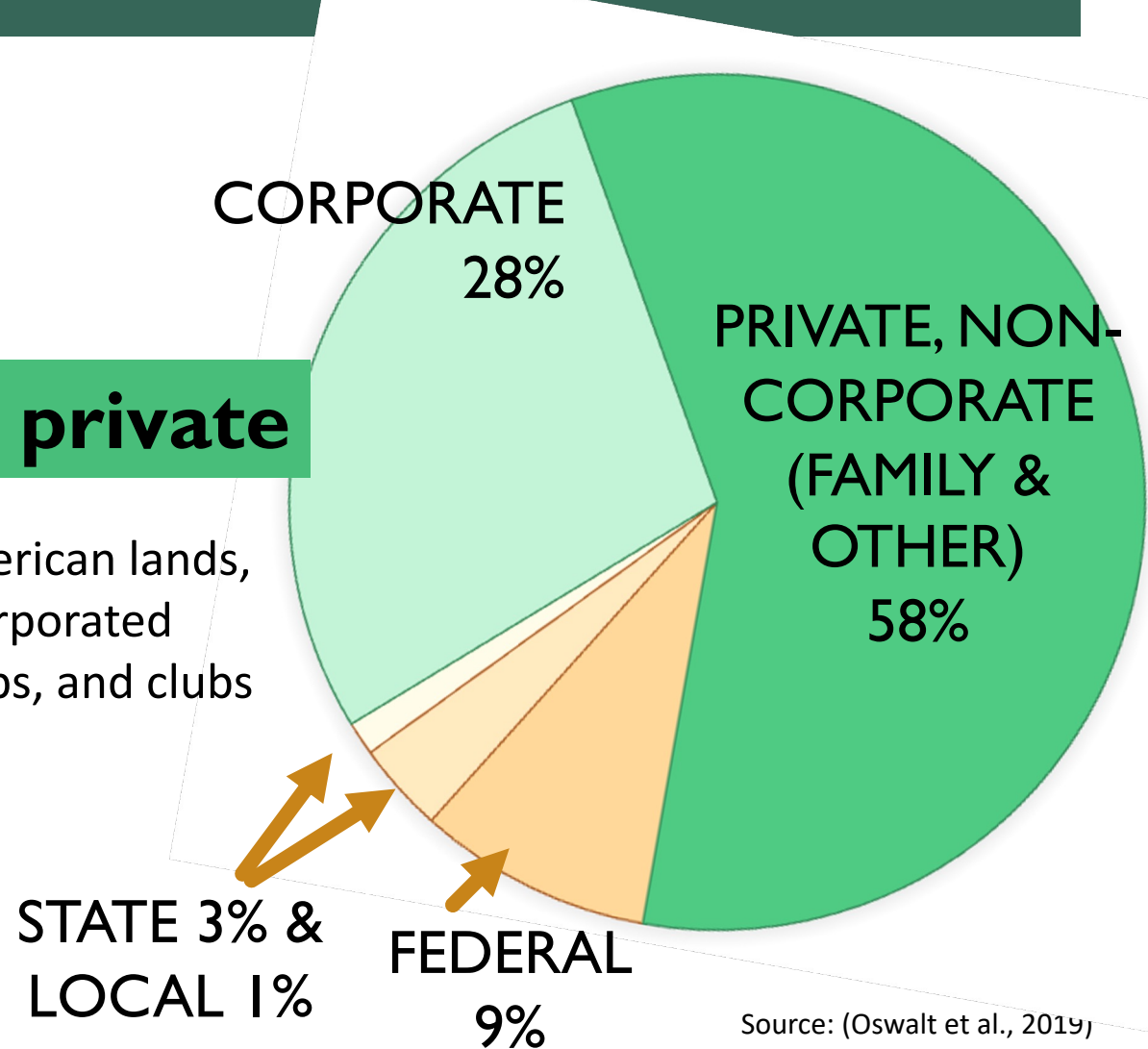
Forest product industry, TIMOs, REITs

Other private

Native American lands, unincorporated partnerships, and clubs

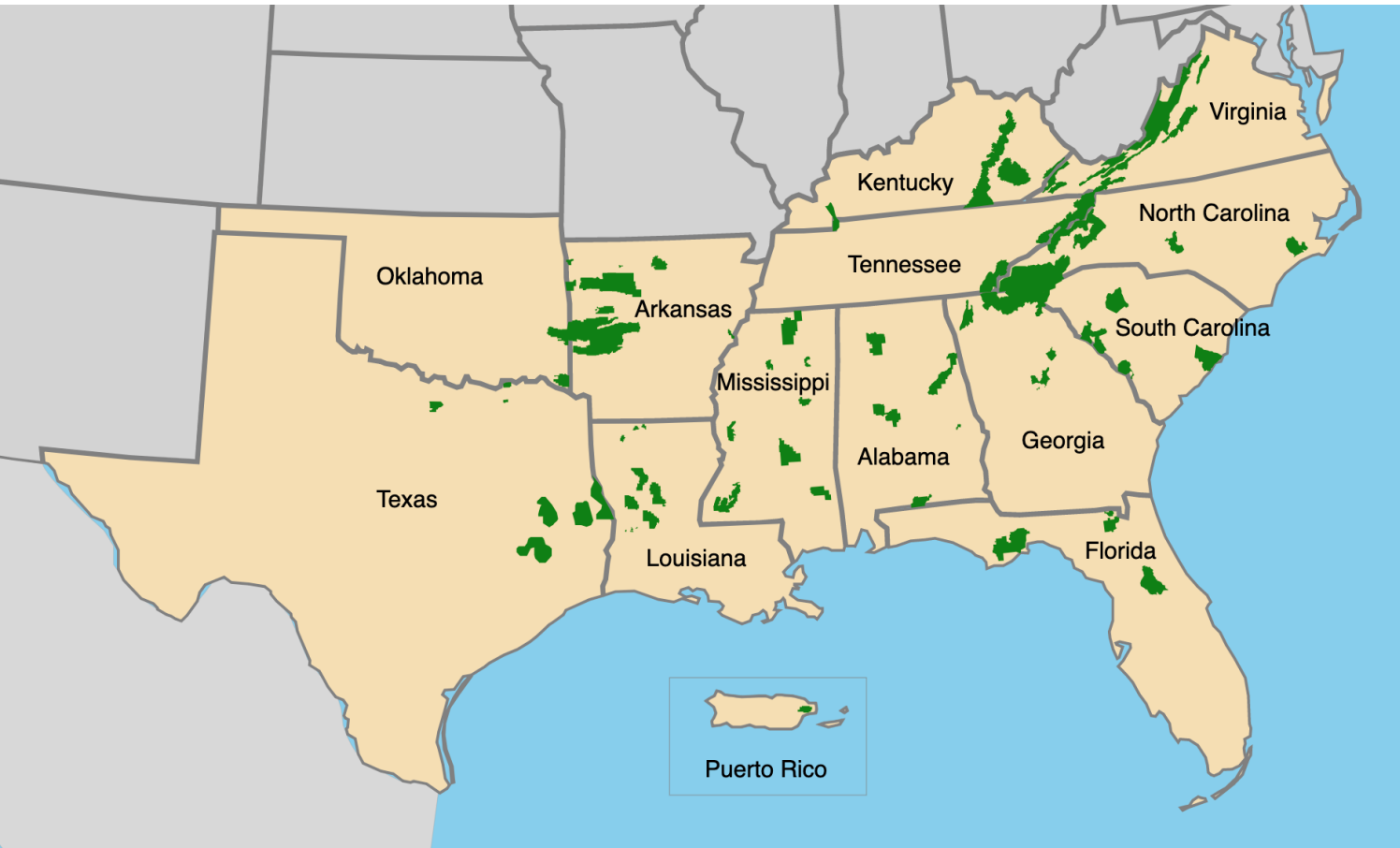
Public Ownership

- federal, state, county, etc. owned land



Source: (Oswalt et al., 2019)

FORESTRY HAS A STRONG ECONOMIC IMPACT ON THE ECONOMY ESPECIALLY IN THE SOUTH

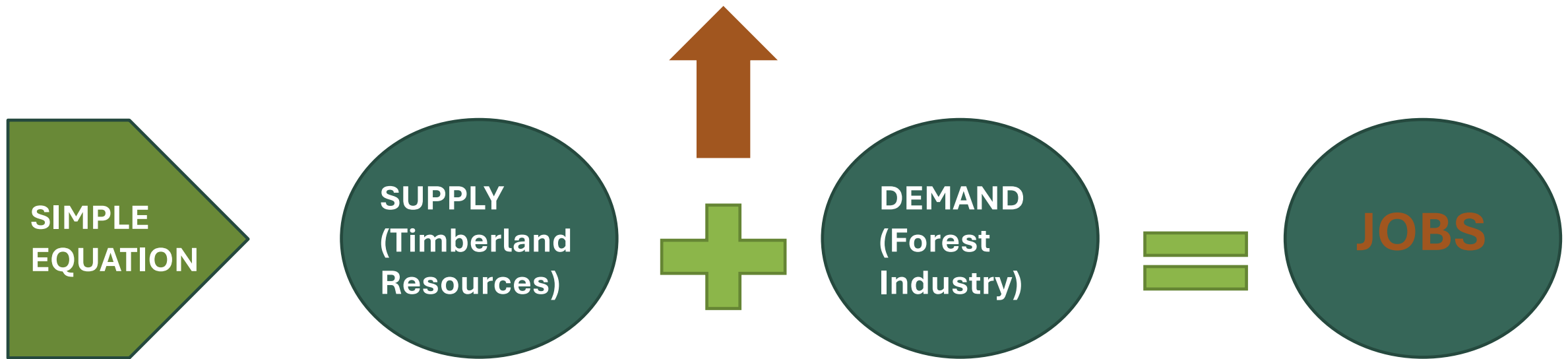


- Total **Economic Impact** of the Forest Industry in the South including:
 - direct,
 - indirect &
 - induced effects for jobs, wages, tax revenue etc. = **\$317 billion**
- **Top 5** of all **manufacturing industries** in the South

*Average of 13 southern states

FOREST ECONOMIC DEVELOPMENT: Supply/Demand!

Timber Markets



BONUS  **RURAL COMMUNITY DEVELOPMENT**

Forestry & the Forest Products Industry Creates Jobs! Rural Jobs!

Employment

- Total jobs: 1.02 million (direct & indirect)
- 2% of total employment from all sectors in South**
- 24% of total manufacturing jobs in South



FORESTRY IS THE ORIGINAL “GREEN” INDUSTRY

Trees

- Trees are grown on the land- “tree farms”
- Harvested – “logged”
 - The land is replanted
- Logs are transported to a mill
- mill processes the logs



SOUTHERN FORESTLAND IS SUSTAINABLY MANAGED



Renewable Resource

Annual growth/
harvest ratio:
1.7

*Number >1 means
that the area grows
more wood than it
harvests every year*



>90%

of Landowners
use sustainable
practices

Ecological Benefits



Societal Benefits



44%

of the South's water
supply flows from private
forests

14M

Over half of residents
drinking water flows
from private forests



Every 100 mature trees filters



250,000
Gallons of rainfall
per year

SOUTHERN FORESTS ARE SUSTAINABLY MANAGED AND MANY FORESTS ARE CERTIFIED



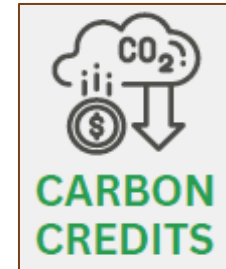
Voluntary process that verify that **forestlands** are **managed** according to **predefined standards of sustainability**



MARKET
ACCESS



FOREST
HEALTH



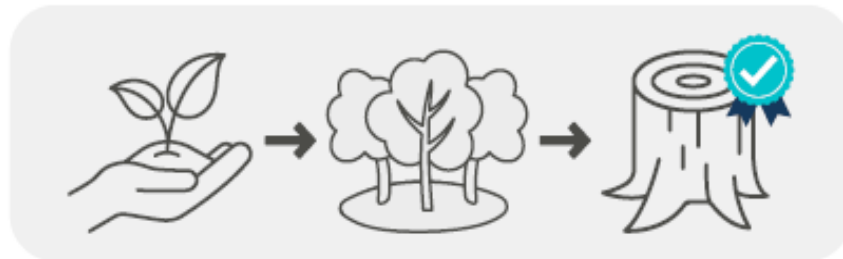
CARBON
CREDITS



TAX
INCENTIVE

- **36.3 million acres of southern forests are certified (14%)**
- **36% of Mills' Wood Fiber From Certified Forests**

FOREST MANAGEMENT (FM)



Verify that forest operations from growing to harvesting comply with standards

CHAIN OF CUSTODY (COC)

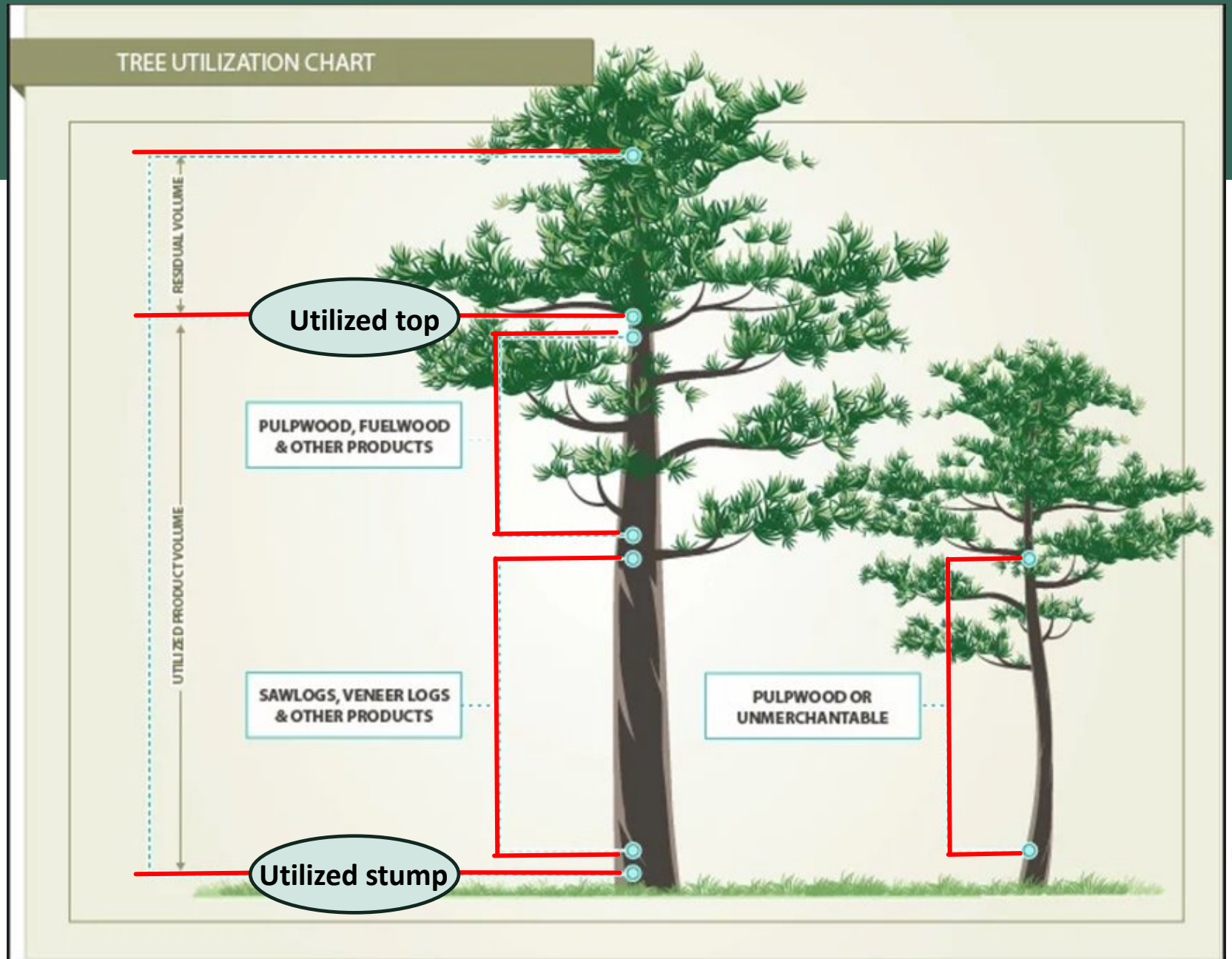


Trace certified wood fiber from forest to final product

Types of Certification

One tree- Many products & Nothing Wasted

- Every part of the Tree is used for different things
- Different tree species can be used for different products
- Different types of wood are produced by harvesting



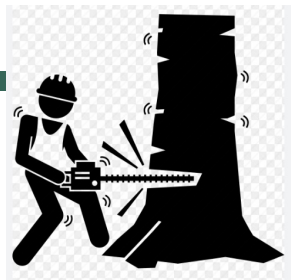
Primary & Secondary Forest Industry

Primary production

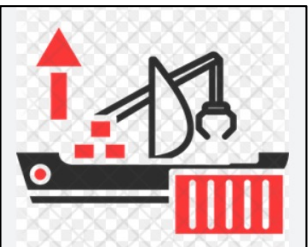
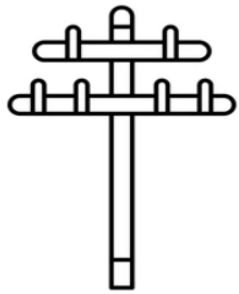
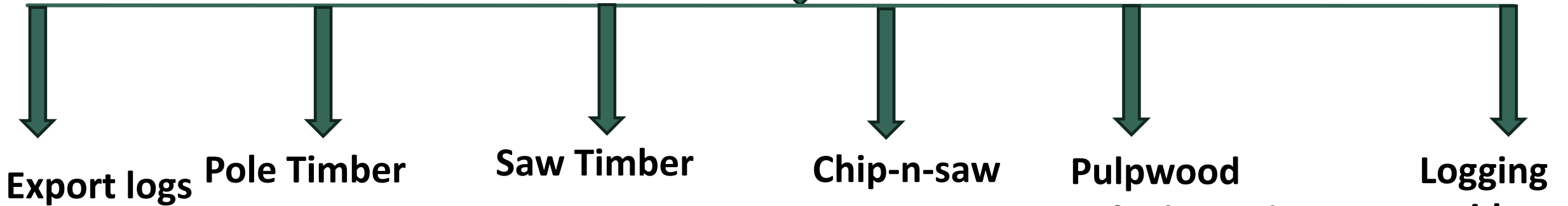
- Saw mills
- Pulp mills
- Pellet mills

Secondary production

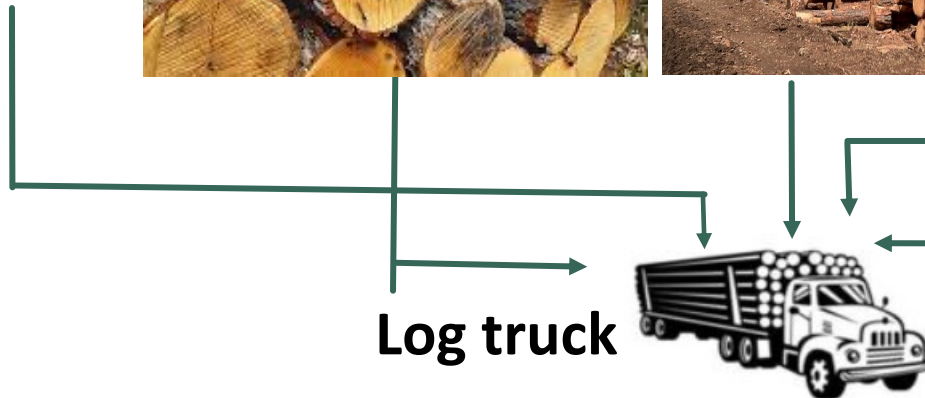
- Furniture manufacturing
- Veneer floor manufacturing
- Etc..



Harvest and thinning



Shipping



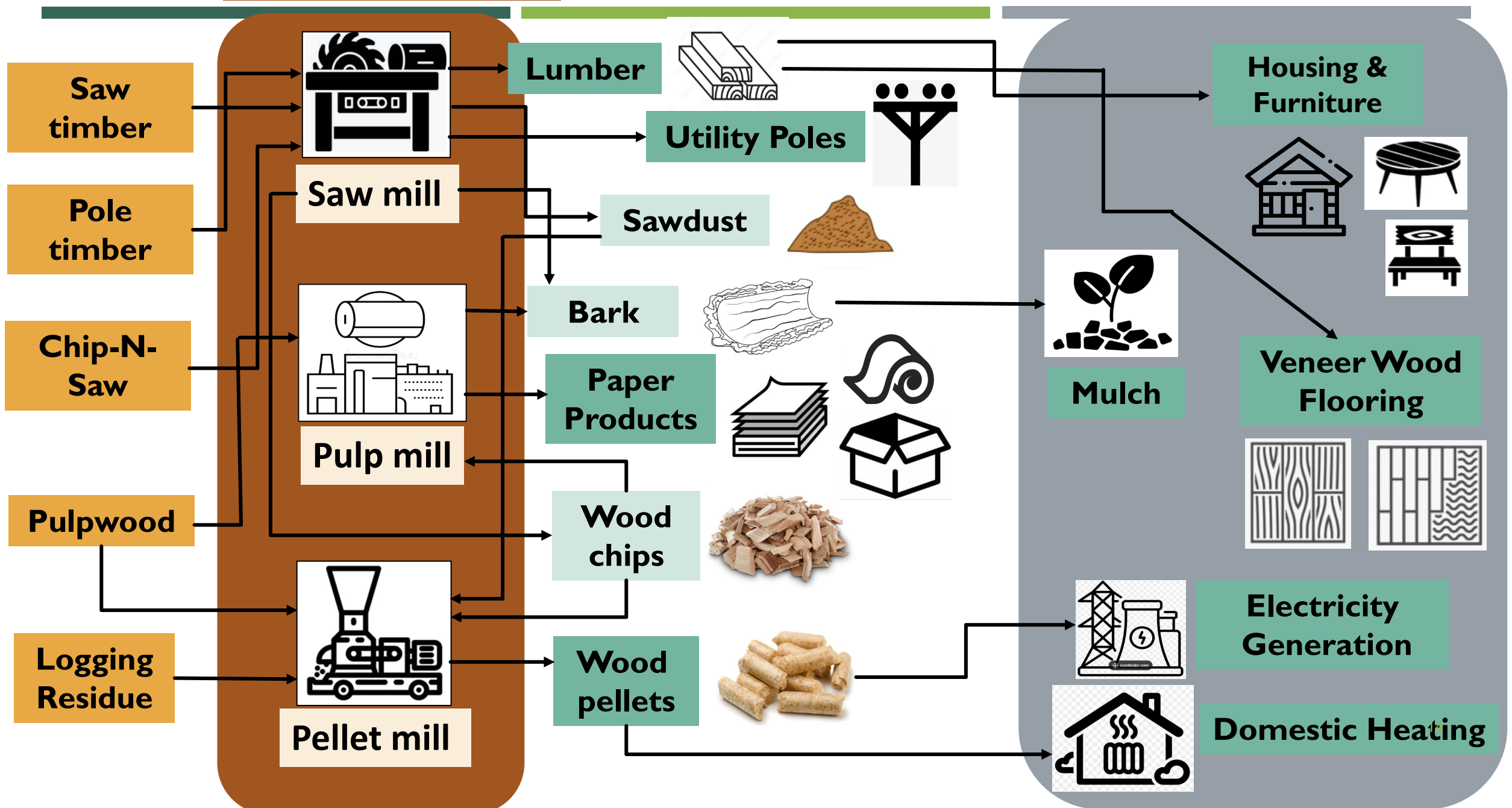
Log truck



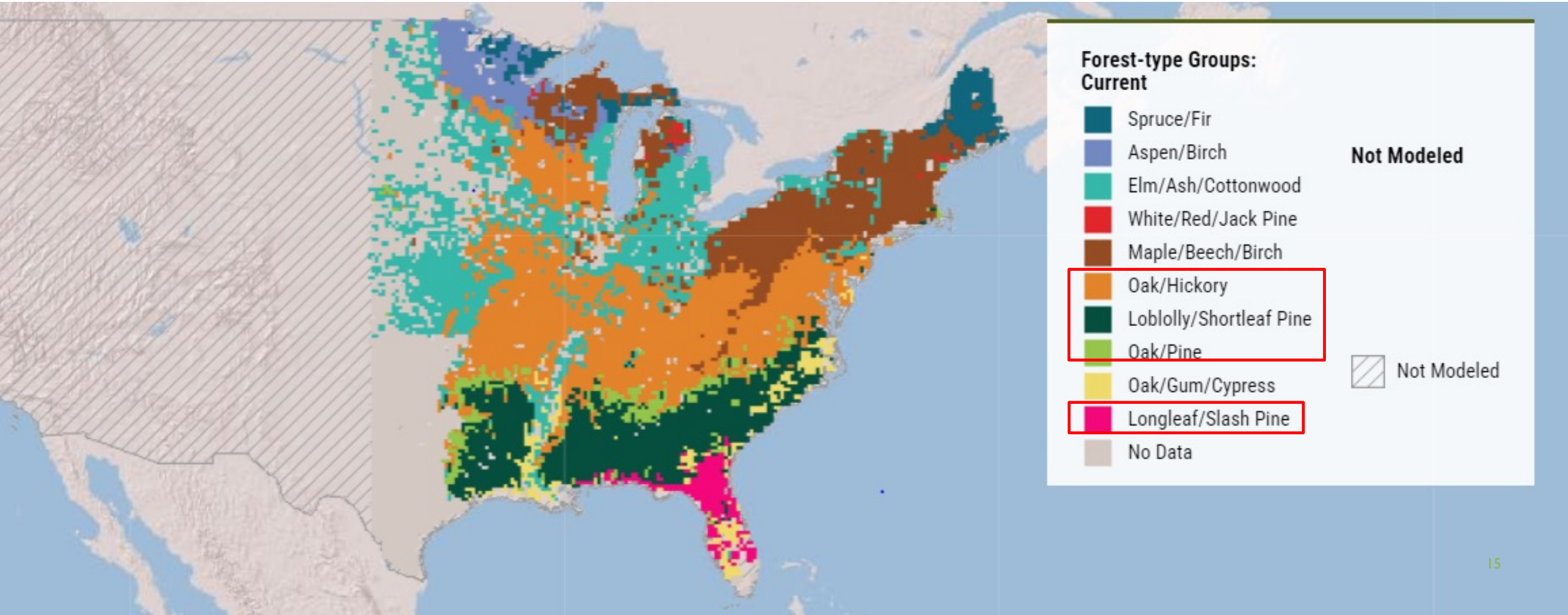
Processing Mills

Primary production

Secondary production



SOUTHERN FOREST RESOURCES: DOMINANT SPECIES



DIFFERENT TREES MATURE AT DIFFERENT RATES

Softwoods

evergreens- retain their needles

- Pines (longleaf, shortleaf, loblolly)
- Faster growth rate
- Mature 25-45 years



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Hardwoods

deciduous trees- lose their leaves

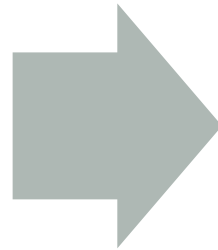
- Oaks, hickory, maple
- Slower growth rate
- Mature 60-100 years



GETTING STARTED ON A FOREST ECONOMIC DEVELOPMENT PROJECT

Wood-Based Site Selection

It starts with the
resource!



Utilization foresters
from the state forestry
agency are here to
help you (for free!)

ASSESSING THE RESOURCE-UTILIZATION & MARKETING (U&M) FORESTERS

Bring the U&M forester into the discussion as early as possible!

- a.Assets in project development
- b.Can help find the optimal sites for the greatest success

Connect U&M Forester to client- will be Confidential

- a.Consider in-person meeting with U&M Forester & client



Invite U&M Forester into the planning huddle!

BASIC QUESTIONS FOR GETTING STARTED!

- Is this project part of a:
 - Request for Proposals (RFP) or
 - Request for Information (RFI)?
- Is it Primary or Secondary industry?



WHAT RESOURCE DO THEY NEED? WHAT DO THEY WANT TO PRODUCE?

- a. Each company is focused on creating certain products
- b. Product type determines tree species



IT STARTS WITH THE RESOURCE!

DIFFERENT TREE SPECIES ARE USED FOR DIFFERENT PRODUCTS

**Pine/
Softwood
products**

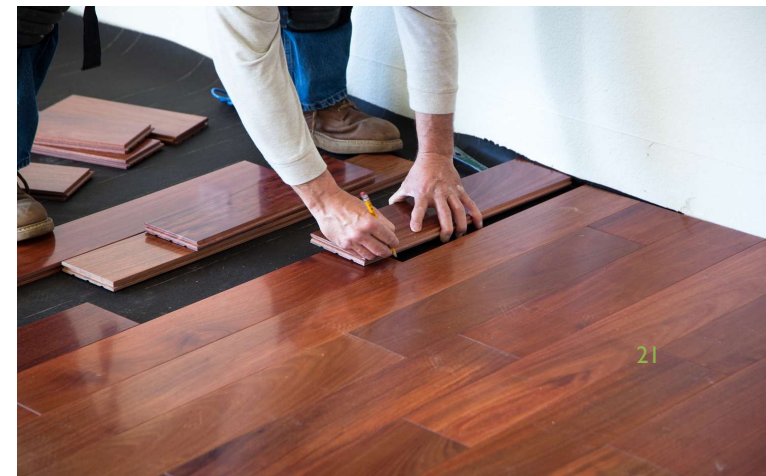


- Longleaf pine
- Slash pine
- Shortleaf pine
- Loblolly pine



**Hardwood
products**

- White oak
- American chestnut
- Yellow poplar
- Black cherry
- Sweetgum



ASSESSING THE RESOURCE

Species?

- i. What species do they need?
- ii. Are there certain species that they can't use



ASSESSING THE RESOURCE

Quantity

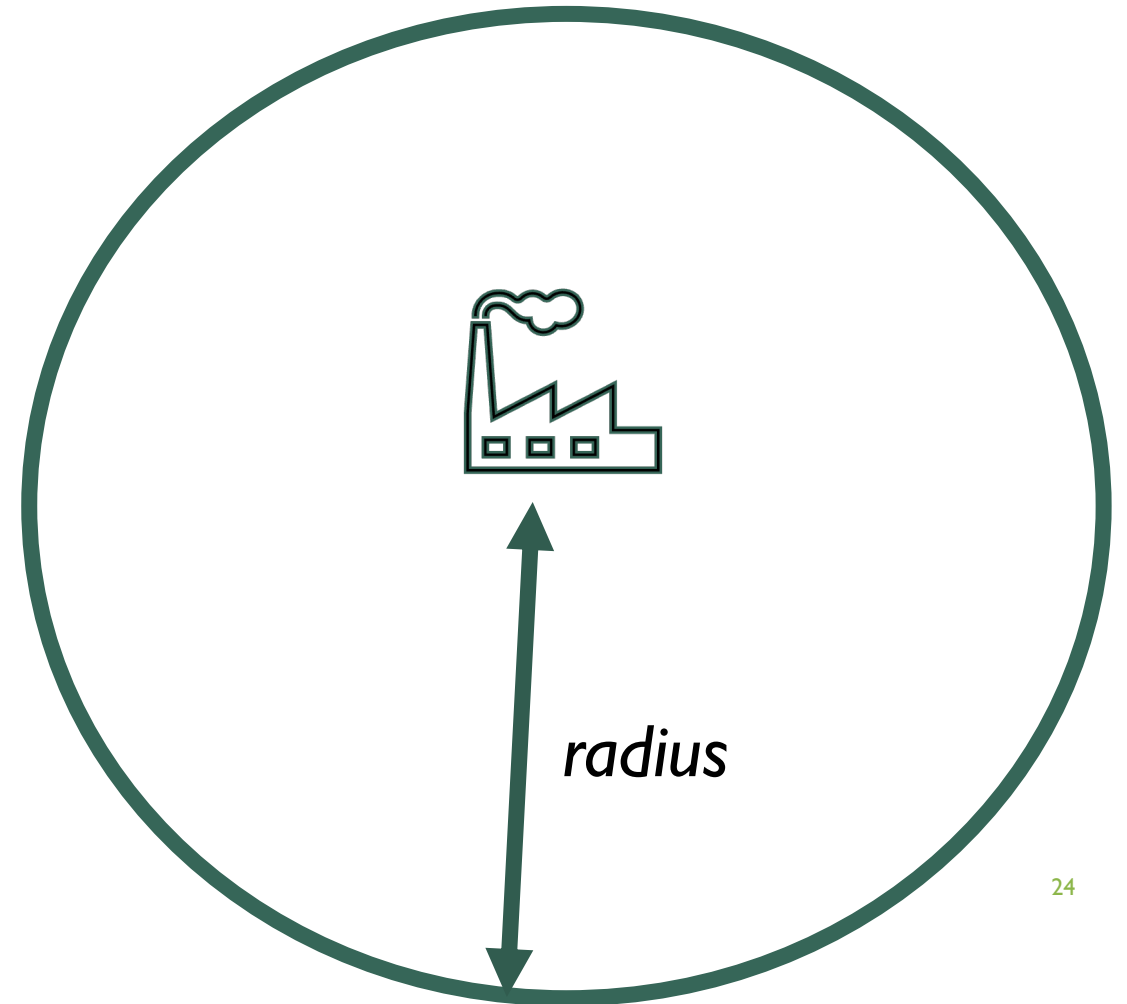
- i. How much wood is needed?
- ii. Will the wood/product be outbound by truck, rail, or port? *Transportation type relates to quantity*

U&M foresters can translate quantity into:

- Volume,
- tons,
- #loads
- #trucks

ASSESSING THE RESOURCE- DISTANCE

- i. How far from the mill can wood be obtained?
- ii. What is the radius around the site where they can procure wood?



ASSESSING THE RESOURCE

- i. Can they use residues?
- ii. Does it have to be clean or dirty?

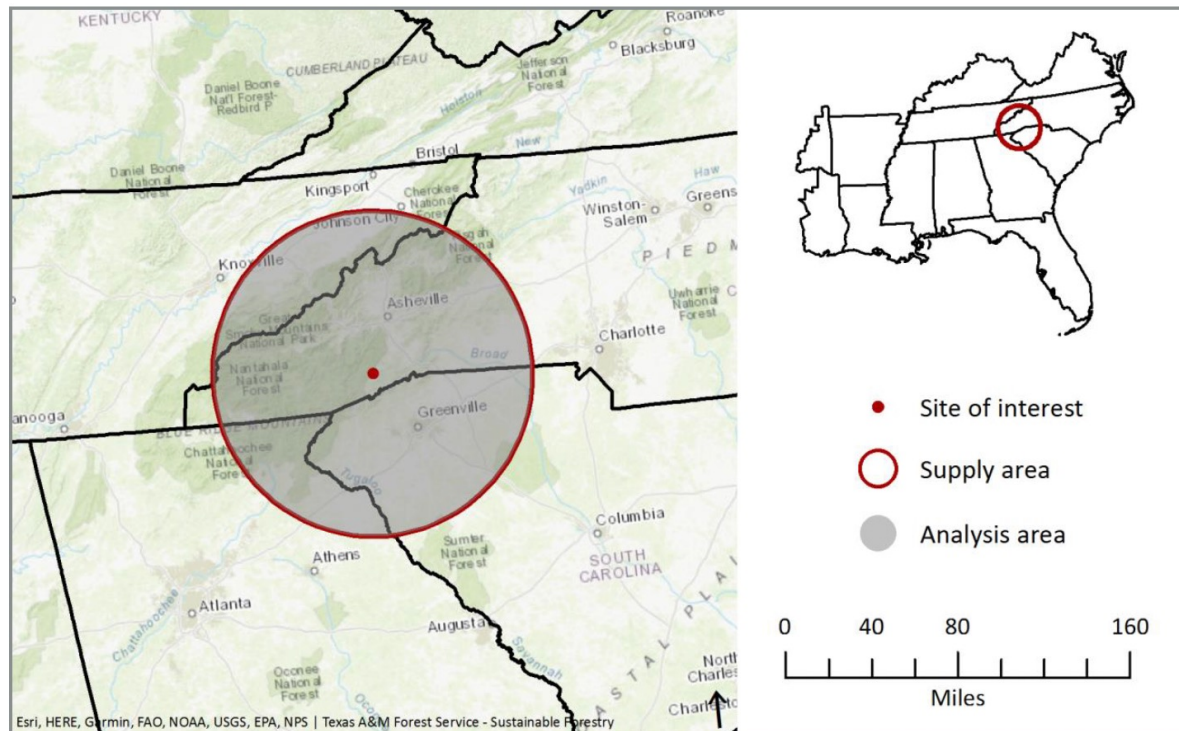
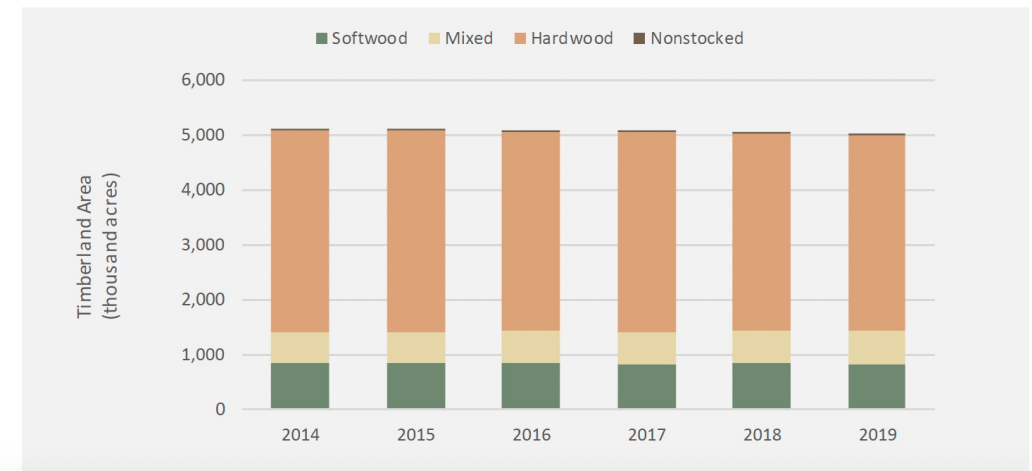


ASSESSING WOOD RESOURCES

- i. Resource/Wood basket analysis
- ii. Forest inventory analysis

Year	Softwood	Mixed	Hardwood	Nonstocked	All
2014	844.6	565.8	3,676.4	10.7	5,097.6
2015	854.6	553.4	3,662.0	13.7	5,083.7
2016	844.4	582.3	3,638.9	12.7	5,078.4
2017	830.1	572.8	3,641.3	11.3	5,055.5
2018	831.9	604.9	3,578.5	18.8	5,034.1
2019	816.4	631.2	3,553.1	15.8	5,016.4

Timberland area in thousand acres.

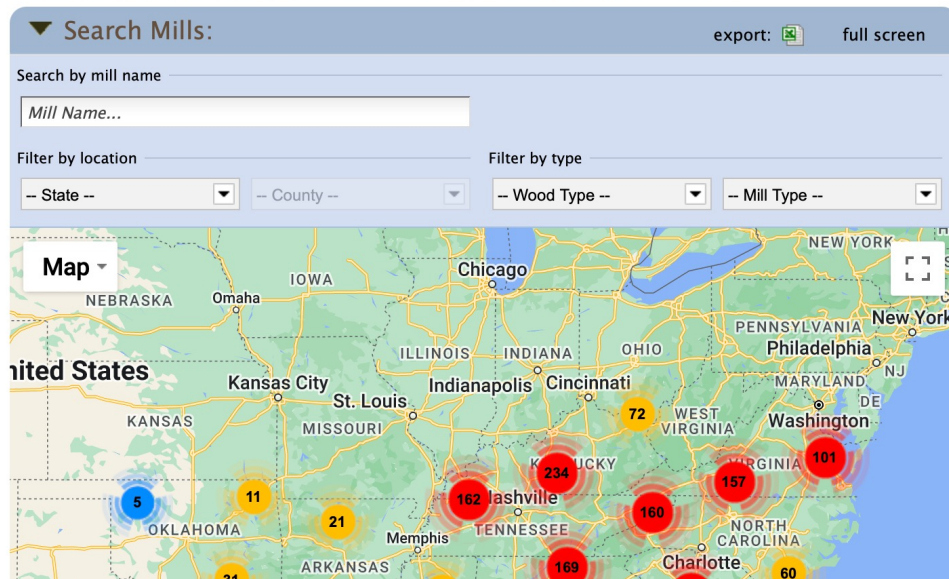


RESOURCE ANALYSES- TOOLS IN OUR TOOLBOX

- i. Primary forest products directory
- ii. Database of loggers/wood-buyers

Welcome to the Primary Forest Products Network

The mill map allows you to visually locate and drill down to find the mill you're interested in.



SITE SELECTION

AFTER FINDING THE RIGHT WOOD RESOURCES

- ❑ Match the site size to company needs
- ❑ Transportation- incoming & outgoing:
- ❑ Roads- *any restrictions on certain roads?*
- ❑ rail
- ❑ Ports



OTHER NON-WOOD RESOURCES TO ASSESS

- i. Energy including electricity & natural gas
- ii. Internet
- iii. Water & wastewater
- iv. *Other inputs* required for manufacturing process



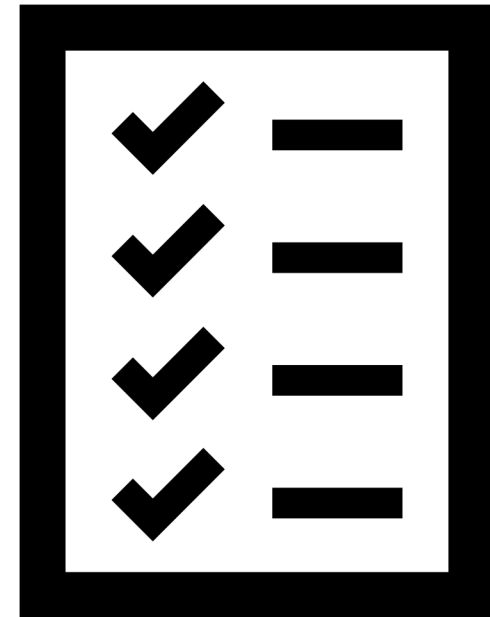
WHAT IS THE WORKFORCE IN THE AREA?

- i. Specific types of workers for forestry
 - i. Loggers, foresters, truckers,
 - ii. workers for mills, manufacturing
 - iii. *Tools for assessing workforce*



DOING BUSINESS IN FORESTRY IN MY STATE- CONSIDERATIONS!

- ✓ Local contacts for air quality and water quality/sediment permits
- ✓ Local stumpage/severance taxes
- ✓ Timber buyer registration
- ✓ Permits that may be required for forest products manufacturing facilities



FOREST ECONOMIC DEVELOPMENT ALLIES- WHERE CAN I FIND HELP?

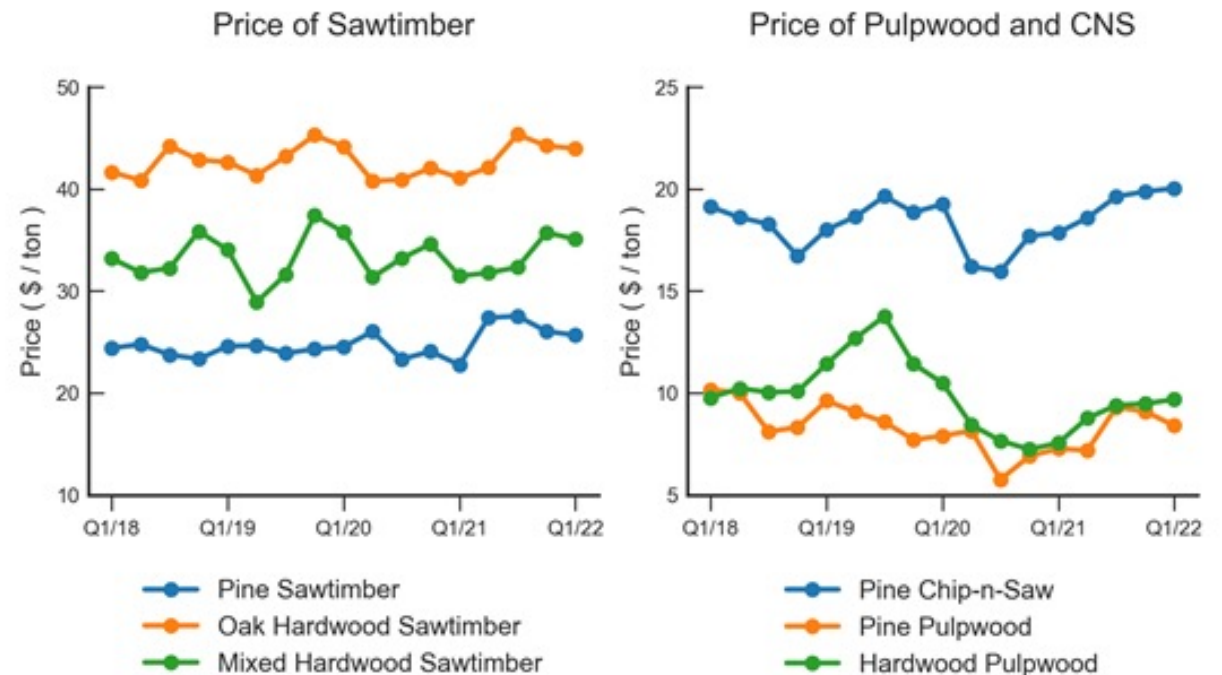
- i. Utilization forester!
- ii. Who are the other players?
 - i. Power companies may have economic developers
 - ii. Utilities
 - iii. Forestry analytic companies
 - iv. Site selection consultants
 - v. Consultants



Where to
Get Help

PROJECT-SPECIFIC QUESTIONS- EXAMPLES OF QUESTIONS THAT UTILIZATION FORESTER AN ANSWER

- i. What is the cost for local wood?
 - i. What's delivered cost or stumpage cost, that is a LOCAL cost!



Stumpage prices for Louisiana- 2022,
<https://www.lsuagcenter.com/articles/page/68563/1054382>

INCORPORATE FORESTRY INTO YOUR OVERALL *ECONOMIC DEVELOPMENT STRATEGY*

Do you have a strategy for forestry economic development?

If not, then consider building a strategy!

- a. Strategies for natural resources (forestry)
 - i. Repurposing old sites
 - ii. New opportunities

WRAP-UP

- The impact of forestry on the southern economy is already significant, but there are many more opportunities to expand!
- Forest resources in the South are enormous, sustainable and incredibly beneficial on multiple levels
- Great opportunities to expand this industry and create more rural jobs
- Utilization foresters from your state forestry agency are critical help to working on these projects in the smartest way
- Start your forest economic development projects by consulting your local utilization forester!

State agency	Contact position &/or contact	
Alabama Forestry Commission, forestry.alabama.gov	Forest Product Economic Development Specialist Senior Economic Development Representative	Al Jones, al.jones@forestry.alabama.gov Dan Chappell, james.chappell@forestry.alabama.gov
Arkansas Forestry Commission https://www.agriculture.arkansas.gov/arkansas-forestry-commission/	Assistant forester	Darren Spinks, Darren.spinks@Arkansas.gov
Florida Dept of Agriculture & Consumer Services fdacs.gov/Divisions-Offices/Florida-Forest-Service	Utilization and Hydrology Supervisor	Jarek Nowak, jarek.nowak@fdacs.gov
Georgia Forestry Commission, gatrees.org	Forest Utilization Specialist	Dru Preston, Dpreston@gfc.state.ga.us
Kentucky Division of Forestry eec.ky.gov/Natural-Resources/Forestry	Forestry Program Specialist - Forest Resource Utilization	Stephen Rogers, stephena.rogers@ky.gov
Louisiana eec.ky.gov/Natural-Resources/Forestry	Assistant State Forester	Charles Vanzile, cvanzile@ldaf.state.la.us
Mississippi Forestry Commission, mfc.ms.gov	Assistant State Forester	Richard McInnis, rmcinnis@mfc.ms.gov
North Carolina Forest Service, ncforestservice.gov	Technical Development & Planning Branch Head	Barry New, barry.new@ncagr.gov
Oklahoma Forestry Services, https://ag.ok.gov/divisions/forestry-services/	Assistant Director	Connie Robinson, connie.robinson@ok.ag.gov
South Carolina Forestry Commission, scfc.gov	Resource Development Director	Tim Adams, tadams@scfc.gov
Tennessee Department of Agriculture – Business Division tn.gov/agriculture/forests	Forest Products Business Consultant/Business Consultant for Wood Products	David Neumann, David.neumann@tn.gov
Texas A&M Forest Service (TFS), texasforestry.org	Wood Utilization & Marketing Specialist Forest Analytics Department Head	Aaron Stottlemyer, astottlemyer@tfs.tamu.edu ,
Virginia Department of Forestry, vaforestry.org	Utilization and Marketing Program Manager	Justin Barnes, Justin.barnes@dof.virginia.gov