

# Forest Inventory



Statewide Stocking Levels  
and Trends in Mississippi

# Overview

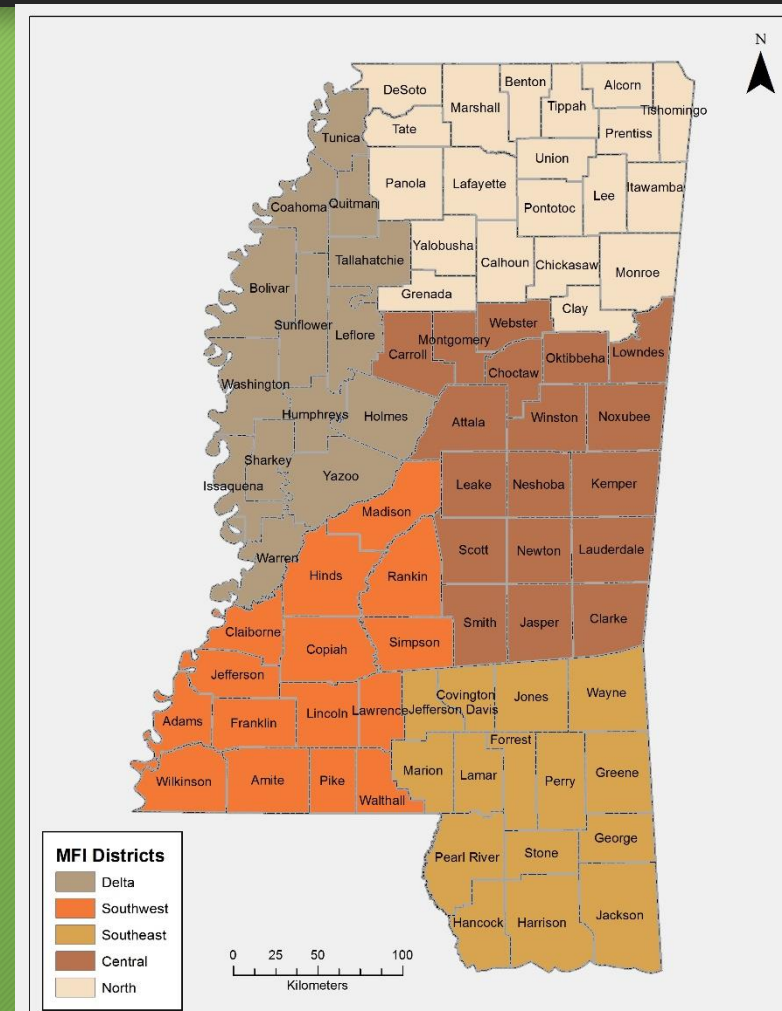


- Inventory programs MFI & FIA
- Land base
  - Forest area & ownership
- Growth Rates and Growth To Removal Ratios
- Stocking trends and current levels

# Mississippi Forest Inventory (MFI)



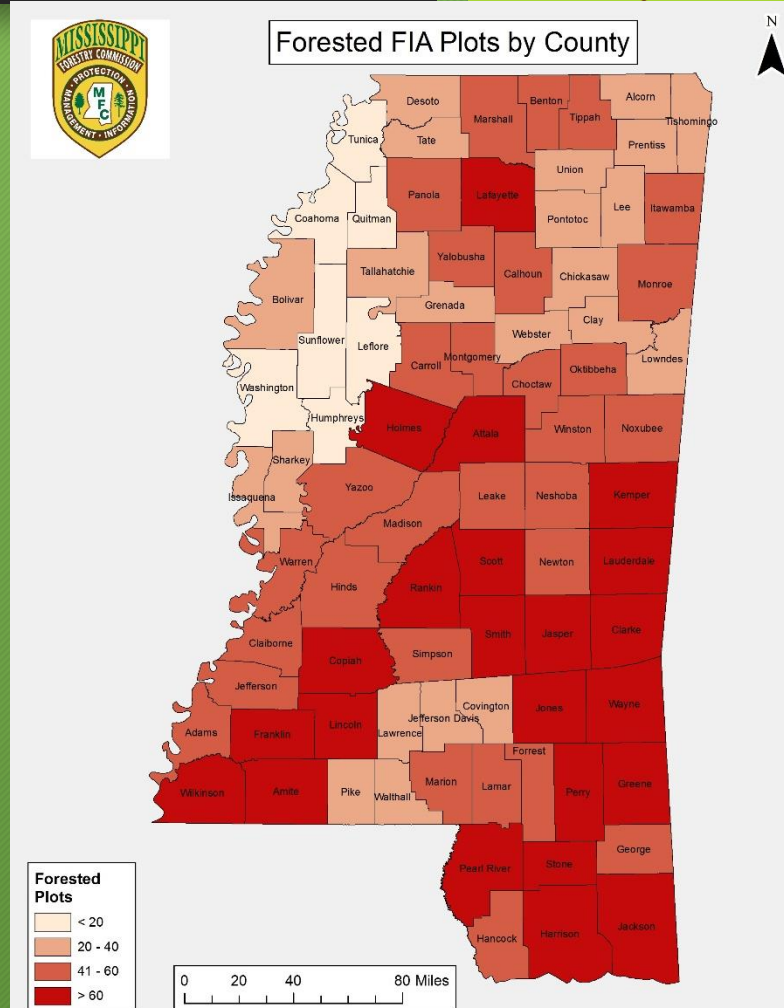
Inventory Unit	First Inventory	Second Inventory
Southwest	2004	2012
Southeast	2005	2013
Central	2006	2014
North	2007	2015
Delta	2008	2016



# USFS Forest Inventory and Analysis (FIA)



- Initiated in 1930's
- Continuous forest inventory
  - Forest Area and Distribution
  - Species, size and health of trees
  - Tree growth, mortality and harvest removals
  - In-woods production and utilization rates by product
  - Forest land ownership patterns
- Strives to project how forests are likely to appear in 10 - 50 years
- FIA program recently enhanced in Mississippi:
  - Transitioned from 7 to 5 year cycle
  - Plan to intensify sampling in key areas of interest

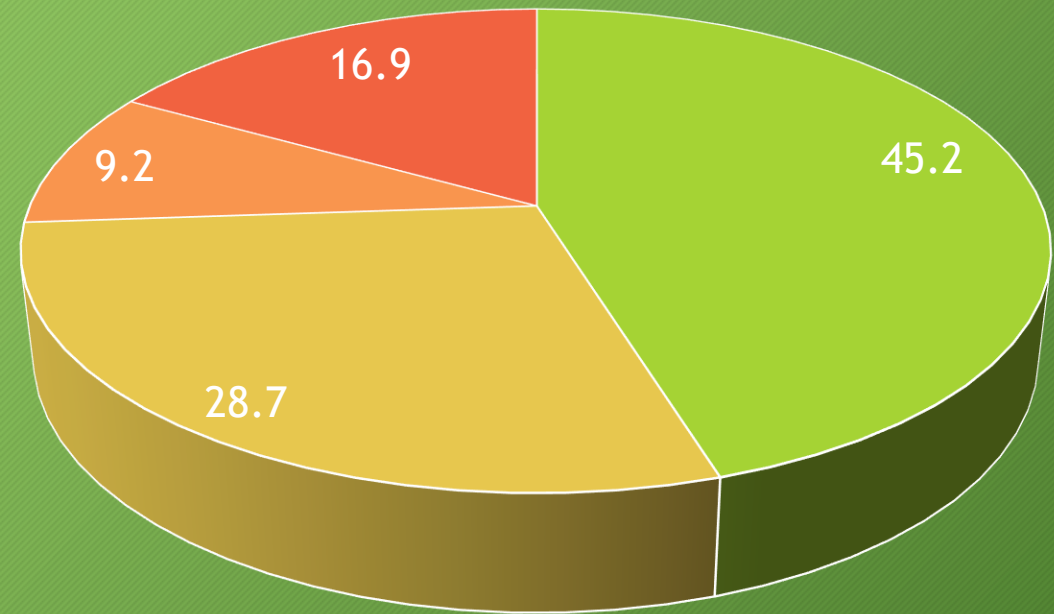


# Land Base and Forest Cover



Percent of Forest by Type

- Mississippi is approximately 30,213,607 acres
- 77% privately owned
- 64% (19.3 million acres) forestland
  - 88% privately owned



□ Hardwood   □ Pine   □ Mixed   □ Regeneration

# Forestland Acres by Ownership Group

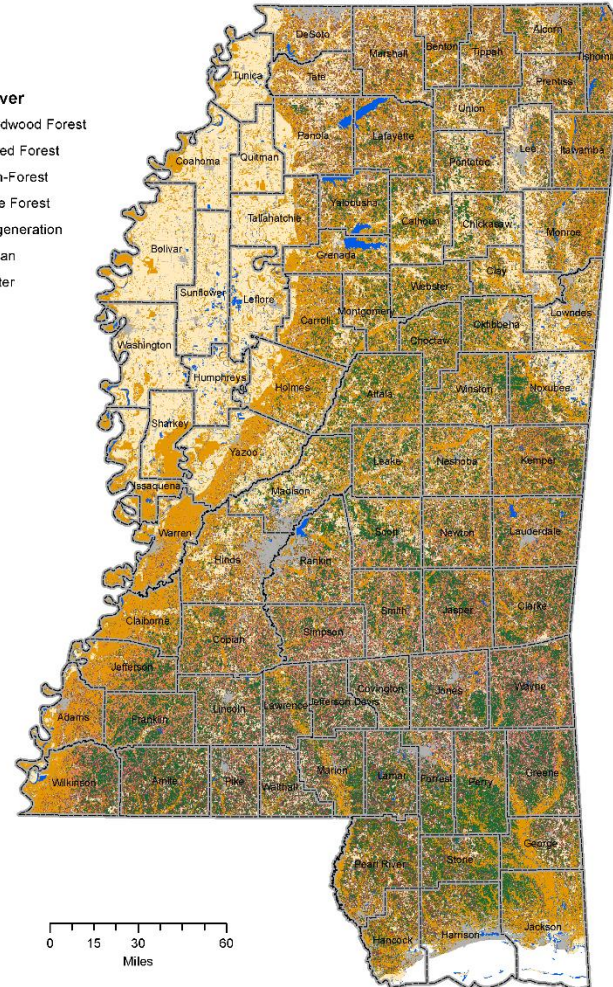


# Forest Type Distribution



**2015**  
**Land Cover**

- Hardwood Forest
- Mixed Forest
- Non-Forest
- Pine Forest
- Regeneration
- Urban
- Water



0 15 30 60  
Miles

# Annual Growth Rates



Inventory Unit	Pine	Hardwood
Southwest	8.8%	3.3%
Southeast	8.9%	7.0%
Central	10.0%	7.9%
North	10.4%	1.7%
Delta	7.5%	2.0%



# Growth To Drain Ratio



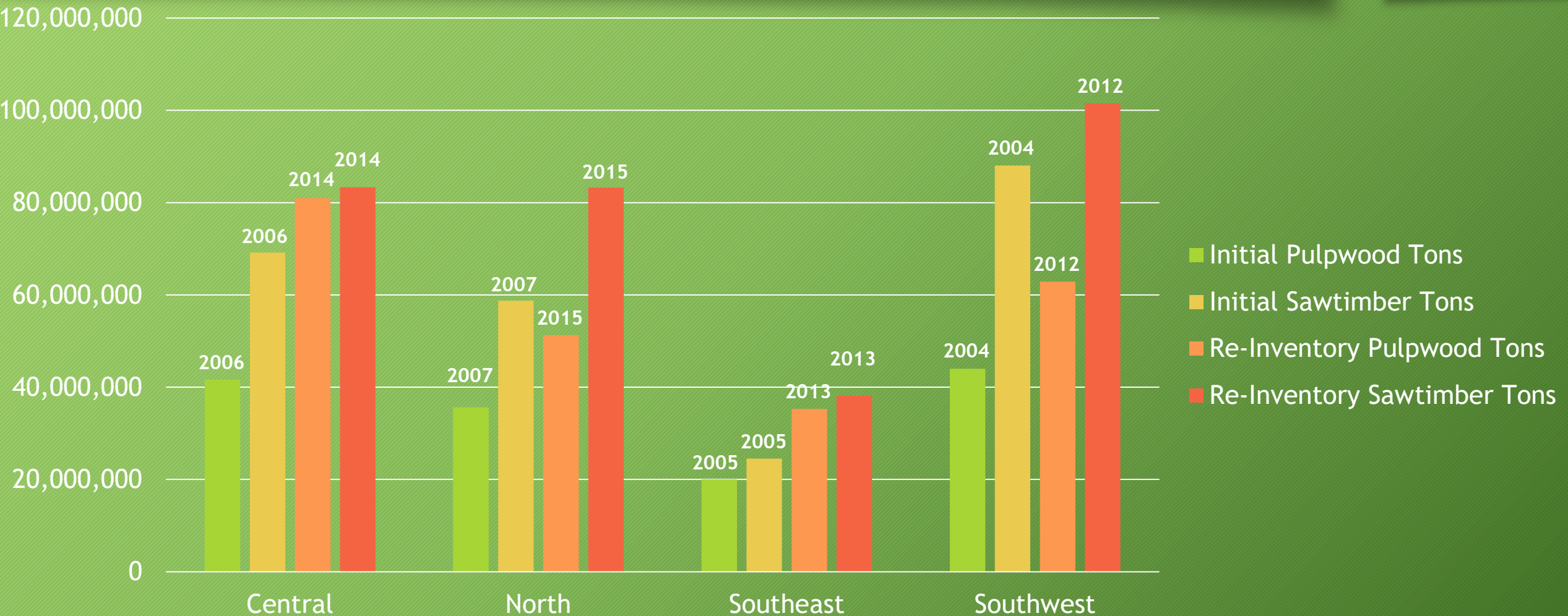
Four-year statewide average from  
the Mississippi Forest Inventory

Species Group	Ratio
Pine	2.3
Hardwood	3.0

# Pine Stock Trends in US Green Tons (MFI)



# Hardwood Stock Trends in US Green Tons (MFI)



# Current Stocking in Green US Tons: FIA Forestlands



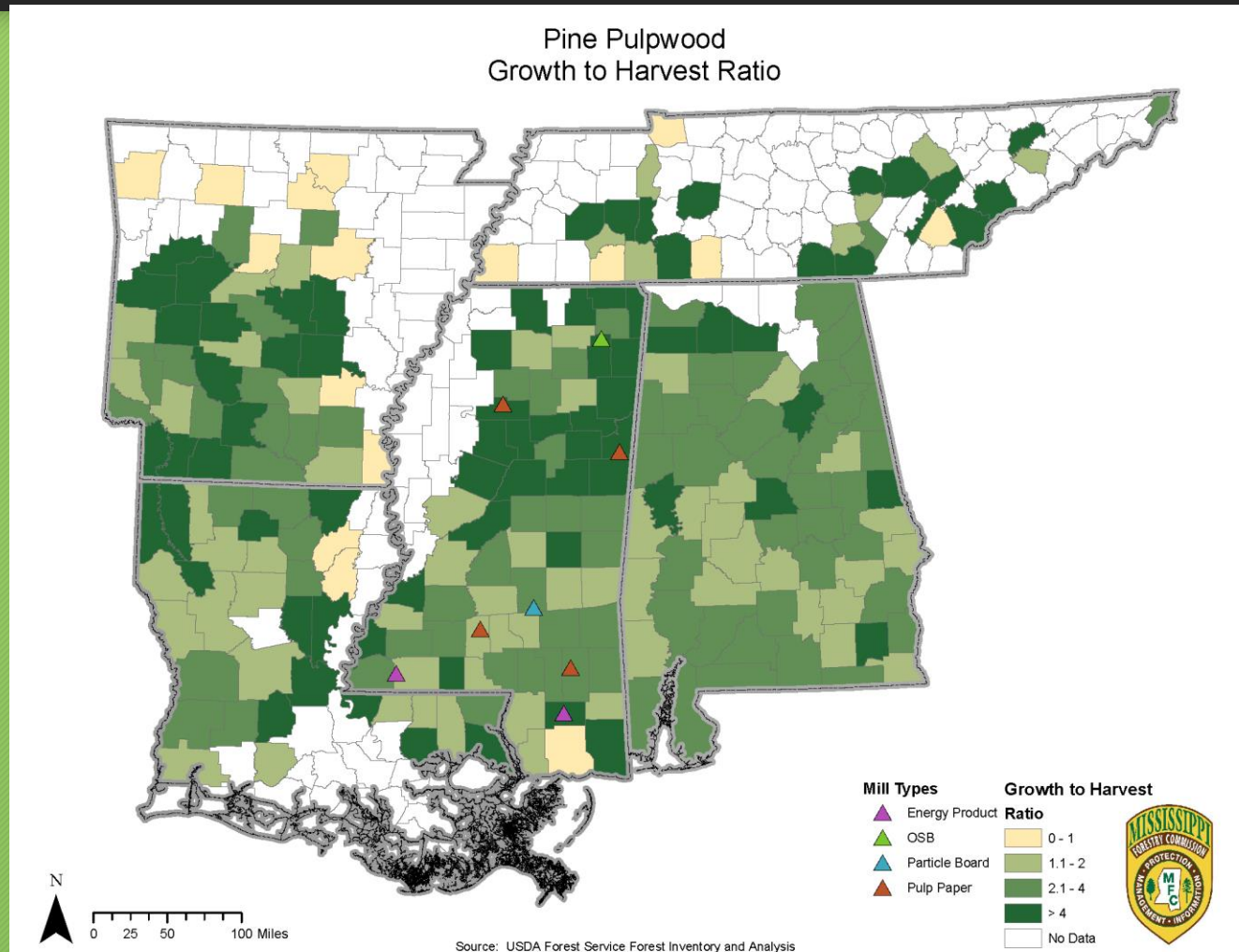
Species Group	Total	Sawtimber	Pulpwood
Pine	523,383,164	401,896,323	121,486,841
Soft Hardwoods	227,513,511	139,292,377	88,221,134
Hard Hardwoods	368,331,399	287,878,693	80,452,706

# Current Growth to Removals: FIA Forestlands



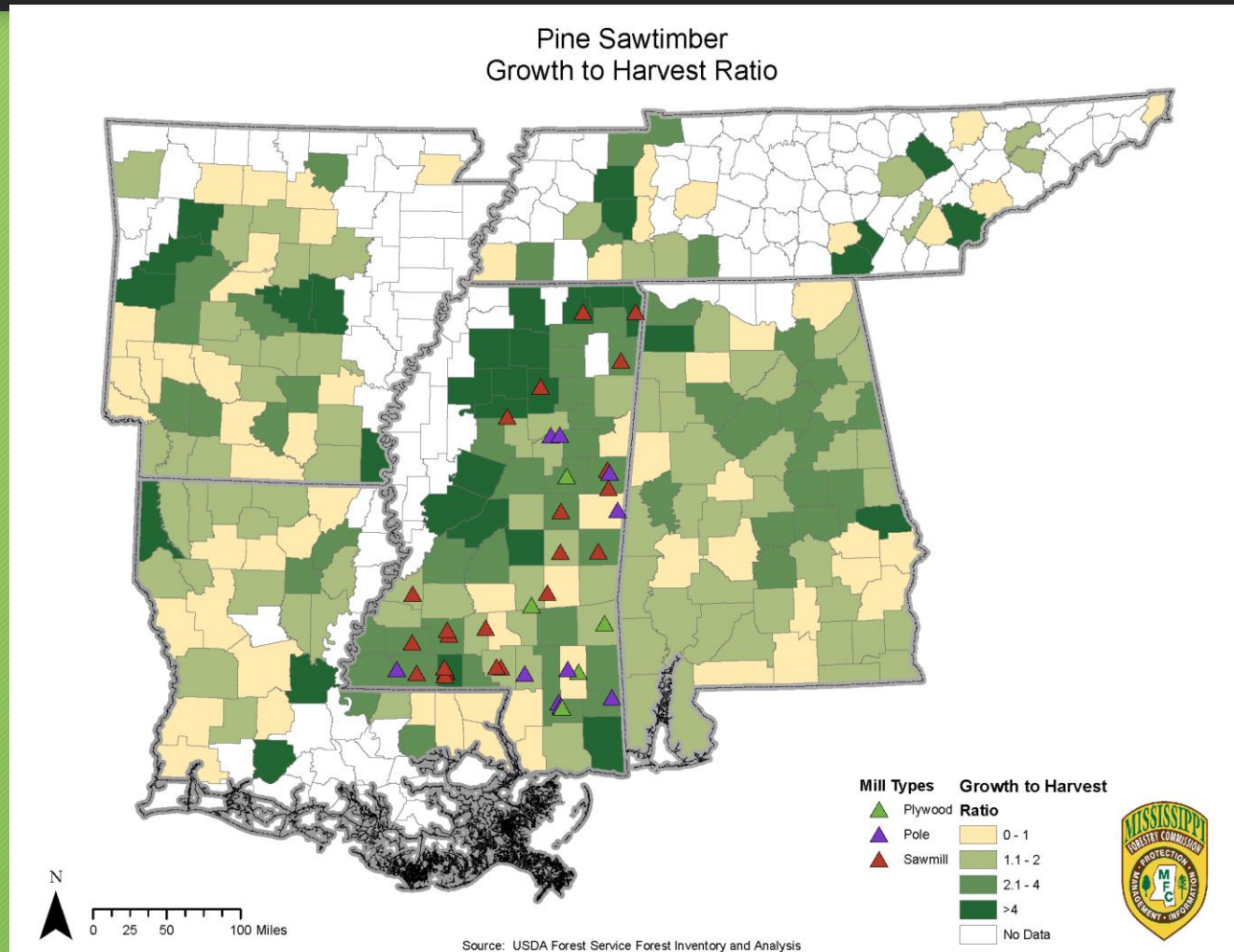
Major species Group	Annual Net Growth (ft <sup>3</sup> )	Annual Net Harvest (ft <sup>3</sup> )	Annual Net Mortality (ft <sup>3</sup> )	Annual Surplus (ft <sup>3</sup> )	Annual Surplus Green Tons
Softwood	1,336,466,356	616,175,549	111,946,808	608,343,999	21,209,655
Hardwood	413,768,444	243,846,006	161,235,334	8,687,104	331,476

# Regional Growth to Drain - Pine Pulpwood



Does not show  
mills from  
adjacent states

# Regional Growth to Drain - Pine Sawtimber



Does not show  
mills from  
adjacent states

# Additional Information



# 2015 FIA Fact Sheet for Mississippi Forestland



- Net volume increased approximately 16% from 2006 to 2015
  - 29.7 to 34.3 billion cubic feet
- Average annual net growth = 1.9 billion cubic feet
- Average annual mortality = 372 million cubic feet
- Average annual harvest = 970 million cubic feet
- Surplus growth of 558 million cubic annually from 2006 - 2015

# 2015 FIA Fact Sheet for Mississippi Forestland



- Ratio of Growth : Mortality + Harvest = 2.0
- The data indicates that “Mississippi is growing more trees than are being removed through conversion or harvest” (Oswalt, 2016).

# References



Oswalt, S. N. 2016. Forests of Mississippi, 2015. Resource Update FS-\_. Ashville, NC: US Department of Agriculture Forest Service, Southern Research Station. 4p.

# Contact Information

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