Landowner Tools and Opportunities

Texas Forest Info & Carbon Markets

Eric Wannlund
Staff Forester
Texas A&M Forest Service
Timber Price Trends

https://tfsweb.tamu.edu/timberpricetrends/

- **Stumpage**: price landowner receives from timber buyer to harvest trees
- **Volume-weighted average stumpage price**
- **Sources**: come from reporters (Feds, loggers, contractors, consultants, mills)
- **Used to monitor general market trend**: (many factors go into timber sale)
LANDOWNER ASSISTANCE: TIMBER PRICE TRENDS

Timber Price Trends aims to provide timely information on timber market conditions to improve decision making and foster fair transactions that benefit both buyer and seller and encourage conservation of the timber resource.

Average stumpage prices published in this report are calculated from actual timber sales as reported by up to 60 cooperators active in the East Texas timber market. Values are weighted by volume sold to filter out the effect that size of sale has on price paid. Thus, the average price reported is the average price paid per unit of wood, NOT per average timber sale.

**View Timber Price Trends Frequently Asked Questions**

<table>
<thead>
<tr>
<th>+ Timber Price Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ BI-Monthly Reports</td>
</tr>
<tr>
<td>+ Annual Summary Reports</td>
</tr>
<tr>
<td>+ Five-Year Stumpage Prices</td>
</tr>
<tr>
<td>+ Historical Timber Price Summary from 1984</td>
</tr>
<tr>
<td>+ Neighboring State Reports</td>
</tr>
</tbody>
</table>
# Stumpage Prices in Texas

<table>
<thead>
<tr>
<th>Product/Region</th>
<th>Average Price</th>
<th>Last Period</th>
<th>Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$/Ton</td>
<td>$/MBF</td>
<td>$/Ton</td>
</tr>
<tr>
<td><strong>PINE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast TX</td>
<td>$29.67</td>
<td>$237.36</td>
<td>$30.03</td>
</tr>
<tr>
<td>Southeast TX</td>
<td>$28.48</td>
<td>$227.83</td>
<td>$31.11</td>
</tr>
<tr>
<td>Statewide</td>
<td>$29.23</td>
<td>$233.83</td>
<td>$30.65</td>
</tr>
</tbody>
</table>

**Sawtimber**

$/Ton

Historical Statewide Sawtimber Prices

$/MBF - Doyle

[Graph showing historical prices for pine and hardwood sawtimber]
Got Land?

Got LAND?

Or thinking about purchasing land?

This app is a support tool that assists potential or new landowners during the initial stages of acquiring or owning property by providing management information and resources based on property goals selected.

Select GET-STARTED and answer a few short questions to return information tailored to your situation.

GET STARTED

en español
Got Land?

Resources Report

Map or Survey of Property
While a general map of your property is useful and can often be found at your County Appraisal District, a legal survey will identify restrictions on the property which may affect your use and future development. It should determine whether the property is in a floodplain and if it has any rights-of-way, easements, abandoned roads, joint driveways, water and utility lines, and ingress and egress. Because properties often lack visual boundary markers like an iron rod in the ground and fences may not be built along the actual boundary, a survey can help resolve a discrepancy over who owns what.

The Real Estate Center at Texas A&M University – Surveys
https://www.recenter.tamu.edu/articles/land-granite/sizing-up-surveys
Texas Society of Professional Surveyors
https://www.texas.org/page/965
Map My Property
http://texasforestinfo.tamu.edu/mapmyproperty/

Previous Land Use
Knowing the historical land use of your property can identify the location of potential environmental contamination, as well as cut-and-fill processes that may affect soil composition and ability to grow vegetation. Many avenues exist for obtaining such historical information. These include:

- Tax records and maps at your county tax assessor's office
  https://comptroller.texas.gov/taxes/property-tax/county-directory/
- County soil survey maps from the local NRCS office
  https://offices.sc.egov.usda.gov/locator/app?state=TX
- Historical maps available at the local public library or online at the Library of Congress
  https://www.loc.gov/maps/
- Historical topographical maps from the U.S. Geological Survey
  https://www.usgs.gov/topics/historical-maps-your-fingertips
- Historical aerial photographs and imagery from your county extension office, the local public library, the county planning office or online at Texas Natural Resource Information System
  https://tnris.org/spotlights/2015-04-09/historical-aerial-map/
- Previously conducted environmental surveys or investigations
- Title records at the county recorder of deeds office

Clear Title
Clear title is the phrase used to state that the owner of real property owns it free and clear of encumbrances. Also known as clean title, a clear title is a title without any kind of lien or levy from creditors or other parties and poses no question as to legal ownership.

A title search will reveal if the property you intend to buy or have inherited has clear title. As the documents concerning conveyances of land are a part of public record, anyone can do a title search.

- Provides resources based on property goals
- Topics include:
  - Property Maps/Surveys
  - Clear title
  - Tax Valuations
  - Easements
  - Subsurface Rights
  - Surface Water
  - Management Efforts
  - And more!
• **Site Index**

  • Measure of site quality
  • Total average height of both the dominant and co-dominant trees in a forest stand at a given age.
Plan My Land

- Defines sensitive areas
- Map of Soils
- Operational Considerations
- Regeneration
- Elevation Profile
- Culvert Size
- Measurement tools
## Characteristics and Ratings for Map Unit

<table>
<thead>
<tr>
<th>Map Unit Symbol</th>
<th>Map Unit Name</th>
<th>Ko</th>
<th>Kouy loam, occasionally flooded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres in Project Area</td>
<td>Percent of Project Area</td>
<td>Map Unit Dominant Component</td>
<td>Percent of Map Unit</td>
</tr>
<tr>
<td>51.7</td>
<td>29.0%</td>
<td>Kouy</td>
<td>85%</td>
</tr>
</tbody>
</table>

### Taxonomic Classification
- Coarse-silty, siliceous, thermic Dystric Fluventic Eutrophicrepts

<table>
<thead>
<tr>
<th>A Horizon</th>
<th>B Horizon</th>
<th>Slope Gradient (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Erosion Class</th>
<th>Drainage Class</th>
<th>Depth to Water Table (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Moderately well drained</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hydric Rating</th>
<th>Flooding Frequency</th>
<th>Presence of Ponding (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominantly Nonhydric</td>
<td>Occasional</td>
<td>0</td>
</tr>
</tbody>
</table>

### Harvest Operations

<table>
<thead>
<tr>
<th>Harvest Activity</th>
<th>Rating</th>
<th>BMP Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction limitations for haul roads and log landings</td>
<td>Moderate</td>
<td>PROCEED WITH CAUTION. Minimize soil disturbance. Follow basic BMP recommendations. Stabilize disturbed areas. <a href="http://tffrit.tamu.edu/planmylandoperation/docs/RoadsAndLandings.pdf">Link</a></td>
</tr>
<tr>
<td>Harvest Equipment Operability</td>
<td>Moderately suited</td>
<td>PROCEED WITH CAUTION. Time operations to avoid wet periods. Minimize soil disturbance. Follow basic BMP recommendations. Remediation may be necessary. Fair performance expected. <a href="http://tffrit.tamu.edu/planmylandoperation/docs/EquipmentOperationsSiteClosfup.pdf">Link</a></td>
</tr>
<tr>
<td>Erosion Hazard: Off-Road/Off Trail</td>
<td>Slight</td>
<td>GREEN LIGHT. Minimize soil disturbance. Follow basic BMP recommendations. <a href="http://tffrit.tamu.edu/planmylandoperation/docs/ErosionControl.pdf">Link</a></td>
</tr>
<tr>
<td>Erosion Hazard: Road/Trail</td>
<td>Slight</td>
<td>GREEN LIGHT. Minimize soil disturbance. Follow basic BMP recommendations. <a href="http://tffrit.tamu.edu/planmylandoperation/docs/ErosionControl.pdf">Link</a></td>
</tr>
<tr>
<td>Soil Rutting Hazard</td>
<td>Severe</td>
<td>RÉD FLAG! Rutting occurs regularly. Avoid operations except during extremely dry periods. Remediate disturbed areas. <a href="http://tffrit.tamu.edu/planmylandoperation/docs/ErosionControl.pdf">Link</a></td>
</tr>
</tbody>
</table>
Plan My Land Operation
Watershed Size/Culvert Size Report

This report was produced using the Plan My Land Operation application that is accessed from the Texas Forest Information Portal found at TexasForestInfo.tamu.edu. It calculates size of watershed that drains to a user-defined point along a stream and recommends the minimum size culvert to use at that point. In determining the recommended culvert size, the application uses (1) acres drained, (2) soil texture, and (3) slope as provided in the culvert sizing chart found in the Texas Forestry Best Management Practices Handbook.

Results of this analysis are:

- Latitude: 31.311838
- Longitude: 95.291536
- Acres Drained: 124.32
- Mean Slope (%): 2.70
- Soil Texture: Sandy Loam
  - Sand (%): 55.80
  - Silt (%): 30.90
  - Clay (%): 9.30
- Recommended Minimum Culvert Diameter: 24 inches

Legend:
- User input point
- Pour point
- Watershed

No. Pour point is point at least 30 meters off the user-defined point that drains the most area of the watershed.

Culvert Sizing Chart

<table>
<thead>
<tr>
<th>Acres Drained</th>
<th>Light Soils (15&quot;)</th>
<th>Medium Soils (20&quot;)</th>
<th>Heavy Soils (28&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flat &lt; 5%</td>
<td>Moderate 5 - 15%</td>
<td>Steep &gt; 15%</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>10</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>20</td>
<td>24</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>40</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>60</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>80</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>100</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>200</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>300</td>
<td>24</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>400</td>
<td>24</td>
<td>30</td>
<td>48</td>
</tr>
</tbody>
</table>

Minimum Culvert Diameter (inches)

- 24 inches for 0 to 124.32 acres

Watershed Properties

- Area (Acres): 124.315
- Mean Slope (%): 2.70
- Soil Texture: Sandy Loam
  - Sand (%): 55.80
  - Silt (%): 30.90
  - Clay (%): 9.30
- Recommended Minimum Culvert Diameter: 24 inches

Project Name: [Enter Project Name]

Create Report

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TexasForestInfo.tamu.edu
My Land Management Connector

Make Connections

- Landowner to Landowner
- Landowner to Service Provider
- Requires an account

Search

- Search for service providers
- Check credentials
- Find seedling and native plant nurseries
- Does not require an account

MyLandManagementConnector.com

TexasForestInfo.tamu.edu
Landowner Steps: Sign up

Get Started

LOG IN

CREATE LANDOWNER ACCOUNT

CREATE SERVICE PROVIDER ACCOUNT

BACK

This web application and all data herein are official State of Texas Resources and as such are available only for authorized purposes by authorized users. Usage may be subject to monitoring and security testing. Your email address, name and any other information you provide, will not be sold, and will not be shared outside of the "My Land Management Connector" application. User privacy is provided by applicable privacy laws.
Service provider,

A landowner has added a new area to "My Land Management Connector" application that needs land management services. If you are interested in providing service to this landowner, you can view the area and service needs by visiting http://TexasForestInfo.tamu.edu, "My Land Management Connector" application, and then send the landowner a service request.

Area #13-11
Area Type: Timberland
Acreage: 10 - 29 acres

Services Needed:
Consulting
Fertilization

My Land Management Connector
Texas A&M Forest Service
Service Provider Steps: Sign up

Full Name
Email
Confirm Email
Password
Confirm password

Credentials
Provider Type

Credentials Holder Full Name
Company
Website Address
Address
Service Provider Steps: Send Request

Send Request to Provide Service

Area 13 - 9
Area type: Pasture
Acreage: 100+ acres

Service(s) Needed:
- [ ] Boundaries, Fences, and Gates
Hello John Henry,

The service provider below would like to provide the following land management service(s) to your area 1038 - 1:

- Consulting
- Tree Valuation

Please contact them for more information.

Michelle Moore
Michelle's Trees
567 Tree Lane
Dallas, TX 52525
555-556-8989
Michelle@abc.com
www.mmtrees.com

Credentials: Certified Burn Manager (TDA), Licensed Landscape Irrigator, SAF Certified Forester, Texas Accredited Forester, Texas Licensed Real Estate Broker/Sales Agent, Texas Oak Wilt Qualified (Texas ISA), Texas Pro Logger

My Land Management Connector
Texas A&M Forest Service
Hello [Name]

A landowner would like to connect with you to potentially aggregate land management service(s) on your area shown below:

Area #13-1
Area Type: Woodland
Acreage: 30 - 59 acres
Services Needed:
Forest Certifications
Forest Farming
Prescribed Burning
Road and Stream

Please contact the following landowner for more information.

[Contact Information]

My Land Management Connector
Texas A&M Forest Service
Service Provider Search

Service Provider Selection

Provider Type
- Certified Arborist
- Environmental Scientist
- Professional Forester
- Vendor
- Wildlife Biologist

Regions Serviced

Services Provided

VIEW LIST
CHECK CREDENTIALS
PDF LIST
NEED TREES OR SEEDS?
Service Providers

**Chemical (Herbicide) Vegetation Control**

**Trees Bees Knees**
Chris Christopherson  
Certified Arborist, Professional Forester  
123 Tree Street  
Oakville, TX 75345

- **Phone:** (111) 111-1111  
- **Email:** oakas@trees4life.com  
- **Website:** billybob.com

**Credential Holder Name:** Chris Christopherson  
**Credentials:** American Society of Consulting Arborists, Association of Consulting Foresters, ISA Certified Arborist, Licensed Landscape Irrigator, Licensed Pesticide Applicator, SAF Certified Forester, Texas Accredited Forester, Texas Oak Wilt Qualified (Texas ISA)

**Bob’s Trees**
Bob Tree  
Professional Forester  
123 ABC Ln  
Conroe, TX 75315

- **Phone:** (546) 454-7678  
- **Email:** bbtree@tree.com  
- **Website:** www.bobstrees.com

**Credential Holder Name:** Bob Tree  
**Credentials:** Certified Burn Manager (TDA), NRCS Technical Service Provider, SAF Certified Forester, Texas Oak Wilt Qualified (Texas ISA), Texas Pro Logger

**Michelle’s Trees**
Michelle Moore  
Professional Forester  
567 Tree Lane  
Dallas, TX 7525

- **Phone:** (555) 556-8989  
- **Email:** michellestreets@abc.com  
- **Website:** www.mmtrees.com

**Credential Holder Name:** Michelle Moore  
**Credentials:** Certified Burn Manager (TDA), Licensed Landscape Irrigator, SAF Certified Forester, Texas Accredited Forester, Texas Licensed Real Estate Broker/Sales Agent, Texas Oak Wilt Qualified (Texas ISA), Texas Pro Logger

**Consulting**

**Fernando’s Landscaping**
John Smith

**Bob’s Trees**
Bob Tree

**Michelle’s Trees**
Michelle Moore
Funding Connector

This website serves as a clearinghouse for information about various natural resource programs that offer financial assistance to Texas landowners who implement conservation practices.

Landowner Tools
### Southern Pine Beetle Prevention Program

<table>
<thead>
<tr>
<th>Organization</th>
<th>Texas A&amp;M Forest Service</th>
</tr>
</thead>
</table>

**Description**
The program provides cost shares for thinning pine stands to reduce Southern Pine Beetle (SPB) hazard. Cost-share applications must be received by February 1, 2023. Contact your local TFS office for more details or Allen Smith, Program Manager allen.smith@fs.fed.us, 903-297-5094 for more information.

**Website**
https://tfeweb.tamu.edu/SouthernPineBeetlePreventionCostShareProgram/

**Program Area**
All counties in east Texas are eligible but priority will be given to stands in the following 21 counties: Angelina, Cass, Cherokee, Hardin, Harrison, Houston, Jasper, Liberty, Marion, Nacogdoches, Newton, Polk, Polk, Rusk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler, and Walker

**Practices**
- Thinning

**Financial Assistance**
- $50/acre for both individual and partnerships/trust ownerships
- 50% of costs of services provided by private consulting forester, not to exceed

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**Map**
A map showing various counties in Texas, with a focus on the southern pine beetle prevention program area. The counties highlighted are those eligible for the program.
Funding Connector: Financial Assistance for Land Stewardship in Texas

Southern Pine Beetle Prevention Program

Organization
Texas A&M Forest Service

Description
The goal of this program is to improve forest health to minimize or prevent future infestations of the Southern Pine Beetle (SPB).

Link to Webpage
https://ffswweb.tamu.edu/SouthernPineBeetlePreventionCostShareProgram/

Project Area
Angelina, Cass, Cherokee, Hardin, Harrison, Houston, Jasper, Liberty, Marion, Nacogdoches, Newton, Panola, Polk, Rusk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler, and Walker counties.

Practices
Thinning

Financial Assistance
• $50/acre for both individual and partnership/trust ownerships
• 50% of costs of services provided by private consulting forester, not to exceed $5/acre
• Maximum cost share allowed per federal fiscal year (October 1 - September 30) is $5,000 for all approved cases

Eligibility
• Must own a minimum of 10 contiguous acres of pine species
• Stand must be a minimum of 120 sq ft basal area
• Stand must be a minimum of 70% pine
• Stand must be located within one of 21 priority counties
• Stand must be thinned to 80 sq ft basal area or less
• Thinning must be completed within 12 months
Carbon Markets

- Not currently listed under Funding Connector, but there are additional resources and opportunities for forest landowners within the private sector
- Carbon Markets are an option for some forest landowners
- Revenue can be generated off the land from carbon sequestration projects
Two Types of Carbon Markets

• **Compliance Markets (Cap and Trade)** - government regulated

• **Voluntary Carbon Markets** - participation is voluntary, no federal regulation
Who’s Buying Carbon Credits

- Largely corporations who want to offset their carbon emissions to improve their ESG rating

**ESG RATING**

An ESG rating measures a company's exposure to long-term **environmental**, **social**, and **governance** risks.

- Only 24% of companies receive a rating of AAA or AA (ESG Leaders). Leaders are proactively managing ESG risk and taking advantage of ESG opportunities better than their peers.
- Average ESG performers may be managing some key ESG issues well and others poorly, or they may be average across the board.
- Laggards have relatively more unmanaged exposure to ESG risk factors.

One of the most widely referenced ESG rating systems is the MSCI ESG score.
ESG Rating Explained
What is a Carbon Credit?

• A tradable certificate or permit representing the right to emit one tonne (1.1 ton) of CO₂ or equivalent amount of a different greenhouse gas

• Average person is responsible for about 10 tonnes of carbon emissions/year
How Carbon is Stored

Physical/Mechanical
- Direct air capture technology

Nature Based Solutions
- REDD+ Reduce emissions from deforestation & degradation (reductions)
- IFM- improved forest management (reductions and removals)
- A/R- afforestation and reforestation (removals)
- Soil Carbon, Forest Carbon, Blue Carbon
Why Forests

Cost-effective methods to mitigate climate change through

- Decreasing GHG emissions and
- Increasing carbon sequestration in an ecosystem

Low-hanging fruit

- Conservation, restoration, and improved management in forests, grasslands, agricultural lands, and wetlands.

Forestry has co-benefits,

- Biodiversity / habitat
- Air filtration
- Water filtration
- Flood control

Total Carbon in U.S. Forests = 58,720 MMT
Carbon Credit Cycle

1. Develop project using registry protocols
2. Have project validated and verified
3. Credits are issued
4. Credits are sold
5. End buyer takes ownership of credit and retires credit. (Prevent reselling)
6. Credits can be generated and sold yearly

Photo Courtesy of Michigan State University Department of Forestry
Carbon Registry

- The voluntary carbon market requires the use of a registry
- Several large registries on the block
- Various protocols for different projects
- Helps legitimize/verify/record credits
What does a project look like in E. Texas

• Depends on landowner’s objective: Fiber production or conservation
• Different programs have different acreage requirements
• Contracts generally stay with the land. Contracts can last 10yrs up 65yrs+
• Depending on protocol, E.TX. Forests generate ~2 credits/ac/yr
Carbon Market Summary

- ESG pressure and goals support a healthy voluntary market place for IFM and A/R carbon credit based projects
- Landowner works with a project developer and registry to develop, implement, verify, sell credits, and maintain project for length of contract
- Not all credits are created equal
- One way to sustainable manage forest land while providing for multiple ecosystem benefits. Good fit for long term conservation or long rotation fiber production
Questions

Eric Wannlund
Staff Forester
Texas A&M Forest Service
evannlufs.tamu.edu