

TEXAS CLIMATE SMART INITIATIVE



CARBON-FOCUSED FORESTRY COST ASSISTANCE

CLIMATESMART.TAMU.EDU

PINE STAND ESTABLISHMENT REIMBURSEMENT RATE = \$600/ACRE

OVERVIEW

The Texas Climate-Smart Initiative is a 5-year financial incentives program made possible by the USDA's Partnerships for Climate-Smart Commodities grant. The incentives program provides funds to non-industrial, private, small-acreage landowners to conduct science-based, **Carbon-Focused Forest (CFF)** management practices to establish new forest stands, improve the health and vigor of existing stands, and/or encourage holistic forest management upon the landscape.

CLIMATE-SMART

The term climate-smart commodity refers to an agricultural commodity that is produced using farming practices that reduce greenhouse gas emissions or sequester carbon. Sustainable forest management is climate-smart, but there is always room for improvement. CFF focuses specifically on those improvements required to maximize carbon capture while, at the same time, producing quality wood fiber for the timber industry.

This program serves as a financial incentive to landowners to implement the following CFF practices at the stated reimbursement rates.

Carbon Focused Forestry begins with proper stand establishment. A stand is a contiguous group of trees sufficiently uniform in age class distribution, structure, and composition that is growing on a site of sufficiently uniform quality to be a distinguishable single management unit. A property may have only one stand or any number of stands. Each may be managed differently.

Stand Establishment is more than planting seedlings. It also includes the prompt ordering, careful delivery and storage, and proper planting of tree seedlings as well as all the necessary site preparation, early post-planting treatments, and other cultural activities required to successfully establish a fully stocked, free-to-grow, and vigorous crop. Successful establishment may take as long as five years even when all of the necessary treatments are conducted properly.

Stand Establishment under CFF Strategies Guidelines uses specific silvicultural parameters designed to emphasize the *in situ* capturing and storing of carbon over the life of the stand while providing other forest ecosystem benefits and high-value

timber. CFF Stand Establishment treatments follow the basic criteria set forth under Conservation Practice Standard (CPS) Code 612 - Tree/Shrub Establishment as defined by the Natural Resources Conservation Service (NRCS). Because multiple activities may be required to successfully establish a new stand, CPS Code 490 - Tree/Shrub Site Preparation and/or CPS Code 315 - Herbaceous Weed Control might also be required to ensure successful stand establishment.

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CLIMATE-SMART INITIATIVE
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STAND ESTABLISHMENT CRITERIA

The following specifications have been selected because of their likely potential to provide long-term, positive carbon sequestration benefits while minimizing the carbon footprint of management activities.

1. Evaluate the site – Determine if the site is suited for pine production and determine what site preparation and soil amelioration treatments will be necessary to ensure seedling survival and vigorous growth. Note that trends in available soil moisture (either too much or too little) may be the limiting factor for site suitability. Adaptive silvicultural strategies use the weather extremes as indicators of suitability and not the average weather. Consider sites with a low to moderate chance of extreme drought or flooding.
2. Determine the number of seedlings to order – The between row planting spacing of 12 to 16 feet is preferred. Stocking range should be 360 - 520 tree seedlings per acre (tpa). Example layouts include: 7' x 12' = 520 tpa, 7' x 15' = 415 tpa, and 8' x 15' = 363 tpa.
3. Order seedlings – Contact a reputable forest tree nursery early, before February, and order enough high-quality, controlled mass-pollinated pine tree seedlings for mid-October pickup as containerized seedlings. Loblolly pine is preferred. Controlled mass-pollinated seedlings are full-sibling (the mother and father(s) are known) and have predictable traits with less variability than half-sibling seedlings. Because of this, forest tree nurseries can provide a family that maximizes form and self-pruning characteristics even at low densities. Varietals are also approved for use in CFF management. Seedlings should be treated at the nursery with a pesticide that protects them from regeneration pest especially if they are to be planted on a cutover site with a heavy pine debris component. Order 5% more seedlings than required to allow for culling.
4. Site preparation – Conduct any necessary mechanical, chemical or prescribed burning site preparation activities or combination of activities to alleviate problematic soil issues and control problematic competing vegetation and regeneration pests. The use of site preparation treatments should be minimized if possible and the intensity and timing will be determined by topography, soil and site conditions. The typical site preparation treatments that deal with removing wood residue from the site (rake and pile/windrow) are not to be used except under special and approved situations. Schedule site preparation activities to be completed at the optimum time. Treated seedlings are required if to be planted on a cutover site with a heavy pine debris component. If an additional step is required to reduce problems associated with insects and logging debris and the establishment of tree seedlings, consider site preparation after six months, but within one year after logging followed promptly by planting treated seedlings.



5. Plant – Plant containerized tree seedlings during the fall as soon as soil moisture becomes available. This is usually mid-October. Delay planting until sufficient soil moisture is available. If poor fall conditions force winter planting, then bare root seedlings may be used instead of containerized seedlings as long as the full-sib family expresses the desired traits. Do not plant later than February 15.
 - a. *Cutover sites* – On cutover sites or other sites with heavy debris, use a dozer equipped with a V-blade and a wildland planter. Using a single pass strategy, push woody debris out of the planting row while planting. A hand planter should walk behind the planter to hand plant seedlings missed by the machine. The woody debris between the rows will provide soil protection, lower soil temperatures during the summer, and retain soil moisture. Seedlings treated against regeneration pests are required.
 - b. *Afforestation sites* – Use a rubber-tired tractor and open-land planter to machine plant containerized tree seedlings. A hand planter should walk behind the planter to hand plant seedlings missed by the machine
6. Herbaceous Weed Control – Conduct herbaceous weed control, band-spray treatment during the following spring if necessary using the smallest, suitable mechanical equipment and appropriate herbicide prescription. Options are available at <https://texasforestinfo.tamu.edu/HerbicideDSS>.
7. Protect – Protect tree seedling from insect pests, wildlife, livestock, equipment, vehicles, and/or fire.
8. Evaluate – Periodically inspect the established trees for adverse impacts from insects, diseases, competing vegetation, fire, livestock and wildlife. If issues arise, contract your local Texas A&M Forest Service forester and/or your consulting forester.
9. Work with a degree/certified forester
10. Follow Best Management Practices



GENERAL ELIGIBILITY

Participants must

- Be a private, non-industrial, small-parcel landowner with a total treatment area between 15 and 125 acres in one of the counties identified on the following map. Priority will be given to small-acreage landowners with a total ownership of 50 acres or less,
- Have a Farm Service Number, meet environmental compliance, and provide required documentation,
- Allow for scheduled soil sampling before, during and after practice implementation,
- Maintain treatment area for a period of 5 years,
- Enroll in one and only one practice per application,
- Not begin work until “Approval to Perform Letter” is provided to the participant, and
- Not apply for Texas Climate Smart Initiative funds and other state/federal funds for the same practice on the same acre.

ENROLLMENT STEPS

- Submit an application at <https://climatesmart.tamu.edu>
- Work with a degreed/certified forester to create a Forest Practice Plan of Work and a treatment area map.
- Obtain a Farm Number with the Farm Service Agency (FSA) and acquire copies of a FSA Tract Map and a FSA Subsidiary Print.
- Submit the following four documents to txclimatesmart@tfs.tamu.edu.
 1. Forest Practice Plan of Work.
 2. FSA Tract Map.
 3. Treatment area map.
 4. FSA Subsidiary Print
- Schedule a site visit with the Texas A&M Forest Service.

All applications must be scanned and submitted as a single PDF. Paper, faxed, mailed applications, and JPEG images will not be accepted. Please ensure all required documentation is included. The treatment area map must be current and feature base satellite imagery.

IF APPLICANT IS SELECTED

- An Environmental Evaluation will be conducted which does not usually require a site visit,
- The applicant will receive a contract to be reviewed, signed and returned,
- The applicant will receive an “Approval to Perform” letter which requires the treatment be completed within 12 months,
- The applicant will work with a forester and submit a Forest Stewardship Plan during the open contract, and
- The completed work will be inspected and verified before an incentive payment will be processed.

The content provided above lists only general information about the Texas Climate-Smart Initiative financial assistance program. The official contract agreement supersedes any information provided in this document.

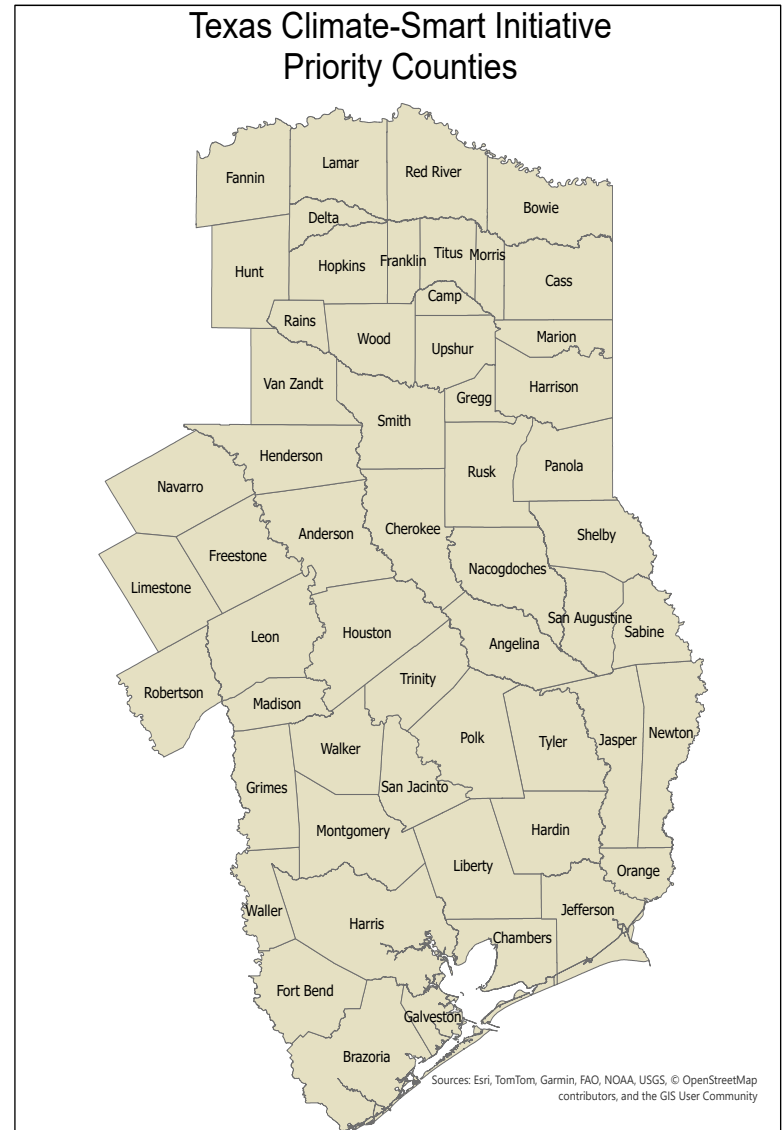
ESTABLISHING FARM RECORDS WITH THE FARM SERVICE AGENCY

The Texas Climate Smart Initiative requires landowners to have or establish farm records with the United States Department of Agriculture (USDA) Farm Service Agency. A farm record creates a unique farm and tract number for your agricultural operation and ensures environmental compliance is met.

The following information is a guideline to establishing farm records. For complete information visit <https://www.farmers.gov/working-with-us/USDA-service-centers>

Steps to Creating a Farm Service Number:

- Find Your Local Service Center. Visit <https://www.farmers.gov/working-with-us/USDA-service-centers>
- Call or email your Service Center to make an appointment.
- Ask what documents to bring to your appointment.
- During your appointment make sure to register for a farm number and file form AD- 1026 (Wetland Conservation and Highly Erodible Land Conservation).
- Obtain a copy of a Farm Tract Map and a copy of a Subsidiary Print. These copies are required for the Texas Climate Smart Initiative.



For detailed information visit: <https://tfsweb.tamu.edu/climatesmart.aspx>

Questions: txclimatesmart@tfs.tamu.edu





FOREST PRACTICE PLAN OF WORK

PINE STAND ESTABLISHMENT

For TAMFS use only	
Project name:	
Received Date:	
TAMFS Forester:	
Pretreat Date Inspected:	
Post-Treat Inspection Date:	

CONTACT INFORMATION

LANDOWNER'S LEGAL NAME	MANAGER'S NAME	CONTRACTOR'S NAME
COMPANY NAME	COMPANY NAME	COMPANY NAME
MAILING ADDRESS	MAILING ADDRESS	MAILING ADDRESS
CITY/STATE/ZIP	CITY/STATE/ZIP	CITY/STATE/ZIP
PHONE	PHONE	PHONE
EMAIL	EMAIL	EMAIL

PROPERTY DESCRIPTION

TRACT NAME	ADDRESS	COUNTY	TOTAL ACREAGE
ACTIVITY <input type="checkbox"/> REFORESTATION <input type="checkbox"/> AFFORESTATION	TREE TYPE <input type="checkbox"/> PINE	HARDPAN <input type="checkbox"/> YES <input type="checkbox"/> NO	TREATMENT AREA HARVESTED <input type="checkbox"/> YES on MONTH/YEAR _____ <input type="checkbox"/> NO, EXPECTED DATE _____
PRIMARY SOIL TYPE	SITE INDEX	TREATMENT ACRES	TOTAL REQUESTED
PROPERTY LOCATION (Include the nearest cross roads, how to access, and lat/long coordinates to tract center)			
SITE DESCRIPTION AND CURRENT CONDITION (What does the site look like? Is this a replant? Why did previous planting fail?)			

MANAGEMENT ACTIVITIES AND PLAN OF WORK

Below, list management activities addressing the Stand Establishment Criteria. Prioritize carbon-focused strategies where applicable. Explain deviations from above listed criteria if necessary.

DESCRIBE THE PRIMARY OBJECTIVE OF THIS ACTIVITY (Select all that apply)

Promote forest health and vigor
 Produce high quality timber
 Enhance carbon sequestration
 Manage for wildlife, recreation, and/or aesthetics

List others here:

DESCRIBE THE SITE PREPARATION: (Refer to Stand Establishment Criteria. Silvicultural activities which limit heavy equipment use will be given priority)

DESCRIBE THE PROPOSED PLANTING LAYOUT, DENSITY AND SPACING: (Follow the stand establishment criteria, if planting a different spacing describe the reasoning)

DESCRIBE THE SEEDLING TYPE TO BE USED: (If pine then controlled mass-pollinated containerized seedlings preferred)

DESCRIBE HOW AND WHEN SEEDLINGS WILL BE PLANTED: (Refer to Stand Establishment Criteria. If pine, then preference is machine planting as soon as soil moisture is present in the fall which is usually mid-October)

DESCRIBE HOW HERBACEOUS WEEDS WILL BE CONTROLLED: (During site prep, after site prep)

IF APPROVED, WHEN IS THE ESTIMATED COMPLETION DATE:

DESCRIBE ANY FOLLOWUP MANAGEMENT ACTIVITIES OR ADDITIONAL PERTINENT INFORMATION ABOUT THIS ACTIVITY:

By signing this document in the space provided below, I'm acknowledging that I agree with the following:

- ✓ I worked with a degreed/certified forester to complete this forest practice plan of work, and
- ✓ To the best of my knowledge, this plan of work accurately represents the work that I intend to conduct on the property.

Landowner Signature: _____



Please submit the following to txclimatesmart@tfs.tamu.edu

- Forest Management Plan of Work
- Treatment Area Map
- Farm Service Agency Tract Map
- Farm Service Agency Subsidiary Print