North Carolina Forest Service SOUTHERN PINE BEETLE PREVENTION PROGRAM HANDBOOK

Revised August 2023

2023





The Southern Pine Beetle (SPB) (*Dendroctonus frontalis*) is the most destructive insect pest to in the southeastern US. Shortleaf pine (*Pinus echinata*) and loblolly pine (*Pinus taeda*) are the most susceptible species. The most susceptible stands are usually unmanaged, and stressed from the environment, competition, age, or a combination of factors. During periodic outbreaks, SPB populations can rise, attack and quickly kill multiple acres of trees within these stands. Because of increasing length and severity of SPB outbreaks, the USDA Forest Service and the Southern Group of State Foresters initiated a more proactive approach for mitigating the severity of outbreaks by creating the Southern Pine Beetle Prevention Cost Share Program. This is a federally funded cost share program that is implemented at the state level.

In 2005, the N.C. Forest Service Southern Pine Beetle Prevention Program (SPBPP) was created for non-industrial private forest landowners of North Carolina. The SPB Prevention Program provides these landowners cost share funds for approved forest management practices that minimize future SPB outbreaks and restore productive stands with healthy, managed forests.

Practice currently available:

<u>Prevention</u> practices will include **pre-commercial thinning** to reduce the number of stems or basal area per acre of over-stocked, young pine stands.

Eligibility and Limitations

General

Any private individual, group, association or corporation owning a minimum of five (5) acres of non-industrial private forestland located in North Carolina is eligible. Where forest land is owned jointly by more than one individual, group, or association, as tenants in common, tenants by the entirety, or otherwise, the joint owners shall be considered as one eligible landowner and entitled to receive cost share. Individual landowners that share in a joint ownership are also eligible. State government owned lands are also eligible for assistance for SPB prevention practices. Other government owned lands, forest industry ownership, and lands owned by primary processors of forest products are not eligible for cost share.

Cost share assistance is limited to \$10,000 per ownership per state fiscal year (July 1 – June 30). Approval of the application for funds requires verification by a N.C. Forest Services (NCFS) forester that potential exists for a Southern pine beetle attack on eligible forestlands and an approved forest management plan for the lands on which funds are requested. This plan must contain a description of the present conditions, future courses of action and approved practices that will be followed to reduce the potential for SPB infestation, while assuring forest productivity and environmental protection. A designated forester of the NCFS must approve this forest management plan.

SPBPP funds cannot be used on the same acres on which other cost share funds are being received for forestry practices during the same fiscal year. Funds cannot be used on CRP, CREP or other Federal cost share stands with an active contract.

Landowners who accept Program funding are required to maintain those acres in forestland for a period of ten (10) years and to comply with the provisions in the approved forest management plan. Landowners will be

required to repay all or part of the funds paid to them if they, (a) destroy the installed practice(s) during the maintenance period, (b) fail to maintain the practice(s) as stated in the approved forest management plan, or (c) voluntarily relinquish control or title to the land on which the installed practice has been established and the new owner or operator of the land does not agree, in writing, to properly maintain the practice(s) for the remainder of the maintenance period. Recapture of program funds will not be pursued when the practice(s) is destroyed due to an "act of God" or to actions beyond the landowner's control (such as condemnation). In addition, if a landowner should harvest residual timber within the ten-year period, the installed practice will not be considered destroyed if the property remains as a managed forest (not converted to non-forestry use).

All Forest Practices Guidelines will be followed and necessary Best Management Practices to protect water quality will be implemented.

The area must be protected from destructive grazing and destructive fire.

Pre-commercial Thinning

Eligible stands:

- Must have more than 700 pine stems per acre (if the stand is mixed pine and hardwood, then >70% of stems must be pine).
- Will be reduced to 300-450 stems per acre after completion of approved pre-commercial thinning practices.
- White pine stands can also qualify if the basal area is 150 square feet or more. These stands will be reduced to 90 square feet of basal area or less.

An eligible landowner may receive cost-shared funds to complete needed pre-commercial thinning practices at the fixed rates per acre listed in Appendix 1.

Application for Cost Sharing

An approved forest management plan must be on file with the N.C. Forest Service before the landowner may apply for cost-sharing funds on practices as prescribed in the plan. Such plan shall include forest management practices to insure both forest productivity and environmental protection of the lands to be treated. The District Forester will designate in writing those NCFS foresters who may approve these plans. Each plan approved will be signed and dated.

Application must be made on Form 4910-3 (see Appendix 2) and submitted through a District Office. Required items on the application form are 1, 2, 3 (Lat/Long), 4, 5, 6, 7, 8, 9, 10, 11 and/or 12, 13, preferably typed but must be legible if handwritten. The appropriate copy will be sent to the Central Office (C.O.) for funding. The district office will maintain a system to record and track the status of all active SPBPP applications. Form 4910-3 is also available online at: https://www.ncforestservice.gov/forest_health/fh_spbpp.htm

Districts will submit applications to the Central Office when projects can be started without delay.

If the property is sold before the work is started or completed and the new owner wishes to follow through with the project, a new application must be submitted by the new owner. The original application will be canceled. If

the new owner does not wish to continue a project that has been started, no cost share will be made for any work completed.

Applicants wishing to obtain funding through the services of an agent (consulting forester, farm manager, trustee, or other) must complete Form 4225-4910, "Power of Attorney for N.C. Forest Service Assistance". To use this form with SPBPP, complete item #7, "Other (specify)", by filling in the wording "actions pertaining to SPBPP, Southern Pine Beetle Prevention Program". Once completed the <u>original</u> is sent to the C.O., one copy is given to the "principal" (the landowner), one copy to the "attorney-in-fact" and one copy is placed in the landowner's project folder at the District Office.

Allocation of SPB Prevention Program Funds

Allocations will normally be made "first come, first served", based upon the date of receipt of the application in the Central Office. Allocations will be equally available across the three NCFS regions.

Upon certification of the availability of funds and allotment to the project, the District Office and the applicant will be notified. If allotment cannot be made due to insufficient funds, the District Office will be notified as to the status of the application. The District is responsible for notifying the counties on project status.

Work will not be authorized for cost sharing until written notice has been received of allotment of funds to the project.

An exception to the written notice requirement may be made to facilitate timely thinning by available contractors. Verbal approval may be given if a SPBPP application is on file in the Central Office awaiting written notice. Verbal approvals will be followed by a FAX to the district, within 24 hours, verifying the verbal approval.

Projects completed without either verbal or written approval will not be cost shared. Payments will not be processed until the landowner and District Office has received written approval.

Revision of Approved Projects

Changes in recommended practices may be made after an application has been submitted or approved. This should only be necessary when unforeseen circumstances have occurred. In such cases, an amendment to the management plan must be made and approval received from the Central Office prior to starting work.

Should changes in completed practices occur without the knowledge of NCFS personnel, requested revisions must show need, be justified, and receive approval of the ARF-FM. The practices must be a satisfactory alternative to those originally approved and performed satisfactorily. The revisions must be made and approved by the C.O. prior to any request for payment. Note: This should be treated as an exception rather than accepted procedure.

The authorizing forester will notify the Central Office by memo of the requested changes to the original application. If additional cost share is required, and funds are available, revisions will be allowed to increase the acres and/or allotted amount.

If additional cost share is required and funds are <u>not</u> available, the acres will have to be reduced to coincide with the original amount of cost share approved. Should this not be acceptable to the landowner, the application should be canceled and a new one submitted for approval.

If approved and funded, the district and landowner will receive a revised allocation letter reflecting the change in practice(s) and funds. Work may start on the revised project, or payment may be requested as soon as this notification is received. The district is responsible for notifying the counties on project status.

Cancellation of Projects

If the project has not been funded, a telephone call or note from the district office to the C.O. will be sufficient to remove the request from the files. A note to the district and county file is needed to document the reason for cancellation.

If cancellation is necessary after the project is funded, the original application sheet (pink) should be marked "cancel" by the forester and sent to the C.O. The canceled form should include the canceled date and forester's initial(s)/signature. The reason for cancellation should also be noted on the canceled form. This information will be included in the letter sent to the landowner by the C.O. Prior to canceling a funded project, the landowner or his/her agent will be notified by the forester either in person or by phone to alert them of the cancellation.

Completion of Projects

The District Forester will designate, in writing, those foresters, county rangers, and management technicians who may certify satisfactory completion. For certification of completion, the landowner must notify the NCFS that the practices have been completed, including those practices recommended in the FM plan to insure environmental protection. By signing item # 18 of Form 4910-3, the NCFS representative certifies performance and acreage; and accepts full responsibility for the measurements and that NCFS silvicultural and environmental standards have been met.

Full payment will be made following certification of all approved work.

A N.C. Forest Service representative must complete the performance section of Form 4910-3. Required items are 14, 15, 16, and 18 (See Appendix 2 or https://www.ncforestservice.gov/forest_health/fh_spbpp.htm for Form 4910-3). This form, along with the private contractor's invoice, or if the landowner did the work, a dated and signed statement of costs must be sent to the Central Office for payment.

When NCFS has contracted work in total or in combination with private contractors, Form 4910-3 and all invoices and related documentation will be sent to the appropriate Regional Offices. These offices will then forward the material to the Central Office for payment.

Payment will be made by applying the fixed rate per acre, or actual cost, whichever is less (see Appendix 1). Payment will not exceed the total amount eligible (see page 1 Eligibility and Limitations).

Invoices and acres certified as completed must correspond. Acres should be certified to the nearest acre or as outlined in Procedure 4225.61. However, invoices do <u>not</u> have to include acres - only cost. The acres certified by NCFS personnel as completed will suffice when no conflicting acreage figures are shown elsewhere.

Should it be necessary to hold payment requests or invoices to settle disputes, or other problems, it is the forester's responsibility to notify the landowner or agent that payment will be held up until the problem is resolved. The landowner will be notified, in writing, what specific actions are needed to correct the problem or resolve the disputed issue.

Forest Practices Guidelines and Best Management Practices Problems

All necessary BMP's will be implemented.

A landowner may submit an application for cost share assistance and be funded when a potential or actual Forest Practice Guidelines (FPG) violation or a Best Management Practices (BMP) problem is present on a tract. Landowners will be notified by the forester, in writing, that final payments will not be approved or made until FPG violations(s) have been corrected. This shall apply to the entire tract for which cost share assistance has been requested.

Professional judgment should be utilized when dealing with BMP problems that do not violate Forest Practice Guidelines standards.

On tracts where BMP problems occur after the NCFS has prepared or approved the plan, payments will not be made until the BMP problems(s) have been corrected.

When BMP problems exist prior to NCFS involvement, professional judgment will be used to correct the problem area(s). Other BMP costs, such as those for waterbars and seeding of roads will be at the expense of the landowner.

Time Limits on Use of Funds

Projects must be completed within one calendar year of the date funded (date on acceptance letter). Applications failing to meet these requirements will have funds withdrawn. A cancellation letter is sent to the landowner with a copy to the district office (see "Cancellation of Projects" above).

To make sure available funding is directed towards landowners who complete their projects in a timely manner, NCFS will not grant time extensions, except in extreme circumstances, beyond the control of the landowner and NCFS. If a project is not completed in the time stated on the cost share award letter, their award will be cancelled as outlined on page 4 and previously approved funds will be used to fund additional projects. If a landowner whose project has been cancelled still wants to complete his or her practice with SPBPP cost-share funds, he or she will have to re-apply for any available funds. If a waiting list is in place at that time, the new application will be added to the end of the waiting list.

Prevailing Rate Establishment

The rates for the coming fiscal year will be reviewed and recommended jointly by the Forest Health, Forest Management and the Regional Staff.

Appeal of Disagreements by Landowners

Landowners may appeal disagreements, disapproval of applications, or decisions on unsatisfactory completion of silvicultural or environmental practices in the manner established in the North Carolina Administrative Code, Title 15, Sub-Chapter 1B, Section .0200.

Recordkeeping

Accomplishment records will be compiled in the Central Office for those practices completed in each county. However, districts should report accomplishments along with all other forest management activities through the regular reporting system. Documentation of projects will be done as outlined in Procedure 4220.

Handling Activities That are Inconsistent with the Forest Management Plan

The NCFS needs to be aware of SPBPP project areas that are destroyed or not maintained according to the management plan. When a Program stand is destroyed or not maintained according to the management plan, the District should initiate recapture procedures as follows:

- (1) Notify the Central Office FM Section Chief, in writing, and provide project information.
 - landowner's name, current mailing address, and phone number
 - SPBPP application number
 - present condition of the project, and number of acres destroyed or affected
- (2) CO will contact the landowner and handle the collection process, with assistance from LE as needed.

Approved Practices

<u>Pre-Commercial Thinning</u>: Felling or deadening, made in an immature stand, to reduce stand density and improve the growth and form of the remaining trees. Eligible stands must have more than 700 pine stems per acre (if the stand is mixed pine and hardwood, then >70% of stems must be pine). Stands will be reduced to 300-450 stems per acre after completion of these practices. White pine stands can also qualify if the basal area is 150 square feet or more. Stands will be reduced to 90 square feet of basal area or less.

Eligible Age	Pre-Treatment	Post-Treatment	
Practice	Crop Trees	Condition	Condition
Pre-commercial	12 Years	700+ pine stems/acre	300 - 450 stems/acre,
thinning of southern	maximum		depending upon age;
yellow pine			450@ age 3, down to
			300 @ age 10
Pre-commercial	30 Years	700+ pine stems/acre	300 - 450 stems per/acre or
thinning of white	maximum	or 150+ square feet of	90 sq. feet of basal area or
pine		basal area	less

Sub-practices:

¹⁾Chemical Control -- Ground: The use of herbicides applied from the ground to reduce pine stocking and improve stand vigor

²⁾Mechanical Control: The use of hand tools or machines to reduce pine stocking and improve stand vigor.

Appendix - 1

SPB PREVENTION PROGRAM 2023 RATES FOR SUB-PRACTICES

Practices are paid either actual cost or listed flat rate, whichever is lesser (Dollar cost per acre)

	Coastal Plain and Piedmont (NCFS Regions 1&2)	Mountains (NCFS Region 3)
 Pre-Commercial Thinning Chemical Control (ground) Mechanical Control 	\$100 \$100	\$100 \$100

<u>Appendix – 2</u>

A fillable form may be downloaded at:

https://www.ncforestservice.gov/forest_health/fh_spbpp.htm

Form 4910-3											
FORESTRY COST-SHARE FUNDING APPLIC			ATION PROGRAM NAME:					APP#			
1) Landowner name, address, phone and email			2) Type	3) Tract Name		4) District		5) County		Distribution:	
			Individual]						Sent for Funding:	
			*Joint Owner	wner Latitude						Scheror randing.	
		Corporation	rporation		6) Fiscal Year		7) Soc. Sec./Federal Tax ID				
		Association	Longitude						Sent for Payment:		
			шс 🔲								
Power of Attorney - Name:			Trust			-				_	
1a) Consultant/Agent name, address, phone and email		*2a) If joint ownership, list additional owners:				The N.C. Forest Service is a division of					
							N.C	. Department	tment of Agriculture		
								WORTH CAROLINA	& Consume	& Consumer Services Steve Troxler,	
								FOREST			
						(NAC) Commissioner					
									OS STEEL PROPERTY.		
PRACTICES NEEDI	ED		PERFORMANCE REPORT								
9) Description of Bractices	9) Acres	10) Prevailing	14) Acres	15) Date	16) Total Cost of Work Completed		17) Actual Total		18) I certify that work has been performed		
8) Description of Practices	Needed	Rate	Completed	Completed	By NCFS	By Others	Cost/Acre		satisfactorily and meets requirements of the approved Forest Management Plan		
									+		
TOTAL ACRES											
**A completed State of North Carolina Substitu	te W-9 form v	vill be require	d, along with	all associated	invoices for c	ompleted pra	ctices.				
11) This certifies that I (a) am an eligible landowner a	and understand	that this means	s a private indiv	idual, group, as	sociation or con	poration owning	a land su	itable for forest	ry purposes, and	d where forestland	
is owned jointly by tenants in common or other type of	f joint ownershi	ip, the joint own	ners shall be con	nsidered as one	eligible landow	ner and (b) I in					
practice(s) described above and those environmental	protection meas	ures related to	the practice(s)	on land owned	by me as outline	ed in the					
Forest Management Plan Approved by			on								
12) Recapture clause - I agree to refund all or part as stated in the Forest Management Plan, or (c) volun agree in writing to properly maintain the practice(s) for	tarily relinquish	control or title	to the land on v								
13) I have not yet started this practice(s) and, that any statement certified by me or my Agent and repayment of any funds received under terms.	with Power-o	f-Attorney in									
			(0.1)							(a. 1)	
Signature of Landauper or Depressent	Air	Title	(Seal) _	Dete	C:		C	or/Doprocontatio	(Seal)	