



State of Alaska Western Bark Beetle Initiative Individual Private Landowners Cost-Share Program Guidelines

Introduction

Alaska is home to a variety of bark beetles, though the vast majority are of little consequence. There are a few exceptions, including two of our most devastating spruce-killing bark beetles: the spruce beetle (*Dendroctonus rufipennis* - SB) and the northern spruce engraver (*Ips perturbatus* - IPS). The spruce beetle can be especially damaging when outbreaks occur, such as is presently occurring in much of Southcentral Alaska and famously occurred on the Kenai Peninsula and in the Copper River Valley in the 1990s.

In 2018, U.S. Forest Service – Forest Health Protection transferred administrative responsibilities for their long-running Western Bark Beetle Initiative (WBBI) to the State of Alaska, Department of Natural Resources, Division of Forestry (DOF) – Forest Health Program. The WBBI program provides cost-share assistance for approved bark beetle prevention, suppression, or restoration practices.

Eligibility and Limitations

The funding for this cost-share program is directed towards individual private landowners (5-499 acres owned). If you own 500 or more acres, please see the Large Acreage Landowners Cost-Share Program Guidelines or contact DOF to see which program is the best fit for you.

Eligible private landowners must own a minimum of five (5) contiguous acres, though the proposed project may occur on a subset of the overall acreage of the property. Some large landowners may manage property across several smaller individually managed administrative units. In these cases, individual administrative units meeting the minimum and maximum acreage requirements may be eligible to submit individual project proposals. Individual administrative units under five (5) acres may also be combined to meet the minimum acreage requirement.

This cost-share program requires a **1 to 1 non-federal funding match**, which is accounted for in the flat reimbursement rates for each type of forestry practice (*refer*

to the DOF WBBi Rate sheet, available separately). For projects awarded to landowners owning 499 acres or less, cost-share reimbursement will not exceed \$10,000 per project, which equates to a maximum project cost of \$20,000 total.

This funding is not authorized for projects consisting solely of removing hazard trees, which are beetle-killed trees that are no longer actively infested. Hazard trees may be removed during approved project operations only to allow for the safety of project personnel. No trees felled using this funding may be sold for monetary gain. No federal funding may be used to match this funding.

Approval for funding requires verification by a DOF Forest Health Program representative or their designee of the need for bark beetle prevention, suppression, or restoration on the requested property. Typically, this need would be determined via a visit by a DOF representative to the property. The DOF may, at its discretion, approve projects in remote areas without conducting an on-site inspection if suitable supporting information is available to determine eligibility.

Upon determination of eligibility, DOF staff will provide the landowner a brief Bark Beetle Management Notice, listed as the Management Notice herein and described in more detail elsewhere in this document. The Management Notice will contain the landowner's objectives or goals with the property, a brief description of the forest type, current bark beetle activity (if present), and recommended management practices.

The approved practices for cost-share reimbursement will be listed under "Practice Approval" on the "Approval and Completion Report." The requirements for implementing the practices will be listed on the "Practice Requirements" worksheet. **If the landowner does not follow the Practice Requirements, the landowner may not receive reimbursement.** Approved practices and resulting maximum allowed cost-share reimbursement rates will be on a per acre basis, per tree basis, or based on paid invoices as outlined in the Western Bark Beetle Initiative Rate Sheet found herein. Landowners who accept WBBi funding agree to allow periodic inspection of recommended practices by DOF staff. Other than the initial inspection, final inspection and possible interim inspections, **no work will be undertaken by the State on non-State lands** within this grant.

Forest land approved for funding through the WBBi must not be converted to non-forest for a period of five years. If converted to non-forest within five years of project completion, WBBi funds must be returned to DOF.

Approved projects must follow all federal, state, and local laws and regulations. It is the responsibility of the landowner to obtain any necessary permits or authorizations, including but not limited to those required by the Division of Forestry under the Forest Resources & Practices Act, the Alaska Department of Fish and Game habitat permits for activities in fish-bearing streams, and the U.S. Army Corps of Engineers for Clean Water Act Section 404 compliance. Landowners must utilize forest practices that protect fish habitat and water quality as well as promote forest regeneration.

Any chemicals used in the recommended practices must be:

- Federally and State registered,
- Applied in accordance with all applicable labeling and local regulations,
- Applied as recommended in the Management Notice,
- And applied by a licensed pesticide applicator.

Pesticide treatments on mass-attacked trees, with unapproved chemicals, or applied to lower tree heights than recommended will not receive reimbursement.

Landowners must understand that actions taken pursuant to this grant do not eliminate the potential for future bark beetle issues on the treated property.

Allocation of WBBF Funds

Allocations for funding to individual private landowners will be made on a first come, first served basis, based on the date of receipt by DOF Forest Health of the signed application form. If multiple applications are received in a given day, applications may be prioritized based on proposed project locations within areas of priority interest to the State.

Project work begun before official funding approval will not be eligible for cost-share reimbursement, nor will projects completed outside of the recommended seasonal timing. Funding approval will be provided via email or mailed letter.

Revision or Cancellation of Approved Projects

Unforeseen circumstances may necessitate landowner-requested changes to approved projects or project cancellation. Requests for changing or cancelling approved projects should be submitted to DOF Forest Health for approval and will be evaluated on a case by case basis.

Applying for Funding

Funding guidelines and application materials, as well as funding exhaustion, will be documented on the DOF website at <http://forestry.alaska.gov/insects/grants>. The application period begins April 1, 2020 and will continue until funding is exhausted.

Application materials may be submitted by mail to:

Division of Forestry – Forest Health Program
550 West 7th Ave, Suite 1450
Anchorage, AK 99501

Or emailed to: WBBF@alaska.gov

Eligible Practices

The following practices are eligible for cost-share when done in accordance with the Practice Requirements. Practices will be approved on a site-specific basis based on the forest health needs and likelihood of effectiveness. Other practices for mitigating spruce

beetle, northern spruce engraver beetle (lps), or other bark beetles may be approved for cost-share on a case by case basis at the discretion of DOF Forest Health staff.

Practice*	Practice Type	Bark Beetle Targeted
Carbaryl-based pesticide spray	Prevention	Spruce beetle/lps
Pruning of lower branches of susceptible spruce	Prevention	Spruce beetle only
Thinning of overstocked spruce forests	Prevention	Spruce beetle/lps
Harvest and processing of infested spruce AND/OR recently down or damaged spruce	Suppression	Spruce beetle/lps
Chipping	Suppression	Spruce beetle/lps
Debarking	Suppression	Spruce beetle/lps
Burning (in accordance with regulations)	Suppression	Spruce beetle/lps
Milling & Destruction of bark slabs	Suppression	Spruce beetle/lps
Split & Stack for firewood, Maximize Airflow	Suppression	Spruce beetle/lps
Bait and burn of log piles	Suppression	Spruce beetle/lps
Buck into manageable bolts, tightly stacked	Suppression	lps only
Site preparation and native tree planting	Restoration	Spruce beetle/lps
Release of established spruce seedlings and saplings	Restoration	Spruce beetle/lps

** Note that the cost-share eligibility of some practices may vary based on localized beetle populations or geographic location.*

Approved Practice Timing

The bark beetle mitigation/restoration practices recommended require strict adherence to seasonal timing in order to maximize effectiveness. For example, a rough estimation of the spruce beetle life cycle timing by month is shown in the table below. Treatments that create fresh green spruce slash, wood chips, whole logs, or other fresh spruce material during or immediately preceding the spruce beetle flight period are likely to be highly attractive to emerging spruce beetles in May (“Adult Flight”, in the table below), which could exacerbate spruce beetle issues on the property. As such, treatments involving the cutting of green-attacked or recently damaged spruce should be completed well outside of the spruce beetle flight period. Conversely, preventive Carbaryl-based pesticide sprays should be conducted closely preceding the spruce

beetle flight period. Landowners receiving WBB cost-share assistance must adhere to required timing for project operations.

Approximate spruce beetle life cycle timing in Southcentral Alaska provided for reference

		Year 1												Year 2												
		Life Stage/ Treatment	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Life Cycle Timing in Southcentral Alaska ¹	2-year	Adult flight					■	■	■																	
		Egg						■	■	■																
		Larva						■	■	■	■	■	■	■	■	■	■	■	■	■						
		Pupa																		■	■	■	■	■		
		Adult*																		■	■	■	■	■	■	■
	1-year	Adult flight					■	■	■											■	■	■				
		Egg						■	■	■																
		Larva						■	■	■																
		Pupa									■	■														
		Adult									■	■	■	■	■	■	■	■	■	■						

¹ Estimated from Werner, R. A., & Holsten, E. H. (1985). Factors influencing generation times of spruce beetles in Alaska. Canadian Journal of Forest Research, 15(2), 438-443.

Bark Beetle Management Notice

Each landowner will be sent a short Management Notice following the site visit by DOF staff that describes the recommended practices. The practices will also be discussed with the landowner while DOF staff are on site. The Management Notice is intended to provide information to help every landowner meet their objectives and goals for the property, regardless of whether their property qualifies for cost-share funding following the site visit. DOF Forest Health may determine that the property would not benefit from the eligible cost-share practices, in which case the landowner will receive a Management Notice but will not receive cost-share funding. Also, the Management Notice may recommend practices that are not eligible for cost-share reimbursement under the WBB Program at this time. At a minimum, the Management Notice will contain:

- Landowner name & contact information
- Date of site visit
- Description of property location
- Landowner's objectives or goals for the property
- Description of the forest type

- Description of current bark beetle activity (if present)
- Recommended management practices & timing of practices
- Do Nothing option (what is likely to occur if no mitigation takes place)

A sample Management Notice is available at the end of this document.

Grant Agreement and Practice Requirements

If DOF Forest Health determines that the property qualifies for cost-share practices, in addition to the Management Notice, DOF will also send a Grant Agreement and Practice Requirements worksheet to be signed by the landowner and returned to DOF. The Grant Agreement will specify the approved practices for cost-share reimbursement and the maximum allowable reimbursement. The Practice Requirements must be followed in order to qualify for reimbursement.

Completion of Projects

All project work must be completed by the **Funding Expiration Date specified in the Grant Agreement**. Projects not completed by the Funding Expiration Date will be canceled and a cancellation letter will be provided to the landowner.

To certify completion of the work, the landowner must notify DOF Forest Health upon project completion. DOF staff may inspect the project site to confirm the practices have been completed satisfactorily and are responsible for certifying the work as complete. Inspections will be completed as quickly as schedules allow. Where applicable, acreage of completed projects will be rounded up to the nearest whole acre.

After DOF staff have confirmed the practices have been completed satisfactorily and the landowner has supplied the request for reimbursement and any necessary receipts and documentation, DOF will pay the reimbursement.

Reimbursement payments made pursuant to this agreement are reported to the Internal Revenue Service as income to the landowner and must be reported on tax filings. The State will issue an IRS 1099 Statement of Earnings reporting form to the landowner.

Requesting Cost-share Reimbursement

Reimbursement must be requested by the landowner within 30 days of completion. Please use the following checklist of required information that must be submitted in order to receive reimbursement:

- _____ A complete, signed, and approved cost-share application
- _____ For any pesticide spraying, a **paid** contractor invoice outlining the work completed.
- _____ A complete Substitute Form W-9, if not already on file with the State

Substitute Form W-9 is available here:

http://doa.alaska.gov/dof/forms/resource/sub_form_w9.pdf or can be printed and mailed to the landowner by request.

Payment

Full reimbursement will be made once DOF has verified the work is complete and the required documentation has been received according to the terms of the Grant Agreement.



SAMPLE

Bark Beetle Management Recommendation Notice

Landowner: Wiley Beedel

Date: September 1, 2020

Contact Information: *phone, email*

Property Size and Location: Property is 8 acres located in the eastern Matanuska-Susitna Valley near the intersection of the Glenn Highway and X road.

Property Description: The property is forested, comprised of a mixture estimated at roughly 30% white spruce, 10% black spruce, and 70% paper birch. A small stream runs through the southeast corner of the property and the property has a well-established network of ATV trails. The live white spruce on the site range from saplings to near-mature trees and average about 10 inches diameter. The majority of white spruce over 12 inches diameter have been killed by spruce beetle.

Landowner goals: Reduce spruce beetle pressure on the property and reduce likelihood of remaining unattacked trees becoming attacked. Maintain a mixed species forest and protect water quality.

Current bark beetle activity: Currently, pressure is moderate to high on the property. About 80% of the mature spruce trees on the site have been killed by spruce beetles. Many trees down to about 6 inches diameter are currently infested and scattered unattacked white spruce are present. No attacked black spruce were observed.

Management Options (Select preferred practices):



- A)** Conduct a sanitation harvest. Fell all actively infested spruce trees and process infested material. Processing options include: limbing and debarking logs, burning, chipping, milling, or using the material for firewood. If using for firewood, material must be cut to length, split, and stacked for maximum airflow.

Must be completed between August and March

Grantee initials_____

- B) Hire a licensed pesticide applicator to apply preventive pesticides to high value **unattacked white spruce trees 7-8 inches in diameter or greater**. Approved pesticides include carbaryl-based sprays. Trees must be treated to at least 40 feet or until trunk diameter is less than 5 inches. If applied correctly, one application can provide at least two years of protection.

Must be applied by a pesticide applicator licensed in an appropriate category in the spring before adult beetle flight and when temperatures are suitable for application. Note that all pesticides must be applied according to their labeling.

No management: Landowners may opt to let the natural processes continue in their forest. By doing no management, additional trees will likely succumb to spruce beetle attack in subsequent years until the beetle outbreak has subsided. Dead trees left standing may become hazards if adjacent to any structures or infrastructure.

General Notes

Mr. Beedel reports that he has a chainsaw and portable sawmill available and plans to complete the work himself with the assistance of family and friends.

Signature:

DOF Representative: _____ Date: _____

Printed Name, Position: _____