



OMINECA REGION

GUIDELINES FOR SPRUCE BEETLE TREATMENT IN SPECIAL MANAGEMENT AREAS

1 Background

Special management areas serve a role in conserving important wildlife habitat and areas with sensitive or significant values. Bark beetles play an important role in the creation and maintenance of many forest ecosystems. As such, consideration of non-timber forest values is critical when assessing the need to undertake management activities. Treatment for spruce beetle in these areas must balance the needs to suppress beetle populations with the need to maintain the other identified values.

These guidelines apply to special management areas, specifically: Old Growth Management Areas, Landscape Biodiversity Areas, Critical Fish Areas, Fisheries Sensitive Watersheds, Wildlife Habitat Areas and Ungulate Winter Range.

This document does not supersede the need to comply with:

- Land Use Objectives (<https://www.for.gov.bc.ca/tasb/SLRP/legal-direction/>)
- Government Action Regulations: http://www.bclaws.ca/civix/document/id/complete/statreg/582_2004
- Approved Ungulate Winter Range: http://www.env.gov.bc.ca/wld/frpa/ugwr/approved_ugwr.html
- Approved Wildlife Habitat Areas: http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=show_approved
- Approved Fisheries Sensitive Watersheds: <http://www.elp.gov.bc.ca/wld/frpa/fsw/approved.html>
- Section 7 Notices for Species At Risk: <http://www.env.gov.bc.ca/wld/frpa/notices/sar.html>
- Section 7 Notices for Ungulate Winter Survival: <http://www.env.gov.bc.ca/wld/frpa/notices/ugwr.html>

2 Guidelines

Beetle Management Units (BMUs) are established province-wide as a basis for developing strategies for the management of major bark beetles, including spruce beetles. Each unit identifies an area where defined forest health strategies can be applied (for definition, see the Omineca Forest Health Strategy 2016, available at https://www.for.gov.bc.ca/hfp/health/TSA_strategies.htm). Therefore, the treatment options for special management areas are dependent on the objectives for that BMU. Generally, the use of conventional trap trees or no-harvest treatments, are preferred options to address spruce beetle in special management areas.

2.1 Prerequisites to Treatment

Before any treatments (trap trees or harvest) are implemented in special management areas, a rationale must be provided to the FLNRO District Manager in your jurisdiction that demonstrates:

- 80-100% of the known beetle infestations on crown provincial forest land within the BMU have been addressed ('addressed' equates to use of conventional trap trees or sanitation harvest); *and*
- all known infestations on crown provincial forest lands within 500 m of the infested other forest value area have been addressed ('addressed' equates to use of conventional trap trees or sanitation harvest).

2.2 Government Action Regulation Orders

2.2.1 In areas covered by an order under the Government Action Regulation (GAR), which prohibits or restricts the construction of roads or harvesting, a rationale needs to be provided. The rationale must demonstrate the impact of spruce beetle mortality on the given value is greater than the impact of harvesting. If timber harvesting and road construction are deemed necessary, they must be conducted in accordance with the General Wildlife Measures (GWM). Where adherence to the order is not practicable, an exemption to the GWM must be obtained through the Landbase Stewardship Division of FLNRO and may be signed off by the Regional Executive Director. Exemptions will require that material adverse impacts on Caribou within in each Ungulate Winter Range do not occur.

2.2.2 Where impacts of spruce beetle are not demonstrated to be greater than the impact of harvesting, yet the infestation is demonstrated to pose a significant risk to the adjacent working forest then harvesting should proceed as indicated in Section 3 (Treatment Options).

2.3 Draft or Proposed Government Action Regulation Orders

In areas covered by draft or proposed orders it is recommended that the proposed GWM's or objectives are followed. Where adhering to the GWM or objective is not practicable, licensees are to work with Landbase Stewardship Division of FLNRO to meet objectives.

2.4 Old Growth Management Areas and Landscape Biodiversity Areas

In Old Growth Management Areas (OGMAs) an assessment of timber and biodiversity values must be done regarding the impact of harvesting or not harvesting the particular OGMA or portion of the OGMA. Where an OGMA, or portion of the OGMA, is proposed to be harvested, a replacement area must be identified and endorsed by FLNRO District Stewardship staff or the Regional Old Growth Specialist, prior to harvesting.

In Landscape Biodiversity Areas (LBAs) there may be slight changes (<5% of the polygon) to the boundaries of the polygon area to incorporate operational issues. If polygons are impacted (area reductions), replacement areas of equal or better value will be identified. These changes will be tracked and the information provided to the Government Landscape Objective Working Group or a government designate by August 31 of each year, for the period ending March 31 of that same year. If more than 5% of a LBA polygon are impacted by harvesting, an assessment of timber and biodiversity values must be done regarding the impact of harvesting or not harvesting the particular portion of the LBA. Where greater than 5% of the LBA is proposed to be harvested, a replacement area must be identified and endorsed by FLNRO District Stewardship staff or the Regional Old Growth Specialist, prior to harvesting.

3 Treatment Options

3.1 Conventional Trap Trees

Trap tree sites can be utilized within special management areas providing that the objectives or GWM's are met. If used, trap tree sites should be located on the periphery of special management areas. It is the discretion of the District Manager to approve the use of trap trees within special management areas as per *Omineca Region Guidelines for Establishing Conventional Trap Trees (March 2015)*.

3.2 Sanitation Harvest

Sanitation harvest for spruce beetles should only be considered where significant areas of susceptible stands are located within 800 m (the average maximum flight distance of spruce beetles) of the infestation edge, in the special management area.

3.3 Windthrow/ Blow Down

Windthrow patches within special management areas of greater than five spruce trees should be treated as trap tree sites if they are a threat to surrounding forests, and removal meets the objectives and GWM in place. Windthrown trees infested with beetles should be removed and processed prior to the next beetle flight.

4 Monitoring of Bark Beetle Suppression Activities

FLNRO will be responsible for monitoring treatment commitments, effectiveness of beetle suppression, stand level prescriptions and treatment, and post-harvest blow down. Monitoring efforts will be used to assess:

- implementation success of treatment commitments;
- implementation of recommendations in this guideline;
- the effectiveness of treatments on spruce beetle populations; and,
- the impact of harvest treatments on non-timber values within special management areas.

5 Deciding on the Appropriate Treatment Option

Treatment decisions in special management areas are complex. The following decision trees were developed to identify appropriate treatment options.



For additional information on spruce beetle suppression, please contact your local FLNRO office.



Decision Tree: Spruce Beetle Management within Special Management Areas

