

Policy Name: Incentives for the Harvest of Killed or Damaged and Low Volume Areas Policy		
Effective Date: June 1, 2021	Revision Date: N/A	Approved By: NFMC Board of Directors

1-Policy Intent

This Policy’s intent is to promote the harvest of killed, damaged and/or low volume stands across Nawiingnokiima Forest Management Corporation’s (NFMC) management area. More complete harvesting of approved harvest areas will result in positive short-term benefits for local contractors and mills, and medium to long-term benefits for forest sustainability and regeneration of NFMC managed forests. This Policy is not intended to subsidize forest operations across the NFMC management area. Should NFMC, at its sole discretion, determine that a proponent’s application does not meet the intent of this Policy, the application will be denied.

2-Policy Background

Forest stands which are killed, damaged, and/or are low in volume are commonly left unharvested due to the economic constraints related to their access, harvesting, and processing costs. Over the medium to long-term this practice results in negative impacts to sustainable forest management activities. NFMC intends to issue reductions to Timber Sales Charges to incentivize harvest opportunities in either killed, damaged, and/or are low volume forest stands across the NFMC management area.

Applications will be completed and submitted by proponents (Forest Operations Agreement (FOA) holder) in collaboration with NFMC. NFMC will review applications submitted to determine if the application meets the intent of this Policy. If NFMC deems the application to be true and reasonable, an applicable timber charge rate reduction will be identified, and the proponent’s application will be approved. NFMC will work with the proponent to ensure there is an appropriate, defensible, and transparent method of operationalizing and tracking the timber charge rate reduction. This includes oversight provided by the proponent and NFMC to ensure compliance with the Forest Management Plan (FMP) and this Policy. Nothing in this Policy violates or requires additional considerations from a FMP implementation perspective. However, harvest of killed or damaged and/or low volume stands will be reported in Management Unit Annual Reports. Silvicultural renewal of these areas will be completed commensurate with regular renewal programs. For areas identified as killed or damaged, additional funding be sought through Forestry Futures Trust (FFT).

3-Policy Purpose

The NFMC intends to issue reductions to Timber Sales Charges to enhance harvest opportunities in either killed, damaged and/or low volume harvest allocations across the NFMC management area. This Policy is planned to yield positive results across operational and environmental services perspectives.

Operationally, forest stands which are killed, damaged and/or are low volume are commonly left unharvested due to the financial constraints related to stand access construction, harvest, and

processing costs. Over the medium to long-term this practice results in negative impacts to sustainable forest management activities. Whereby non-harvested stands are not silviculturally renewed and left to natural succession. Considering the absence of natural forest fires, natural succession in killed or damaged and low volume stands, often promotes undesirable stand conditions containing more brush, and/or non-commercial species than planned in the FMP). Subsequently, these non-harvested areas are often re-allocated in future FMPs, causing a more non-cohesive harvest allocation, resulting in higher operating costs and the creation of harvest patterns that conflict with the desired forest condition.

Environmentally, the deferral of damaged or low volume stands contributes to negative impacts on environmental goals and ecosystem services. A core objective of forest management planning is to enhance or maintain ecosystem services. Examples of forest ecosystem services include providing water filtration, providing habitat for flora and fauna, and in recent years, also includes carbon sequestration for climate change mitigation. These objectives are measured at various scales, but it is important to note that the arrangement of forest management activities across the landscape has an affect on the achievement of these goals. In short, to achieve the maximum amount of ecosystem services from a FMP, harvest and renewal must be complete. Not harvesting damaged or low volume stands “orphans” those stands whereby they will not positively contribute to the planned arrangement of management activities, thereby reducing the value of future ecosystem services.

Providing a viable means of harvesting and renewing these killed, damaged and/or low volume stands concurrent with normal harvest offers the best alternative to avoid incurring the negative impacts of avoiding, bypassing, or deferring these stands. Additionally, complete harvest of planned areas is considered a core principle of sound forest management.

4. Policy Criteria, Requirements, and Definitions for Reductions to Timber Sales Charges

The direction, standards, and procedures within this Policy are based on two Ministry of Natural Resources and Forestry’s (MNRF) documents: *Authorizing the Harvest of Killed or Damaged Forest Resources (Salvage) (2000)* and *Report of the Forest Accord Item #11 Committee to the Ontario Forest Accord Advisory Board (2000)*. See Section 10.0 for full references.

This Policy is based on the following conditions, requirements, and definitions:

1. The Policy is planned and implemented on Crown land managed by NFMFC, either under a Sustainable Forest License (SFL) or Forest Resources License (FRL).
2. The Policy is being applied to areas within the bounds of approved harvest operations in the applicable FMP. The Policy is applied to areas within an approved Annual Work Schedule (AWS) and the Conditions on Regular Operations (CROs), and application of Area-of-Concern (AOC’s) principles are followed as directed by the FMP.
3. “Timber Sales Charges” means minimum price and residual charges with residual value price consistent with the Ontario Crown Timber Sales Charges table (also referred to as the Stumpage Matrix) for the applicable period.

4. Timber Sales Charges are set by NFMC.
5. “Merchantable Volume” means merchantable wood as defined by the Scaling Manual prepared under the (CFSA), section 68, and approved by the regulations, including amendments to the Manual approved by the regulations.
6. Killed or Damaged stands are defined as:
 - a. Killed forest resources having complete lack of normal physiological function.
 - b. Damaged forest resources having been disturbed by physical or biological agents so as to impair their normal physiological function.
 - c. Killed or damaged forest resources that have been affected by the natural causes of wind, fire, flood, insects or disease. Causes must be natural; death or damage of forest resources attributable to previous harvest operations does not meet the intent of this procedure.
 - d. Stands where at least 50 percent of the forest resources have been:
 - i. Killed or,
 - ii. Damaged in such a manner that death is likely to occur within two to five years or,
 - iii. Damaged to an extent that prohibits the production of merchantable forest resources (e.g. broken tops in young timber that will prevent future growth into merchantable products) and where harvest operations will not cause injury to existing forest regeneration that could prevent normal forest stand development.
7. Low volume stands are defined as:
 - a. Low volume stands are defined as stands managed under a clear-cut silvicultural system with less than 45 m³ per hectare (<45m³/ha) of merchantable conifer and lesser than 65 m³/ha of all merchantable species.
 - b. At the sole discretion of NFMC, there may be adjustments to the definition of low volume stands (8a) based on marketability considerations determined on a case-by-case basis.
8. If the above conditions are met, reduction to Timber Sales Charges will be considered to a maximum reduction of:
 - a. 75 percent for killed or damaged stands.
 - b. 40 percent for low volume stands.
9. Timber Sales Charge reductions will only apply to NFMC Timber Sales Charges.
 - a. Crown dues collected through FFT (CFSA S. 51(5)), and FRI charges will not be reduced.
 - b. Crown dues associated with forest renewal (renewal rates) will not be reduced.
 - c. NFMC management fees will not be reduced.

5. Rate Reduction Categories

This Policy covers two distinct categories where an application for reduction timber sales rates may be considered:

- a. The first category considers killed or damaged forest stands as defined by section 4, point 6.
- b. The second category considers low volume forest stands as defined by section 4, point 7.

6. Policy Process

6.1 Application

Applications for timber sales rate reductions will be prepared by the proponent and will provide the information listed below:

1. Definition of area - the proponent will identify and define the area proposed for a reduction to Timber Sales Charges.
2. If applying for a killed or damaged reduction, an assessment of damage will be provided:
 - a. The proponent and NFMFC will jointly assess and determine the category of damage based on the extent and severity of damage. The reduction in Timber Sales Charges is dependent on two stand characteristics:
 - i. Extent of damage – this is the estimated percentage of killed or damaged timber in the area to be classified as salvage. It may be determined for an individual species (as in the case of balsam fir damaged by a spruce budworm infestation) or for all species (as in the case of a fire). Effort should be made to exclude stands of undamaged timber greater than ten ha in size when making this determination.
 - ii. Severity of damage – this is an approximation of the likelihood of survival of the damaged trees over time. For example, hot burns tend to result in mortality of the trees within one or two years, and generally would be considered severe. Insect infestations may require a number of years to induce mortality, and generally could be considered as causing moderate damage.
 - b. The combination of the two criteria above provides an assessment of how badly damaged the Crown timber is, and is used to arrive at the applicable percentage reduction to be applied to Timber Sales Charges. NFMFC will agree upon the methodology for determining the extent and severity of damage as defined above.
 - c. Based on the determined extent and severity of the damage, Table 1 will be used to direct an applicable reduction to Timber Sales Charges.

Table 1: Timber Sales Charges Reduction for Killed or Damaged Forest Stands

Extent of Damage	Severity of Damage	
	Severe (dead in 0-2 years)	Moderate (dead in 3-5 years)
>75 percent of the trees in the area affected	75 percent reduction by product sector and species	50 percent reduction by product sector and species
50 percent to 75 percent of the trees in the area affected	50 percent reduction by product sector and species	25 percent reduction by product sector and species
<50 percent of the trees in the area affected	No reduction	No reduction

3. If applying for a low volume reduction an assessment of the total merchantable volume by species will be included.
 - a. NFMC will determine a methodology for determining volume within the identified area.
4. Operationalizing and tracking – within the application, the proponent will suggest a method to operationalize and track the proposed timber sales charge reduction. Examples of methods to operationalize and track rate changes can be found in section 6.4 Operationalizing and tracking rate reductions.

6.2 Application Review

NFMC will review applications submitted by the proponent and conclude the application is true and reasonable. NFMC will work with the proponent to resolve any disputes related to the application.

NFMC will determine an appropriate reduction to Timber Sales Charges by category as follows:

1. Killed or damaged – as determined by Table 1.
2. Low volume – industry is to pay 60 percent of Timber Sales Charges:
 - a. 10 percent of Timber Sales Charges paid to NFMC Timber Sales Charges.
 - b. 50 percent of Timber Sales Charges directed to the applicable Forest Renewal Trust (FRT).

6.3 Application Approval

If NFMC finds the application to be true and reasonable, and an applicable Timber Sales Charges rate reduction is identified, then the NFMC will notify the proponent that the application has been approved.

6.4 Operationalizing and tracking rate reductions

As part of the application, the proponent will suggest a method of operationalizing and tracking the Timber Sales Charges rate reduction. The method for operationalizing and tracking rate reductions will be discussed by the proponent and NFMC. NFMC will consider and determine a final method for operationalizing and tracking timber rate reductions. Examples of methods to operationalize and track rate reductions are as follows:

1. Unique harvest approval - proposed area is uniquely identified (flagged separately in field) and harvested wood is hauled under a unique harvest approval. NFMC will source and issue approvals.
2. Proportional reduction by block – areas approved for Timber Sales Charges reduction are identified and timber rate reductions are proportionally applied to all wood hauled out of the harvest block.
 - a. In this example, timber charge rate reductions may be withheld during the operation. Timber charge reductions will be issued once the final harvest area is digitized and NFMC confirms the harvest of killed or damaged or low volume stands.

6.5 Compliance and Monitoring

The proponent and NFMC will monitor harvest operations to ensure compliance with standards included in the FMP, AWS, conditions within this Policy, and/or conditions on the timber charge reduction issued.

Regarding regular forest management compliance:

1. The standards included in the FMP and AWS (including AOC's, CRO's, road corridors and Operational Road Boundaries (ORB's) will be applied and monitored.
2. The harvest area licensee (typically the proponent) is responsible for completion of a Forest Operations Inspection Program (FOIP) report for the applicable Compliance Reporting Area (CRA).

Regarding compliance with this Policy:

1. The proponent and NFMC will monitor operations within the approved area.
2. If the operationalizing and tracking method depends on proportion of killed or damaged or low volume area harvested, then NFMC may withhold, or delay issuance of a Timber Sales Charges reduction until operations in that area are complete and harvest completeness determined by NFMC.
3. If the volume generated from a low volume area exceeds 45m³ per hectare (>45m³/ha) of merchantable conifer or >65m³/ha of all merchantable species, then the Timber Sales Charges reduction will not apply.
4. Should the proponent or NFMC have reason to believe any manipulation or tampering of harvest stands and/or this Policy's process is occurring, then the Timber Sales Charges reduction will not apply, and any rate reductions previously awarded may be retroactively collected. manipulation or tampering could include actions such as hauling wood from non-killed or damaged or low volume areas using the harvest approval issued under this Policy.

7. Forest Management Plan Considerations

This Policy applies only to forest stands within approved harvest allocations identified in an FMP and part of an approved AWS. Where it is desired to harvest killed or damaged forest stands outside of approved harvest areas, a salvage proposal will be submitted to the MNRF using the applicable ministry process.

8. Silvicultural Considerations

Renewal of harvested killed or damaged or low volume forest stands will occur commensurate with adjacent forest renewal (Silviculture). It is expected that silviculture in areas harvested under this Policy will likely require more intensive renewal packages to be applied. To balance the increase silvicultural costs:

1. Where a killed or damaged area was harvested, NFMFC will pursue an application to the FFT to assist and support that areas renewal programs.
2. As described in section 6.2 Review, 50 percent of Timber Sales Charges collected for low volume stands are directed to the applicable FRT account to support renewal programs.

9. Application Submissions

Applications are to be submitted to:

Carmelo Notarbartolo
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 P.O. Box 1479
 Marathon, ON P0T 2E0
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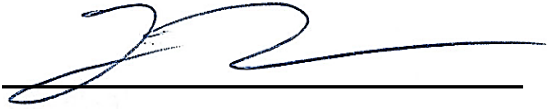
10. References

Author:	Ministry of Natural Resources and Forestry
Title:	Authorizing the Harvest of Killed or Damaged Forest Resources (Salvage)
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Compiled by:	Industry Relations Branch
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Date Approved:	May 4, 2000
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Dated:	March 2000

11. Policy renewal

As required.

12. Policy endorsement



Laird Van Damme, Chair
On behalf of the Board of Directors

June 1, 2021

Date