

DEPARTMENT OF FORESTS, PARKS, AND RECREATION

Procedure for the Management of Ash on ANR Lands in Response to Emerald Ash Borer

Date: February 1, 2021

Scope

This procedure will be used by the Agency of Natural Resources (ANR) staff who manage or provide oversight of the management of ANR Lands including State Forests, State Parks, Wildlife Management Areas, Fishing Access Areas, and DEC Lands in response to the presence of emerald ash borer (EAB) in Vermont. This procedure supports the planning and management of timber harvests, hazard tree mitigation, other vegetation management activities, and research across all land management classification units. The land classification units range from highly sensitive management to intensive management such as campgrounds, day use areas, and access areas. The guiding principles of the planning and management are to protect public safety; retain ash on the landscape; mitigate the impacts related to the decline of ash species; and harvest ash for educational, cultural, economic, and ecological values. This procedure is based on current science and values of Vermonters and the principles and strategies will be updated periodically based on new knowledge as EAB and ash management research continues.

Overview of Emerald Ash Borer

EAB is a non-native wood-boring beetle that attacks all native ash (*Fraxinus*) species. Ash species composition in Vermont includes white, green, and black ash, which are all susceptible to EAB. In February of 2018, EAB was discovered in Vermont and is expected to kill most ash trees. Survival of ash species ultimately depends on retaining genetic diversity within ash populations and allowing potential resistance to EAB to express itself. Research to develop new integrated pest management techniques is focusing on EAB population reduction, delaying ash mortality, and establishing biological controls to protect the next generation of ash trees.

Guiding Principles

It is the intent of the Agency to continue to recognize the value of ash as a species in our forests for its cultural, economic, and ecological contributions. The following guiding principles will be applied to the planning and management of ANR Lands in response to the presence of EAB:

Protect public safety.

- Safety of life and property supersede ash tree retention objectives.
- Ash trees in areas where people congregate and structures are maintained, should be monitored and managed to reduce the risk.
- Ash trees in campgrounds, day use areas and parking lots, and along roads and recreational trails that, if infested, would be a risk to public safety should be considered for removal prior to or early in a localized EAB infestation to mitigate the risk.

Retain ash on the landscape.

To perpetuate ash on the landscape, where retention or regeneration of ash can be compatible with reasonably achieving safety and vegetative management objectives, ash retention strategies should be incorporated into all harvests occurring on ANR land. Healthy, free-to-grow ash trees on productive sites for ash should be prioritized for retention. Strategies for integrating ash retention or regeneration are summarized below:

- Retain ash trees to support seed production and future regeneration potential:
 - Retain trees >6” diameter at breast height (DBH).
 - Retain both male and female ash trees for reliable seed production.
 - Retain groups of ash trees to increase odds of pollination.
- When conducting harvests, consider using silvicultural techniques that can regenerate a diversity of species including ash. Openings of .25 acres or greater are recommended for regenerating ash.
- Pesticide treatments to retain ash trees should be considered for:
 - Ash trees in high-use areas that may pose a risk to humans or property;
 - Ash trees that have been identified as high-value for aesthetic, cultural, ecological, or other values may be managed actively and protected with the use of a pesticide; and
 - Conducting research to help us better understand EAB and ash management.

Mitigate the ecological impacts related to the decline of ash species.

- Maintain or improve native tree species diversity when conducting silviculture and other vegetation management.
- Encourage the regeneration of a variety of native species. When silviculturally appropriate, incorporate regeneration techniques that promote a diversity of species and shade tolerance into the management strategy.
- Inventory regeneration inhibitors (native and non-native invasive plants, herbivory, etc.) and incorporate management strategies into silvicultural prescriptions.
- Evaluate state-significant natural communities for management opportunities that mitigate the impacts related to the decline of ash species in that community.
- Assess natural communities for the potential for hydrologic change due to loss of ash and consider management options and strategies to protect hydrologic function and water quality.

Harvest ash for educational, cultural, economic, and ecological values.

- Outside of areas where public safety is the primary objective of harvesting ash, all management will follow silvicultural guides.

- Consider the timing of harvests based on proximity to known infested area and EAB infestation levels to maximize economic potential of ash trees.
- Recognize the cultural value of black ash to indigenous communities when developing and implementing management strategies, through the use of SUPs, agreements, and utilization strategies, as appropriate.
- Residual stocking levels should recognize the potential for ash mortality and should be based on the non-ash component.

Implementation Guidelines

When conducting forest management activities on ANR lands, the following resources will guide management and align with the principles set forth in this Procedure: the Long Range Management Plan (LRMP), Land Management Classification (LMC) system, District Stewardship Team (DST), Annual Stewardship Plans (ASP), past management activities, licensed FPR foresters, an understanding of the current science, and the latest information on extent and locations proximity of known EAB infestations.

Planning on ANR Land:

The Long-Range Management Plans (LRMP) for various lands managed by the ANR and its associated departments utilize a Land Management Classification (LMC) system to broadly guide management activities. There are four broad categories that are informed by natural community type, various natural resource inventories, infrastructure, and legal considerations for each parcel. ANR's approach to ash management on ANR lands will be based on these LMCs. The four categories are:

LMC 1: Highly Sensitive Management

LMC 2: Special Management

LMC 3: General Management

LMC 4: Intensive Management

Overarching considerations:

- ANR will conduct all land management activities in accordance with state and federal laws as well as state policy.
- Utilization and transportation of ash harvested within a state designated EAB infested area will follow Vermont's Slow the Spread recommendations.
- ANR policy requires a Pesticide Use Impact Assessment (PUIA) be created and reviewed for approval of the use of pesticides. If approved, before any pesticide is applied, a pre-project pesticide review sheet will be completed to further assess each treatment.

Procedure for Implementation

For parcels with a current LRMP	
<p>Vegetation management activity <u>IS</u> <u>scheduled within 2 years</u> in the current LRMP</p>	<ul style="list-style-type: none"> • Develop silvicultural prescription applying principles outlined in the LRMP and in this document. • Add silvicultural prescription to ASP.
<p>Vegetation management activity <u>IS</u> <u>scheduled</u> in the current LRMP but <u>greater than 2 years to implementation</u>, and a treatment is recommended sooner.</p>	<ul style="list-style-type: none"> • Develop silvicultural prescription applying principles outlined in the LRMP and in this document. • Seek DST review and approval of amended implementation schedule. • Add to ASP and notify ANR Lands Team of change in schedule.
<p>Vegetation management is <u>NOT</u> <u>scheduled</u> in a current LRMP.</p>	<p><u>LMC 1:</u> Vegetation management should only be considered for public safety or management of natural community composition and function with respect to ash, i.e., wetlands and would involve DST and ANR Lands Team review and approval.</p> <p><u>LMC 2:</u> Requests for approval may involve changing LRMP objectives and would involve DST and ANR Lands Team review and approval.</p> <p><u>LMC 3:</u> May be approved where LRMP guidance supports timber management but it is not scheduled.</p> <p><u>LMC 4:</u> May be approved where harvesting can be used to meet forest health and public safety goals.</p> <p>For all LMC's.</p> <ul style="list-style-type: none"> • Develop silvicultural prescription applying principles outlined in the LRMP, in this document, and past harvest objectives, if known and relevant. • Seek DST review and approval of amended management and implementation schedule. • Add to ASP and seek approval from ANR Lands Team of amended management and implementation schedule.

For parcels without a current LRMP

LRMP is either not developed or expired.

- DST shall draft LMC map and vegetation management schedule for the area considered for managing ash. May include multiple parcels within the district.
- Develop silvicultural prescription applying principles in this document, and past harvest objectives, if known and relevant.
- Get DST review and approval of change in management.
- In consultation with the ANR Lands Team to determine the appropriate scope of the public input, DSTs shall solicit public input on parcels without any LRMP. Parcels with expired LRMPs can be revised.
- Add to ASP and seek approval from ANR Lands Team.

For research projects

For ALL treatments that do not follow an existing silvicultural guide or are designed as an experiment related to ash retention and regeneration.

For all LMCs.

- Project proposals will be brought to the DST for review and approval.
- A monitoring system will be used to track results in areas where ash management strategies are being implemented.

For treatments to protect public safety

For ALL treatments to protect public safety.

For all LMCs.

- Specific strategies employed will be discussed and decided by the DST.
- No LRMP amendment or public involvement is required.

Acronyms - LRMP: Long Range Management Plan; LMC: Land Management Classification; DST: District Stewardship Team; ASP: Annual Stewardship Plan

