

DECISION MEMO
USDA FOREST SERVICE

Emerald Ash Borer (EAB) Sanitation

Chippewa National Forest
Cass Lake, Minnesota

DECISION

I have decided to put in place rapid response actions to address emerald ash borer (EAB) attacks occurring on Chippewa National Forest lands. Recent dynamics of EAB infestations show that such attacks are imminently foreseeable. Because EAB attacks threaten not only National Forest trees, but also values on private, industrial, state, county and tribal forests, I have decided to put in place response actions essential to efficiently and effectively slow the spread of EAB. My decision recognizes that more extended actions may be needed following initial actions, and that additional analysis and decisions for a more extensive response may be warranted after assessing the actual extent, scope, and nature of infestation and damage.

Upon confirmation of the presence of EAB on National Forest lands, I have decided the following initial actions may be taken:

- Investigate extent and severity of EAB infestation using tree symptoms and destructive sampling.
- Cut and sanitize infested ash trees
- Cut and sanitize all ash trees within 50' of infested trees, unless directed otherwise.
- Assess the need to create “sink” trees in the immediate infested area.
- Assess the need to create a series of “trap” trees within two miles of the infestation site to be cut and sampled one and two years later for the purpose of monitoring efficacy of our initial defense actions.
- Incidental tree cutting would be allowed for access and operational effectiveness
- Temporary road and landings would be allowed, as needed for operational effectiveness.

“**Sanitizing**” would be accomplished in a variety of ways from whole-tree chipping, slab and chip, debarking, processing and kiln-drying, burning, insecticide treatment of bole, or removal to an approved marshalling site. This treatment is not a stand-level regeneration treatment, but focuses sanitation on affected ash trees.

“**Sink Trees**” are ash trees within the immediately infested area that are treated (girdling or removing a ring of bark around the tree to stress the ash) to attract any EAB, keep the EAB in one spot, and then destroy those trees to decrease the EAB population. Sink trees will be created in groups of 3-5 ash trees. Sink trees will be cut and sanitized after EAB flight but before eggs and larvae can develop into adults. The immediately infested area would be considered within ¼ mile of the infestation site. Sink tree groups will be GPSed to aid in relocation.

“**Trap Trees**” are ash trees that are located within two miles of the infestation site and treated (removing a ring of bark around the tree to stress the ash) to lure EAB in the area to attack them.

They would be sampled and if found infested, sanitized. One series of trap trees would be created immediately and a second set would be created one to two years after the first set (dependent on results).

“**Incidental**” tree cutting is limited to cutting only those trees that would impede access to cut, remove, and/or sanitize infested, sink, and trap trees.

Mitigation: The following measures would be employed to assure impacts to extraordinary circumstances are minimized and would not become significant:

- A. The method for sanitizing ash trees would be selected by what is appropriate under the forest-wide and management area (MA) direction in the Plan with consideration of effectiveness, expediency, and cost.
- B. This action applies to Forest lands in all Management Areas: General Forest, General Forest Longer Rotation, Recreation Use in a Scenic Landscape, Eligible Scenic River, Semi-Primitive Non-motorized Recreation, Semi-Primitive Motorized Recreation, Unique Biological, Aquatic, Geological, or Historical Areas, Riparian Emphasis, Candidate and Research Natural Areas, and Experimental Forest. Coordination with Northern Research is required in making the determination on whether or not to apply initial actions to Research Natural Areas, Candidate Research Natural Areas, the Experimental Forests, or any research study areas.
- C. Site specific sanitation proposals that have the potential to harm historic sites will be subject to review under Section 106 of the National Historic Preservation Act. An archeologist will conduct a records review sufficient to determine if an adequate cultural resource survey has taken place within the location of affected trees. If survey has been completed and no cultural resources recorded, that information will be forwarded for concurrence to THPO and SHPO. Upon concurrence, the sanitation measures may proceed. If a survey has not taken place a site specific survey will be implemented. That survey will be conducted by an archeologist, or an archaeological paraprofessional acting under supervision of an archeologist. If a significant or potentially significant cultural resource recorded within the affected area, protective measures will be established in consultation with THPO and SHPO.
- D. Consultation and coordination with the Leech Lake Band of Objibwe. Inform DRM and LICs on areas with activities so that traditional gatherers might access the area before treatment activities begin. Make quality ash for baskets available to the tribe so that they could submerge trees under water until ready for use.
- E. A wildlife biologist shall review the on-the-ground findings at the infestation site and inform the decision-maker of any changes in the substance of the effects disclosed in the Biological Evaluation.
 - a. If ash (*Fraxinus* spp.) is identified for removal within 5 chains (100m) of an eagle nest, the district biologist will be consulted prior to any ground disturbing activities.

- b. All ground disturbing activities within 10 chains (200m) of an active eagle nest are seasonally restricted to 10/1-2/14.
- F. A botanist will review the on-the-ground findings of any infestation and inform the decision-maker of any changes in the substance of effects and recommend mitigation measures if appropriate.
- G. A hydrologist, aquatics or fisheries biologist, or soil scientist will review on-the-ground findings at the infestation site to identify mitigation measures that would be required to meet Forest Plan standards and guidelines. To limit detrimental soil effects such as rutting and compaction, the proper season of harvest would need to be followed using the Forest Plan Guideline G-WS-8. Due to the areas where ash is found, in most cases the sanitation would need to take place on frozen ground.
- H. A recreation specialist will review the on-the-ground findings of any infestation in scenic landscapes, scenic byways and river corridors, or any areas adjacent to National Scenic Trails (North Country or Soo Line), or developed recreation sites, trails, historic sites, or Semi Primitive Non-Motorized areas to develop mitigation measures, determine the scope of the sanitation and the desired outcome for the reforestation of the site.
- I. To minimize the spread of noxious weeds,
 - a. standard timber contract provisions require cleaning of equipment prior to being moved from areas infested with noxious weed species of concern to non-infested areas.
 - b. If used, erosion control measures should use materials that are free of weed seed. Use of hay bales for erosion control should be avoided. Use certified straw when available. Use jute matting, synthetic sediment fence or other weed-free materials whenever possible.
 - c. Forest Plan Standard G-WS-1 directs use of native species in restoration of vegetative cover. If reseeding of bare ground occurs, use native materials. Non-native annuals may be used as nurse crops to obtain rapid stabilization while slower growing native species are becoming established.
- J. Upon identification of an infestation that crosses ownership boundaries, contact adjacent landowners to implement, where feasible, a coordinated sanitation strategy. Communicate with adjacent landowners and public agencies for a potential pool of resources (equipment and personnel) and for a coordinated response.

REASONS FOR THE DECISION

Background: Emerald ash borer, *Agrilus planipennis*, is a non-native pest of ash trees which was first identified in southeast Michigan in 2002. EAB is very aggressive at attacking and killing all

true ash species *Fraxinus* sp.). Even healthy trees decline and die within several years. Since EAB larvae, pupae and adults can survive in dead ash trees for 1 to 2 years, sanitation practices and logging may be under state and federal quarantine regulation. An EAB individual may fly up to 2 miles to find a host tree. Once symptoms are apparent, the tree has already produced adults and it is likely that ash within 50 feet have already been attacked – even if no symptoms are yet apparent. Therefore, entomologists from US Forest Service State and Private branch and the Minnesota Department of Natural Resources advise that all ash within 50 feet of a known infested tree be considered attacked.

The ash genus (*Fraxinus*) in Minnesota comprises some 900 million trees and is the second most common hardwood tree genera in the state. Since EAB was discovered in Michigan in 2002, it has spread and is now present in 13 states and 2 Canadian Provinces. It was found in Minnesota in 2009; currently there are two known locations, one in extreme southeastern Houston County and the other in the Twin Cities, in both Ramsey and Hennepin Counties. EAB populations can be transported and spread rapidly in infested firewood, logs, and ash nursery stock. Therefore, it is assumed that EAB will eventually infest Minnesota's forested areas and may cause significant impact to the ash resource. Experience from other states has shown that EAB kills 99+% of the ash in a stand once that stand becomes infested. To date there has been no evidence of resistance to EAB within any North American ash species.

While numerous Federal and State agencies are doing what they can to prevent new infestation sites and slow the spread, the insect continues to be discovered in new locations. Movement of infested wood or nursery stock being transported from one location to another is likely the cause of new infestations beyond normal dispersal patterns of the insect. The risk of an EAB infestation on the National Forest within several years even with quarantines and firewood restrictions is very high.

The Chippewa National Forest has thousands of acres of lowland hardwood which is predominantly black ash (>50% of the total species present) and many more acres of upland hardwood that have a black ash component (generally <20% of the total species present). An EAB infestation and resulting mortality is likely to have a profound effect on the species composition and hydrology of black ash lowlands, potentially the forested landscape of the Forest and the surrounding area, as well as anywhere ash grows. The longer we can prevent an infestation, suppress known infestations and slow the spread of EAB gives additional time to researchers who are working on mitigation and control strategies.

The loss of ash trees not only impacts the ash resource but the viability of those ecosystems of which ash is a component. The Leech Lake Band of Objibwe value black ash which is used for basket making. The death and loss of ash could have significant cultural impacts.

Purpose and Need: The purpose of this action is to at least slow the spread of EAB and mortality of ash within the Forest, and from National Forest lands to near-by non-Forest ownerships. A population build-up of EAB and expansion to other areas poses a threat to native forests and ecosystems, particularly lowland hardwood ecosystems.

The Forest Plan desired condition supporting the need for this action is D-CM-1 (p. 2-7) which states:

“The Forest works cooperatively with other landowners to protect, enhance, and restore physical and biological resources as well as social and economic values. Cooperative management includes tribal, state, county and local governments as well as other federal agencies.”

Under objectives or desired conditions the Forest Plan states:

For insects and diseases, p. 2-18:

D-ID-2 Integrated pest management approaches are used to avoid epidemics and infestations of un-desirable native or non-native invasive species.

For non-native invasive species, p. 2-33:

O-WL-38 Reduce the spread of terrestrial or aquatic non-native invasive species that pose a risk to native ecosystems.

O-WL-39 Use Integrated Pest Management to:

- a. Eradicate any populations of new invaders
- b. Contain or eradicate populations of recent invaders (*i.e.*, non-native invasive species that have only recently become established but are not widespread in the planning area).

For vegetation management, Vegetation composition and Structure, p 2-22:

O-VG-4 Maintain acres of lowland conifer and lowland hardwood vegetation communities.

Rationale: My rationale for this decision is three-fold:

1. The Forest has committed through our Forest Plan to cooperate with other agencies, governments, and the public to control non-native pests such as EAB. This decision initiates and meets this commitment.
2. There is a need to protect National Forest ecosystems and prevent spread to other adjacent ecosystems. This decision takes the first steps to rapid and effective defenses for newly discovered EAB infestation that appear on the Forest.
3. Numerous methods of effectively sanitizing EAB infested trees are available in addition to commercial removal (timber salvage). My decision provides flexibility and choice to effectively sanitize EAB brood habitat across a the full range of affected Management Areas while meeting various and differing management area requirements, yet allows initial defensive actions to be implemented with immediacy.

REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

Category of Exclusion: I have determined this action falls under the following category of action that is normally excluded from documentation in an Environmental Assessment or Environmental Impact Statement pursuant to 36 CFR 220.6 (e)(14):

“Commercial and non-commercial sanitation harvest of trees to control insects or disease not to exceed 250 acres, requiring no more than ½ mile of temporary road construction, including removal of infested/infected trees and adjacent live uninfested/uninfected trees as determined necessary to control the spread of insects or disease. The proposed action may include incidental removal of live or dead trees for landings, skid trails, and road clearing.”

Included in this category is removal and/or destruction of infested trees affected by a new exotic insect such as emerald ash borer.

Initial defensive actions are focused on the earliest infestation sites found on the Forest. These sites are anticipated to be only a few trees to at most, a few acres in size. Therefore the scope and scale of my decision is very small, and extended defenses would require additional analysis and NEPA documentation. Environmental impacts would be confined and minor. Sanitation and salvage are routine activities common to the forest, and effects are well-known. Management direction, actions, and activities will not change as a result of this action. A review of the action in relation to extraordinary circumstances is provided, below.

FINDING OF NO RELATED EXTRAORDINARY CIRCUMSTANCES

I find there are no extraordinary circumstances present that may result in a significant individual or cumulative environmental effect. Specifically, the following circumstances were evaluated and found not related (36 CFR 22.6; supporting documentation is in the Project Record)

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species. Federally threatened, endangered or candidate species, or their habitat, or Forest Service sensitive species would not be adversely impacted by this action (see Biological Assessment and Evaluation, Project File). There would be “No Effect” to Canada lynx and gray wolf. Black ash swamps do not provide primary habitat for the Canada lynx, gray wolves, or their prey. Also this project results in no change in road density.

Regional Forester’s Sensitive Species (RFSS) habitat would not be measurably impacted by this action (see mitigation measure E). Northern goshawk, red-shouldered hawk, black-throated blue warbler, and bald eagle are known to be present or have habitat that could contain ash. Activities may impact these individuals or habitat, as well as some sensitive plant species, but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species. Due to the lack of habitat for the remaining wildlife sensitive species the project would have “No Impact” on them. The minor scope and scale of this action in both area and duration would create no viability concerns for species of concern. For RFSS plants, benefits to sensitive species habitat from slowing the spread of EAB through timely implementation of the proposed action are likely to outweigh the consequences of no action.

2. Floodplains, wetlands or municipal watersheds. The actions may occur on floodplains or wetlands, however actions on such areas would be limited by Forest Plan requirements and

additional mitigation measures where needed (G above) to prevent adverse impacts. Therefore, there would be no significant and adverse impacts to floodplains and wetlands. Potential effects to hydrology and water levels of EAB sanitation are not anticipated and could be greater if EAB is allowed to spread rapidly. This action plan, by slowing the spread of EAB, will benefit hydrologic functions, wetlands, and aquatic ecosystems (see Hydrology and Aquatic Report, Soils Report, Project Record). There are no municipal watersheds in the Forest.

3. Congressionally designated areas or inventoried roadless areas. No action under this decision would occur in a wilderness or other congressionally designated site.
4. Research Natural Areas. Actions under this decision may occur in Research Natural Areas or candidate Research Natural Areas upon coordination with the Northern Research Station.
5. American Indian and Alaska Native religious or cultural sites: The local and affected American Indian Tribe, the Leech Lake Band of Ojibwe, was notified about this action. No concerns regarding specific religious or cultural sites were identified, however, no EAB infestation has been found in the Chippewa National Forest. Depending upon the specific location of future infestations, cultural or religious concerns may be raised. Therefore, coordination and consultation with Leech lake Band of Objibwe Division of Resource Management and THPO would occur upon identification of an EAB infestation.
6. Archeological sites, or historic properties or areas. Mitigation measures (C, above) would protect cultural resources, and no adverse impacts would occur.

PUBLIC INVOLVEMENT

The proposed action was scoped by contacting state, local, and tribal governments (see Contact list, Project Record), and notification provided through the Forest website. Collaborative efforts have been initiated with State and Federal pest management agencies. A wide public notice was supplied via the April 2010 Forest's "Quarterly Schedule of Proposed Actions". Several comments were received. No issues resulted from the comments although several mitigation measures were identified. The comments and responses are located in the project file and are available upon request.

Consultation included letters to the Leech lake Band of Ojibwe Division of Resource Management (DRM) and tribal leaders (see Contact list, Project Record). Forest personnel also met the DRM on several occasions. The DRM is working on identifying a strategy to remove or treat infested ash trees on their properties. DRM is generally supportive and provided several recommendations that are included as mitigation measures.

COMPLIANCE WITH LAWS AND REGULATIONS

I have considered relevant laws, regulations and agency direction. I find my decision complies with the National Forest Management Act, National Environmental Policy Act and the Endangered

Species Act. I have considered direction in the FSM 1950 and FSH 1909.15 and find the analysis and my decision consistent with that direction.

FOREST PLAN CONSISTENCY (NATIONAL FOREST MANAGEMENT ACT). I have reviewed the direction in the 2004 Chippewa National Forest Land and Resource Management Plan (2004 LRMP). My decision to sanitize with or without commercial harvest is consistent with the Forest Plan.

ENDANGERED SPECIES ACT. I have reviewed the BA and I find no threatened or endangered species would be impacted, and therefore no formal consultation needs to be initiated. I find my decision complies with the Endangered Species Act.

ENVIRONMENTAL JUSTICE ORDER. I have reviewed this action in accordance with Executive Order 12898 (consideration of environmental justice). I find scoping was adequate to identify low income and minority populations that may be affected by this action. No concerns of disproportionate health or environmental effects surfaced. No adverse impacts on low income and minority populations are anticipated from this action. Given the small scale of this decision, I find my decision will not disproportionately create high and adverse health or environmental effects to low income or minority populations.

ADMINISTRATIVE REVIEW AND IMPLEMENTATION DATE

My decision is not subject to a higher level of administrative review or appeal pursuant to 36 CFR 215.12(f). This decision may be implemented immediately. For more information about this decision, contact project leader Gary Swanson (218-335-8652 or ghswanon@fs.fed.us).

SIGNATURE AND DATE

/s/ Robert N. Schmal
Robert N. Schmal
Acting Forest Supervisor

Date 10/06/2010