

EAB IN IOWA ... THE LIKELY SCENARIOS

I. INTRODUCTION

Iowans of all walks of life continue to ask, "What will happen in Iowa when emerald ash borer is found?" This document was created to answer questions posed by local governments and homeowners to assist in planning for the eventual emerald ash borer (EAB) find in Iowa.

It is important to remember that no solid, unwavering plan has been developed at federal, nor state levels concerning EAB response. The insect continues to confound entomologists and regulators – thus preparedness plans are fluid documents. Plans change as information is discovered, and plans are adapted to fit the unique circumstances associated with individual infestations. The federal and state regulating agencies are the United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (USDA-APHIS-PPQ) and the Iowa Department of Agriculture and Land Stewardship (IDALS), will work with local governments in an effort to find the most feasible action plan for an infested area in Iowa.

With this being said, it is important to understand that both USDA and IDALS must follow federal and state laws and departmental rules. All efforts will be directed to developing a plan of action that is agreeable to all the parties involved, but if that is not possible, USDA and IDALS are bound to the state laws and federal regulations. Furthermore, if a local government wishes to implement an action that contradicts what is allowable under plant pest regulations, USDA and IDALS cannot support such an action.

The '☞' sign is used in many areas in this document, to highlight the *most likely* scenario to unfold in Iowa. Though an action may be considered the most likely, there is a possibility that something other than what is considered *most likely* could happen.

II. DEFINITIONS

Compliance Agreements - A written agreement between a person/company and the USDA, concerning the treatment of regulated articles to eliminate the risk of pest movement on, with, or in regulated articles; thus allowing the movement of the regulated article outside, and sometimes necessary to move through the quarantined area. A compliance agreement and subsequent inspections, ensures that the agreement is being followed and the pest risk is reduced as required.

☞ *Instituting compliance agreements takes a substantial amount of time, much recordkeeping, proper marking of treated goods, and adherence to strict requirements. For example, movement of firewood outside of an EAB quarantine area will require that the firewood be debarked, heat treated or fumigated as required by the USDA and IDALS. WARNING - there is an uprising among states, where states receiving goods treated under compliance agreements be included in the approval process of persons/companies, and be pre-notified of shipments. A compliance agreement is NOT a way to circumvent regulations, and effortlessly move regulated articles outside of the quarantined area.*

Iowa EAB Team - State-focused partners include:

- Iowa Department of Agriculture and Land Stewardship (IDALS) – state plant pest regulatory authority as granted by Code of Iowa, chapter 177A.
- Iowa Department of Natural Resources (DNR) – state agency vested with the responsibility of providing for the protection of state and privately owned forests, parks, wildlife areas, and other property under its jurisdiction, as granted by Code of Iowa, Chapter 456A.24.
- Iowa State University (ISU) – land grant institution in Iowa established to conduct research, teach, and transfer technology and information to the citizens of Iowa.

In collaboration with federal partners:

- USDA-APHIS-PPQ – federal agency granted authority over plant pests via the federal Plant Protection Act.
- USDA Forest Service – federal agency granted authority.

Local Government – When an infestation is found in Iowa, the EAB Team will work with local governments to disseminate information and create a plan of action specific to the infested area. Local governmental officials may include City Administrators, City Council Members, City Foresters and Horticulturalists, Park and Public Works Directors, County Supervisors, County Conservation Board Directors, County Resource Managers, and others.

☞ *To facilitate the necessary activities and day-to-day operation of an EAB Team that includes local governmental officials, the EAB Team asks that local officials select a small group of representatives to work closely with the EAB Team on a daily basis as needed.*

Quarantine – A strict isolation imposed by USDA and/or IDALS to prevent the movement of a plant pest. EAB quarantines are ordinarily put in place on a county-by-county basis. If an infestation is found near a county border, adjoining counties are typically quarantined too. However, in December 2006, the states that were considered partially infested at that time were moved to whole-state quarantines because fine-tuned EAB survey methods were lacking, and infestations had obviously moved beyond the county-by-county quarantine boundaries. Since the December 2006 move to quarantine whole states, the USDA has gone back to quarantining new infestations on a county-by-county basis.

☞ *It is anticipated that when EAB is found in Iowa, quarantines will be quickly issued by IDALS on a county-by-county basis.*

- Intrastate quarantine – Via Iowa Law, IDALS has the authority to implement county-by-county quarantines to prevent the spread of plant pests in Iowa.
☞ *It is likely that IDALS will first implement EAB quarantine on regulated articles on a county-by-county basis, because the state has the ability to act faster than Federal agencies.*
- Interstate quarantine – Via the Federal Plant Protection Act, USDA-APHIS-PPQ has authority to prevent the movement of plant pests from moving from one state to another.
☞ *It is likely that USDA will place parallel federal quarantines into place, which match the intrastate quarantines first put in place by IDALS.*

Regulated Articles – Historically, EAB regulated articles include:

- The emerald ash borer, *Agrilus planipennis* (Fairemaire), in any living stage of development.
- Entire ash (*Fraxinus spp.*) trees.

- Firewood of any non-coniferous (hardwood) species.
- Ash limbs and branches.
- Ash stumps.
- Ash logs with bark.
- Ash lumber with bark.
- Non-coniferous (hardwood) wood chips and non-coniferous (hardwood) bark chips larger than 1 inch in two dimensions.
- Any article, product or means of conveyance when it is determined to present the risk of spread of the EAB.

Survey – Survey may consist of sticky traps, sentinel (trap) trees, visual surveys, debarking of suspect trees, and any other sound methodology based on current EAB research.

- Detections Survey – A survey conducted in an area to determine if a pest is present.
- Delimiting Survey – A survey conducted to establish the boundaries of an area considered to be infested, or free from, a pest. Generally, a delimiting survey is more encompassing than a detection survey. Varying with resources and the time of the year, tactics which may be employed in an EAB delimiting survey include sticky traps with a lure, sentinel trees, debarking suspect trees, and/or visual surveys.

III. QUARANTINE IMPLEMENTATION - The Who, What, Where and When

Figure 1 is a flow chart depiction of the projected chain of events. See numbered boxes in the flow chart that correspond to the following steps.

How are officials monitoring for EAB? [Box 1]

The Iowa EAB Team is engaged in sticky trap and visual monitoring activities during the growing season, and bark peeling of sentinel (or trap) trees prior to winter. Furthermore, team members respond to citizen calls concerning suspicious trees throughout the year.

What happens when a suspect beetle or larva is found? [Box 2]

As with any new pest being identified in a state, the specimen must be sent to an official federal identifier. An official confirmation may take 24-72 hours, varying with holidays and other unexpected timing issues. It is unknown at this time when state identifiers are allowed to take over the confirmation process - - and if all new county finds go through the federal system.

Once EAB is verified, who is notified and when? [Box 3]

The official federal identifiers will notify the USDA-APHIS-PPQ State Plant Health Director (SPHD) and IDALS State Plant Regulatory Official (SPRO) of the insect confirmation. The SPHD and SPRO will notify the members of the EAB Team. The SPRO and EAB Team members will notify local government officials. The Iowa EAB Readiness Plan is activated.

- Iowa SPHD = Robert Meinders, USDA-APHIS-PPQ, 6000 Fleur Drive, Des Moines, IA, 50321, (515) 285-7044 office, robert.d.meinders@aphis.usda.gov.
- Iowa SPRO – Robin Pruisner, IDALS, 2203 South Ankeny Boulevard, Ankeny, IA, 50023, (515) 725-1465 office, (515) 231-4481 mobile, Robin.Pruisner@IowaAgriculture.gov.

The EAB Team will work with local governmental officials on two concurrent activities:

- 1) Prepare and distribute a media release to inform the public of the EAB find.

- 2) Implement interstate, county-by-county quarantines on regulated articles coverings areas with known and suspect EAB infestations.

How will the EAB Team determine what exact areas are infested with EAB? [Box 4]

Entomologists will implement delimiting surveys to attempt to determine the boundaries of the infestation.

☞ *Delimiting surveys do not necessarily provide fast results, nor detailed information on large areas of land. These EAB surveys are time consuming, expensive and may vary with the environment associated with the area under scrutiny. Little biological information on EAB existed prior to 2002. Basic research continues, and entomologists are working with the information that is currently available. For example, how far an adult EAB can fly is up for debate. Thus, determining exactly how large of an area to delimit is not set in stone. The landscape, available staff, and time of year are just a few of the details that go into determining the exact delimiting survey for an area. The Iowa EAB Readiness Plan states a 2-mile delimiting area for an initial find, but this distance may be influenced any conditions associated with area around a suspect infestation.*

As information concerning the infestation is determined, will the EAB Team continue to work with local governmental officials? [Box 5]

Yes, the EAB Team will continue to work with local governmental officials to make decisions and involve stakeholders in discussing needs and how to meet them.

☞ *Agencies charged with regulating EAB and other plant pests cannot promise to abide by stakeholder desires because regulators are bound to adhering to the applicable laws. IDALS is bound to serving the entire state of Iowa and USDA is bound to serving the best interests of the whole country. If local governments want state and federal regulators to do something that is not in the spirit of the law, or the best interest for all citizens, the regulators are bound to carry on with their legal obligations. It should be noted that the USDA and IDALS intend to work with stakeholders to develop agreeable action plans to the best of the abilities and authorities of all involved.*

Ultimately regulators and local officials must determine whether to attempt to 1) eradicate, 2) contain the infestation, or 3) do nothing to eradicate or contain EAB. [Box 6]

Eradication. [Box 7a]

☞ *How likely is eradication to be implemented? Eradication had been the keystone to EAB response in the year's immediately following initial discovery in the USA, recently years, entomologists determined that those eradication efforts were not successful. At the present time, no federal dollars are committed to EAB eradication efforts. However, IDALS is willing to consider eradication if: 1) the infestation is limited in size, 2) new in occurrence, 3) judged to be manageable, and 4) sufficient funds are available to carry out the eradication. The decision to eradicate would not be taken lightly and stakeholders would have to support the plan for it to be implemented.*

- Delimiting surveys will continue, dictating a flexible response as new information is discovered.
- As data are collected, intrastate and interstate quarantine boundaries will be adjusted.
 - All business known to sell or transport regulated articles in and near a quarantined area, as well as landowners and citizens, will be informed of the quarantine

restrictions via media messaging and town meetings.

☞ *The details of quarantine enforcement will be determined based on the specific situation. Division of state and federal responsibility of investigating reports of quarantine breach, as well as the issuance of compliance agreements will hinge on many details, such as landscape and availability of staff, etc.*

- Eradication is the removal of ALL ash trees in a target area. Strict regulations will be enforced - governing the removal of the trees and the disposal of the material.
 - ☞ *Locals governments must be prepared to assist in the selection of 'marshalling yards' where ash material will be taken and processed. It is very likely that an accelerated timeframe for removal and destruction of ash materials will be implemented. Local governments must be prepared to fully engage in the removal activities, either by diverting staff to the tasks, or contracting the tree removal and chipping work.*
- If eradication efforts are implemented, biological organisms would not be released. Biological control is a part of a management plan, not an eradication plan.
- The planning and execution of an eradication plan must take hazard trees into consideration, and be flexible to handle public dangers as necessary.

☞ *Local governments ...*

... What do your ordinances look like now? Are you prepared to assist in the implementation of an eradication plan? Are you prepared to remove street trees, as well as those in parks and private residences?

... Do you have a current, detailed inventory of your tree resources by species? This inventory will help local, state and federal governments develop a plan of action quickly. Don't forget about ash resources in recreation and rural areas.

... Removal of ash is only one part of the community effort – are you prepared to tell landowners what, and how, to replant?

Containment. [Box 7b]

- Delimiting surveys will continue, requiring a flexible response as new information is discovered.
- As that data is collected, intrastate and interstate quarantine boundaries will be adjusted.
 - All business known to sell or transport regulated articles in and near a quarantined area, as well as landowners and citizens, will be informed of the quarantine restrictions via media messaging and town meetings.
 - ☞ *The details of quarantine enforcement will be determined based on the specific situation. Division of state and federal responsibility of investigating reports of quarantine breach, as well as the issuance of compliance agreements will hinge on many details, such as landscape and availability of staff, etc.*
- Containment plans could include a strategy to eradicate infested ash material in a specific targeted area, if officials believe it would slow the spread of the insect.
 - As ash infested ash material is removed due to hazard tree situations, local governments must be prepared to assist in selecting areas where the ash material can be brought and processed.
 - ☞ *An accelerated timeframe for removal and destruction of ash materials not likely to be implemented.*
- As infestation details are discovered, biological control organisms may be released. The availability and number of biological organisms will be determined by the USDA.
- The planning and execution of a local containment plan must take hazard trees into consideration, and be flexible to handle public dangers as necessary.

- Hazard trees will be an ongoing liability for communities.
 - ☞ *Local governments ...*
 - ... What do your ordinances look like now? Are you prepared to assist in the implementation of an eradication plan? Are you prepared to remove street trees, as well as those in parks and private residences?*
 - ... Do you have a current, detailed inventory of your tree resources by species? This inventory will help local, state and federal governments develop a plan of action quickly. Don't forget about ash resources in recreation and rural areas.*
 - ... Removal of ash is only one part of the community effort – are you prepared to tell landowners what, and how, to replant?*

Do Nothing. [Box 7c]

- Delimiting surveys will likely continue, but...
 - Generally speaking, if the state in collaboration with USDA, maintains a reliable EAB monitoring program and continues to implement quarantines on an intrastate basis, USDA is likely to parallel those county quarantines at a federal level. But, if resources and staff constraints occur, the state cannot maintain a sound delimiting program. It will be the decision of the USDA to either a) take over all delimiting activities, or b) quarantine the entire state of Iowa and cease delimiting survey activities.
 - ☞ *What is likely to happen? There are more questions than answers. Currently - ... IDALS entomologists are employed with fulltime duties; these include inspecting nursery stock so that stock can be sold in, and out, of Iowa, as well as issue thousands of certificates required for the export of Iowa grown commodities such as seed, grain and lumber. These duties must/will be maintained.*
 - ... Will the state legislature, USDA or Congress provide money for emergency response activities associated with EAB, such as staffing increases and appropriate equipment such as vehicles?*
 - ... Will local governments have resources to dedicate to EAB activities?*
 - ... What will a delimiting plan look like - - until the first infestation is found and delimiting begins, we have no idea if we're looking at a small contained area or thousands of acres infestation. If the infestation appears to be established and widespread, it is unlikely that even with the pooling of local, state and federal resources will be enough to tackle the infestation in a reasonable manner.*
- Hazard trees will be an ongoing liability for communities.
 - ☞ *Local governments ...*
 - ... What do your ordinances look like now? Are you prepared to assist in the implementation of an eradication plan? Are you prepared to remove street trees, as well as those in parks and private residences?*
 - ... Do you have a current, detailed inventory of your tree resources by species? This inventory will help local, state and federal governments develop a plan of action quickly. Don't forget about ash resources in recreation and rural areas.*
 - ... Removal of ash is only one part of the community effort – are you prepared to tell landowners what, and how, to replant?*

