



OFFICIAL NOTICE AND AGENDA

Notice is hereby given that the Tree Commission of the City of Stoughton, Wisconsin will hold a regular or special meeting as indicated on the date, time and location given below.

****SPECIAL MEETING****

Meeting of the:

Date /Time:

Location:

Members:

TREE COMMISSION OF THE CITY OF STOUGHTON

Wednesday, December 18, 2013 @ 6:00 p.m.

Hall of Fame Room/City Hall (381 E Main St, Stoughton WI 53589)

Jay Schotzko, Kevin Short, Dave Moyer, John Archer, Bonnie Kennedy, Alderperson Tom Selsor, Urban Forester Randy Nelson, Street Department Foreman Rick Gullickson, Stoughton Utilities Director Bob Kardasz and Mayor Donna Olson

Item #	CALL TO ORDER
1	Communications
Item #	OLD BUSINESS
2	Emerald Ash Borer Plan – Discussions, Additions & Revisions to complete the plan
Item #	NEW BUSINESS
	ADJOURNMENT

cc:

Mayor Donna Olson (Packet) - email
Council Members
Leadership Teams
City Clerk (Packet) - email
Debbie Myren (e-mail)
Matthew Dregne, City Attorney (e-mail)
Robert Kardasz (e-mail)
Maria Hougan (e-mail)
Sean Grady (email)
Deb Blaney
Bill Livick (email)
Stoughton Newspaper
WI State Journal / Capital Times

NOTE: AN EXPANDED MEETING MAY CONSTITUTE A QUORUM OF THE CITY COUNCIL

NOTE: For security reasons, the front doors of the City Hall Building (including the elevator door) will be locked after 4:30 p.m. If you need to enter City Hall after that time, please use the Fifth Street entrance or if you are physically challenged and are in need of assistance, please call 873-6677 prior to 4:30 p.m.

City of Stoughton EAB Response Plan

Executive Summary

Wisconsin's urban ash resources consist of 5.2 million trees lining our streets and in our parks and natural areas. About 20% of all trees in Wisconsin's communities are ash. They have an estimated value of over \$1.5 billion and also provide millions of dollars of environmental, social and economic benefits annually. This valuable resource is seriously threatened by a tiny, metallic green beetle known as the emerald ash borer. The larvae of this insect are responsible for the trees' decline and eventual death. Since its discovery in 2002 in Detroit Michigan, the emerald ash borer has spread its destruction to over 19 states in the U.S. and Canada. As of November 2013, 21 counties in Wisconsin are under quarantines.

The City of Stoughton, in cooperation with Dane County and Wisconsin DNR, has developed an Emerald Ash Borer (EAB) response plan. An inventory was begun in the spring of 2013. This inventory was completed in the fall of 2013. It will serve as the lead information document on the ash resource located within the City limits. After further review of the tree inventory, the City acknowledges the economic value of its ash resource and its importance to residents' quality of life. The purposes of this plan are to educate residents, preserve City resources, and minimize the fiscal impact on City operating budgets and to maintain public safety.

The City formally recognizes the following major aspects of this plan:

- The City endorses a pro-active approach with education and outreach in an effort to manage the urban forest while serving the best interests of its citizens and its environment.
- The City will work cooperatively with Dane County, WI DNR and DATCAP to slow the spread of EAB.
- A tree inventory was completed in 2013. The City had 5130 trees located in the public right of way and parks; 12.4% of these are ash. Neither conservancy areas nor private property were included in the inventory.
- The estimated value of these trees in Stoughton is \$7,557,499.52 (ash is \$1,056,090)
- The City recommends near complete removal of ash trees on public lands in the next 5 to 10 years at a potential cost of \$500,000.
- After careful consideration, the City does not endorse wide spread use of chemical treatments to preserve the ash population.
- The City does recognize the need to preserve certain high value ash trees within the community through chemical treatment.
- The City Acknowledges the need for additional resources to accomplish this project whether through City budget, grants or cooperative agreements with other units of local government.
- This plan will be reviewed and updated as further research and facts are developed about EAB infestations and management.

Mission Statement

The City of Stoughton is developing a living document to create a strategic plan to help in the prioritization, development and implementation of actions related to the threat and damage to Stoughton's urban forest caused by the Emerald Ash Borer (EAB). This plan will attempt to use the most recent scientific advice and try to identify the lowest cost for the community in order to maintain and enhance the urban forest's maximum long term benefits to the community.

Glossary of terms in regards to
E A B Community Readiness Plan Definitions

- 1) **Condition rating** – defined in Inventory pg 25
- 2) **DATCP** – Wisconsin Department of Agriculture, Trade & consumer Protection
- 3) **Dbh** – diameter at breast height; represents the diameter in inches of a trunk cross-section measured at 4 ½ ' above ground level; a basis for estimating or identifying tree volume, value, management needs and costs, utilization options, etc.
- 4) **Delimit** – to establish geographic limits or boundaries; emerald ash borer quarantine areas are determined after **delimiting** an area of infestation
- 5) **EAB** – the emerald ash borer insect
- 6) **EAB readiness team** – a group of people responsible for all aspects of preparing for emerald ash borer within a particular jurisdiction/municipality; team member have specific roles and tasks
- 7) **EAB readiness plan** - a document delineating local EAB readiness activities and processes; includes scope & purpose, authority, responsibility, policies & procedures, actions/tasks, available resources, forms & contracts, technical references & support information (such as surveying and reporting protocols), and similar content
- 8) **Eradication** – total elimination; according to national science panel recommendations, Wisconsin's planned response to a positive emerald ash borer find will be **eradication**; this involves removing all ash trees within the EAB infested area as well as all ash trees within ½ mile of the outer edge of the known infested area.
- 9) **Infestation** – an area where the ash trees have been positively identified as having a sustained population of EAB
- 10) **Marshalling yard** – a fenced in location within a quarantine area where infested or quarantine-area trees are collected and held for further handling
- 11) **Phloem** – living tissue directly under tree's bark where EAB larvae feed impairing the trees circulatory function
- 12) **Preemptive** – removing trees prior to infestation; based on condition rating Ash trees, may be removed
- 13) **Quarantine area** – a defined geographic area from which goods may not be transported; **quarantines** will be established by federal or state agencies to restrict ash wood movement out

of infested areas to avoid emerald ash borer infestation of new areas; *quarantines* can be applied to an individual property; township; county or entire state

14) **Removal** – rather than pruned as a means to lessen the burden (physical & financial) at a later date

15) **WDNR** – Wisconsin Department of Natural Resources

Authority
Federal

Animal and Plant Health Inspection Service, USDA

§ 301.53-1

prior to movement. Such articles shall be assembled at such points and in such manner as the inspector designates to facilitate inspection.

regulations in this subpart, other than for the services of the inspector.

Subpart—Emerald Ash Borer

§ 301.52-7 Attachment and disposition of certificates or permits.

(a) If a certificate or permit is required for the interstate movement of regulated articles, the certificate or permit shall be securely attached to the outside of the container in which such articles are moved, except that, where the certificate or permit is attached to the waybill or other shipping document, and the regulated articles are adequately described on the certificate, permit, or shipping document, the attachment of the certificate or permit to each container of the articles is not required.

(b) In all cases, certificates or permits shall be furnished by the carrier to the consignee at the destination of the shipment.

SOURCE: 68 FR 59088, Oct. 8, 2003, unless otherwise noted.

§ 301.53-1 Definitions.

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any individual authorized to act for the Administrator.

Animal and Plant Health Inspection Service (APHIS). The Animal and Plant Health Inspection Service of the United States Department of Agriculture.

Certificate. A document that is issued for a regulated article by an inspector or by a person operating under a compliance agreement and that represents that such article is eligible for interstate movement in accordance with § 301.53-5(a).

Compliance agreement. A written agreement between APHIS and a person engaged in growing, handling, or moving regulated articles that are moved interstate, in which the person agrees to comply with the provisions of this subpart and any conditions imposed under this subpart.

Emerald ash borer. The insect known as emerald ash borer (*Agrilus planipennis* [Coleoptera: Buprestidae]) in any stage of development.

Infestation. The presence of the emerald ash borer or the existence of circumstances that make it reasonable to believe that the ash borer is present.

Inspector. Any employee of the Animal and Plant Health Inspection Service, or other individual authorized by the Administrator to enforce the provisions of this subpart.

Interstate. From any State into or through any other State.

Limited permit. A document in which an inspector or a person operating under a compliance agreement affirms that the regulated article not eligible for a certificate is eligible for interstate movement only to a specified destination and in accordance with conditions specified on the permit.

§ 301.52-8 Inspection and disposal of regulated articles and pests.

Any properly identified inspector is authorized to stop and inspect, and to seize, destroy, or otherwise dispose of, or require disposal of regulated articles and pink bollworms as provided sections 414, 421, and 434 of the Plant Protection Act (7 U.S.C. 7714, 7731, and 7754), in accordance with instructions issued by the Deputy Administrator.

[32 FR 16385, Nov. 30, 1967, as amended at 66 FR 21051, Apr. 27, 2001]

§ 301.52-9 Movement of live pink bollworms.

Regulations requiring a permit for, and otherwise governing the movement of live pink bollworms in interstate or foreign commerce are contained in the Federal Plant Pest regulations in part 330 of this chapter. Applications for permits for the movement of the pest may be made to the Deputy Administrator.

§ 301.52-10 Nonliability of the Department.

The U.S. Department of Agriculture disclaims liability for any costs incident to inspections or compliance with the provisions of the quarantine and

Moved (movement, move). Shipped, offered for shipment, received for transportation, transported, carried, or allowed to be moved, shipped, transported, or carried.

Person. Any association, company, corporation, firm, individual, joint stock company, partnership, society, or any other legal entity.

Quarantined area. Any State, or any portion of a State, listed in § 301.53-3(c) or otherwise designated as a quarantined area in accordance with § 301.53-3(b).

Regulated article. Any article listed in § 301.53-2(a) or otherwise designated as a regulated article in accordance with § 301.53-2(b).

State. The District of Columbia, Puerto Rico, the Northern Mariana Islands, or any State, territory, or possession of the United States.

§ 301.53-2 Regulated articles.

The following are regulated articles:

(a) The emerald ash borer; firewood of all hardwood (non-coniferous) species; nursery stock, green lumber, and other material living, dead, cut, or fallen, including logs, stumps, roots, branches, and composted and uncomposted chips of the genus *Fraxinus*.

(b) Any other article, product, or means of conveyance not listed in paragraph (a) of this section may be designated as a regulated article if an inspector determines that it presents a risk of spreading emerald ash borer and notifies the person in possession of the article, product, or means of conveyance that it is subject to the restrictions of the regulations.

[63 FR 59088, Oct. 8, 2003, as amended at 70 FR 252, Jan. 4, 2005]

§ 301.53-3 Quarantined areas.

(a) Except as otherwise provided in paragraph (b) of this section, the Administrator will list as a quarantined area in paragraph (c) of this section each State or each portion of a State in which the emerald ash borer has been found by an inspector, in which the Administrator has reason to believe that the emerald ash borer is present, or that the Administrator considers necessary to regulate because of its inseparability for quarantine enforce-

ment purposes from localities where emerald ash borer has been found. Less than an entire State will be designated as a quarantined area only if the Administrator determines that:

(1) The State has adopted and is enforcing restrictions on the intrastate movement of regulated articles that are equivalent to those imposed by this subpart on the interstate movement of regulated articles; and

(2) The designation of less than an entire State as a quarantined area will be adequate to prevent the artificial interstate spread of the emerald ash borer.

(b) The Administrator or an inspector may temporarily designate any nonquarantined area as a quarantined area in accordance with the criteria specified in paragraph (a) of this section. The Administrator will give written notice of this designation to the owner or person in possession of the nonquarantined area, or, in the case of publicly owned land, to the person responsible for the management of the nonquarantined area. Thereafter, the interstate movement of any regulated article from an area temporarily designated as a quarantined area is subject to this subpart. As soon as practicable, this area either will be added to the list of designated quarantined areas in paragraph (c) of this section, or the Administrator will terminate the designation. The owner or person in possession of, or, in the case of publicly owned land, the person responsible for the management of, an area for which the designation is terminated will be given written notice of the termination as soon as practicable.

(c) The following areas are designated as quarantined areas:

Illinois

The entire State.

Indiana

The entire State.

Kentucky

Boone County. The entire county.
Bourbon County. The entire county.
Campbell County. The entire county.
Carroll County. The entire county.
Fayette County. The entire county.

Animal and Plant Health Inspection Service, USDA

§ 301.53-4

Franklin County. The entire county.
Gallatin County. The entire county.
Grant County. The entire county.
Greenup County. The entire county.
Harrison County. The entire county.
Henry County. The entire county.
Jefferson County. The entire county.
Jessamine County. The entire county.
Kenton County. The entire county.
Oldham County. The entire county.
Owen County. The entire county.
Pendleton County. The entire county.
Scott County. The entire county.
Shelby County. The entire county.
Trimble County. The entire county.
Woodford County. The entire county.

Maryland

Charles County. The entire county.
Prince George's County. The entire county.

Michigan

Upper Peninsula:
Alger County. The entire county.
Chippewa County. The entire county. [Note: This quarantined area includes tribal land of the Bay Mills Indian Community. Movement of regulated articles on those lands is subject to tribal jurisdiction.]
Delta County. The entire county.
Houghton County. The entire county.
Keweenaw County. The entire county.
Luce County. The entire county.
Mackinac County. The entire county.
Schoolcraft County. The entire county.
Lower Peninsula: All counties, in their entirety (i.e., Alcona, Allegan, Alpena, Antrim, Arenac, Barry, Bay, Benzie, Berrien, Branch, Calhoun, Cass, Charlevoix, Cheboygan, Clare, Clinton, Crawford, Eaton, Emmet, Genesee, Gladwin, Grand Traverse, Gratiot, Hillsdale, Huron, Ingham, Ionia, Iosco, Isabella, Jackson, Kalamazoo, Kalkaska, Kent, Lake, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Manistee, Mason, Mecosta, Midland, Missaukee, Monroe, Montcalm, Montmorency, Muskegon, Newaygo, Oakland, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon, Saginaw, Sanilac, St. Clair, St. Joseph, Shiawassee, Tuscola, Van Buren, Washtenaw, Wayne, and Wexford Counties).

Minnesota

Hennepin County. The entire county.
Houston County. The entire county.
Ramsey County. The entire county.

Missouri

Wayne County. The entire county.

New York

Cattaraugus County. The entire county.
Chautauqua County. The entire county.

Ohio

The entire State.

PENNSYLVANIA

Allegheny County. The entire county.
Armstrong County. The entire county.
Beaver County. The entire county.
Butler County. The entire county.
Indiana County. The entire county.
Juniata County. The entire county.
Lawrence County. The entire county.
Mercer County. The entire county.
Mifflin County. The entire county.
Washington County. The entire county.
Westmoreland County. The entire county.

VIRGINIA

City of Alexandria. The entire city.
City of Fairfax. The entire city.
City of Falls Church. The entire city.
City of Manassas. The entire city.
City of Manassas Park. The entire city.
Arlington County. The entire county.
Fairfax County. The entire county.
Fauquier County. The entire county.
Loudon County. The entire county.
Prince William County. The entire county.

West Virginia

The entire State.

Wisconsin

Brown County. The entire county.
Crawford County. The entire county.
Fond du Lac County. The entire county.
Kenosha County. The entire county.
Milwaukee County. The entire county.
Ozaukee County. The entire county.
Racine County. The entire county.
Sheboygan County. The entire county.
Vernon County. The entire county.
Washington County. The entire county.
Waukesha County. The entire county.

[68 FR 59088, Oct. 8, 2003, as amended at 70 FR 252, Jan. 4, 2005; 70 FR 10316, Mar. 3, 2005; 70 FR 62231, Oct. 31, 2005; 71 FR 29764, May 24, 2006; 71 FR 57873, Oct. 2, 2006; 72 FR 15598, Apr. 2, 2007; 72 FR 30460, June 1, 2007; 74 FR 48000, Sept. 21, 2009; 75 FR 29190, May 25, 2010]

§ 301.53-4 Conditions governing the interstate movement of regulated articles from quarantined areas.

Regulated articles may be moved interstate from a quarantined area

only if moved under the following conditions:

(a) With a certificate or limited permit issued and attached in accordance with §§ 301.53-5 and 301.53-8;

(b) Without a certificate or limited permit if:

(1) The regulated article is moved by the United States Department of Agriculture for experimental or scientific purposes; or

(2) The regulated article originates outside the quarantined area and is moved interstate through the quarantined area under the following conditions:

(i) The points of origin and destination are indicated on a waybill accompanying the regulated article; and

(ii) The regulated article, if moved through the quarantined area during the period of May 1 through August 31 or when the ambient air temperature is 40 °F or higher, is moved in an enclosed vehicle or is completely covered to prevent access by the EAB; and

(iii) The regulated article is moved directly through the quarantined area without stopping (except for refueling or for traffic conditions, such as traffic lights or stop signs), or has been stored, packed, or handled at locations approved by an inspector as not posing a risk of infestation by emerald ash borer; and

(iv) The article has not been combined or commingled with other articles so as to lose its individual identity.

§ 301.53-5 Issuance and cancellation of certificates and limited permits.

(a) An inspector¹ or person operating under a compliance agreement will issue a certificate for the interstate movement of a regulated article if he or she determines that the regulated article:

(1)(i) Is apparently free of EAB, based on inspection; or the article or

(ii) Has been grown, produced, manufactured, stored, or handled in a manner that, in the judgment of the inspector, prevents the regulated article from presenting a risk of spreading EAB; and

(2) Is to be moved in compliance with any additional emergency conditions that the Administrator may impose under section 414 of the Plant Protection Act (7 U.S.C. 7714)² in order to prevent the artificial spread of emerald ash borer; and

(3) Is eligible for unrestricted movement under all other Federal domestic plant quarantines and regulations applicable to the regulated articles.

(b) An inspector or a person operating under a compliance agreement will issue a limited permit for the interstate movement of a regulated article not eligible for a certificate if he or she determines that the regulated article:

(1) Is to be moved interstate to a specified destination for specific processing, handling, or utilization (the destination and other conditions to be listed on the limited permit), and this interstate movement will not result in the spread of emerald ash borer because emerald ash borer will be destroyed by the specific processing, handling, or utilization; and

(2) Is to be moved in compliance with any additional emergency conditions that the Administrator may impose under section 414 of the Plant Protection Act (7 U.S.C. 7714) in order to prevent the spread of emerald ash borer; and

(3) Is eligible for unrestricted movement under all other Federal domestic plant quarantines and regulations applicable to the regulated article.

(c) An inspector shall issue blank certificates and limited permits to a person operating under a compliance agreement in accordance with § 301.53-6 or authorize reproduction of the certificates or limited permits on shipping containers, or both, as requested by the person operating under the compliance

¹Inspectors are assigned to local offices of APHIS, which are listed in the local telephone directories. Information concerning such local offices may also be obtained from the Animal and Plant Health Inspection Service, Plant Protection and Quarantine, Domestic and Emergency Operations, 4700 River Road Unit 134, Riverdale, Maryland 20737-1236.

²An inspector may hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of plants, plant pests, or other articles in accordance with sections 414, 421, and 423 of the Plant Protection Act (7 U.S.C. 7714, 7731, and 7754).

agreement. These certificates and limited permits may then be completed and used, as needed, for the interstate movement of regulated articles that have met all of the requirements of paragraph (a) or (b), respectively, of this section.

(d) Any certificate or limited permit may be canceled orally or in writing by an inspector whenever the inspector determines that the holder of the certificate or limited permit has not complied with this subpart or any conditions imposed under this subpart. If the cancellation is oral, the cancellation will become effective immediately, and the cancellation and the reasons for the cancellation will be confirmed in writing as soon as circumstances permit. Any person whose certificate or limited permit has been canceled may appeal the decision in writing to the Administrator within 10 days after receiving the written cancellation notice. The appeal must state all of the facts and reasons that the person wants the Administrator to consider in deciding the appeal. A hearing may be held to resolve a conflict as to any material fact. Rules of practice for the hearing will be adopted by the Administrator. As soon as practicable, the Administrator will grant or deny the appeal, in writing, stating the reasons for the decision.

(Approved by the Office of Management and Budget under control number 0579-0233)

§ 301.53-6 Compliance agreements and cancellation.

(a) Persons engaged in growing, handling, or moving regulated articles interstate may enter into a compliance agreement³ if such persons review with an inspector each provision of the compliance agreement. Any person who enters into a compliance agreement with APHIS must agree to comply with the

³ Compliance agreements may be initiated by contacting a local office of APHIS. The addresses and telephone numbers of local offices are listed in local telephone directories and may also be obtained from the Animal and Plant Health Inspection Service, Plant Protection and Quarantine, Domestic and Emergency Operations, 4700 River Road Unit 134, Riverdale, MD 20737-1236.

provisions of this subpart and any conditions imposed under this subpart.

(b) Any compliance agreement may be canceled orally or in writing by an inspector whenever the inspector determines that the person who has entered into the compliance agreement has not complied with this subpart or any conditions imposed under this subpart. If the cancellation is oral, the cancellation will become effective immediately, and the cancellation and the reasons for the cancellation will be confirmed in writing as soon as circumstances permit. Any person whose compliance agreement has been canceled may appeal the decision in writing to the Administrator within 10 days after receiving the written cancellation notice. The appeal must state all of the facts and reasons that the person wants the Administrator to consider in deciding the appeal. A hearing may be held to resolve a conflict as to any material fact. Rules of practice for the hearing will be adopted by the Administrator. As soon as practicable, the Administrator will grant or deny the appeal, in writing, stating the reasons for the decision.

(Approved by the Office of Management and Budget under control number 0579-0233)

§ 301.53-7 Assembly and inspection of regulated articles.

(a) Persons requiring certification or other services must request the services from an inspector⁴ at least 48 hours before the services are needed.

(b) The regulated articles must be assembled at the place and in the manner that the inspector designates as necessary to comply with this subpart.

(Approved by the Office of Management and Budget under control number 0579-0233)

§ 301.53-8 Attachment and disposition of certificates and limited permits.

(a) A regulated article must be plainly marked with the name and address of the consignor and the name and address of the consignee and must have the certificate or limited permit issued for the interstate movement of a regulated article securely attached at all times during interstate movement to:

⁴ See footnote 1 to § 301.53-5.

- (1) The regulated article;
- (2) The container carrying the regulated article; or
- (3) The consignee's copy of the accompanying waybill: *Provided*, that the description of the regulated article on the certificate or limited permit, and on the waybill, are sufficient to identify the regulated article; and
- (b) The carrier must furnish the certificate or limited permit authorizing interstate movement of a regulated article to the consignee at the destination of the shipment.

(Approved by the Office of Management and Budget under control number 0579-0233)

§301.53-9 Costs and charges.

The services of the inspector during normal business hours will be furnished without cost to persons requiring the services. The user will be responsible for all costs and charges arising from inspection and other services provided outside of normal business hours.

Subpart—South American Cactus Moth

SOURCE: 74 FR 27073, June 8, 2009, unless otherwise noted.

§301.55 Restrictions on interstate movement of regulated articles.

No person may move interstate from any quarantined area any regulated article except in accordance with this subpart.¹

§301.55-1 Definitions.

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

Animal and Plant Health Inspection Service (APHIS). The Animal and Plant Health Inspection Service of the United States Department of Agriculture.

¹ Any properly identified inspector is authorized, upon probable cause, to stop and inspect persons and means of conveyance moving in interstate commerce and to hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of regulated articles as provided in sections 414, 421, and 434 of the Plant Protection Act (7 U.S.C. 7714, 7731, and 7754).

Cactus plants. Any of various fleshy-stemmed plants of the botanical family Cactaceae.

Certificate. A document in which an inspector or person operating under a compliance agreement affirms that a specified regulated article is free of South American cactus moth and may be moved interstate to any destination.

Compliance agreement. A written agreement between APHIS and a person engaged in growing, handling, or moving regulated articles, wherein the person agrees to comply with this subpart.

Departmental permit. A document issued by the Administrator in which he or she affirms that interstate movement of the regulated article identified on the document is for scientific or experimental purposes and that the regulated article is eligible for interstate movement in accordance with §301.55-4(c).

Infestation. The presence of the South American cactus moth or the existence of circumstances that makes it reasonable to believe that the South American cactus moth may be present.

Inspector. Any employee of APHIS or other person authorized by the Administrator to perform the duties required under this subpart.

Interstate. From any State into or through any other State.

Limited permit. A document in which an inspector or person operating under a compliance agreement affirms that the regulated article identified on the document is eligible for interstate movement in accordance with §301.55-5(b) only to a specified destination and only in accordance with specified conditions.

Moved (move, movement). Shipped, offered for shipment, received for transportation, transported, carried, or allowed to be moved, shipped, transported, or carried.

Person. Any association, company, corporation, firm, individual, joint stock company, partnership, society, or other entity.

Plant Protection and Quarantine (PPQ). The Plant Protection and Quarantine program of the Animal and Plant Health Inspection Service, United States Department of Agriculture.

Wisconsin Statutes

for EAB

29.30

94.01

94.02

94.03

94.10

94.46

Administrative rules: Authority
W.S. Cons'n

7. Required import conditions that will, in the department's opinion, effectively prevent the spread of hemlock woolly adelgid.
8. Provisions authorizing the department to cancel the agreement at any time, with or without cause or prior notice.

History: CR 02-121: cr. Register July 2003 No. 571, eff. 8-1-03.

ATCP 21.17 Emerald ash borer; import controls and quarantine.

- (1) IMPORTING OR MOVING REGULATED ITEMS FROM INFESTED AREAS; PROHIBITION. Except as provided in sub. (3), no person may do any of the following:
 - (a) Import a regulated item under sub. (2) into this state if that item originates from an emerald ash borer regulated area identified in 7 CFR 301.53-3.
 - (b) Move any regulated item under sub. (2) out of an emerald ash borer regulated area that is identified in 7 CFR 301.53-3 and located in this state.

Note: The United States department of agriculture, animal and plant health inspection service (USDA-APHIS) periodically updates the list of regulated areas in 7 CFR 301.53-3. Subsection (1) applies to new regulated areas as those areas are identified in the CFR.

Each year, as a service, the Wisconsin department of agriculture, trade and consumer protection distributes an updated federal CFR listing to nursery license holders and other affected persons in this state. More frequent updates, if any, are available on the department's website at www.datcp.state.wi.us. Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224-4573, by visiting the department's website, or by writing to the following address:

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Resource Management
P.O. Box 8911
Madison, WI 53708-8911

- (2) REGULATED ITEMS. The following are regulated items for purposes of sub. (1):
 - (a) The emerald ash borer, *Agrilus planipennis* Fairmaire, in any living stage.
 - (b) Ash trees.
 - (c) Ash limbs, branches and roots.
 - (d) Ash logs, slabs or untreated lumber with bark attached.
 - (e) Cut firewood of all non-coniferous species.
 - (f) Ash chips and ash bark fragments (both composted and uncomposted) larger than one inch in diameter.
 - (g) Any other item or substance not listed in sub. (2) that may be designated as a regulated item if a pest control official determines that it presents a risk of spreading emerald ash borer and notifies the person in possession of the item or substance that it is subject to the restrictions of the regulations.
- (3) INSPECTED AND CERTIFIED ITEMS; EXEMPTION. Subsection (1) does not prohibit the shipment of a regulated item if a pest control official in the state or province of origin does all of the following:

- (a) Inspects the regulated item.
- (b) Certifies any of the following in a certificate that accompanies the shipment:
 1. The regulated item originates from non-infested premises and has not been exposed to emerald ash borer.
 2. The regulated item was found, at the time of inspection, to be free of emerald ash borer.
 3. The regulated item has been effectively treated to destroy emerald ash borer. The certificate shall specify the date and method of treatment.
 4. The regulated item is produced, processed, stored, handled or used under conditions, described in the certificate, that effectively preclude the transmission of emerald ash borer.

History: CR 06-008: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 21.18 Asian longhorned beetle; import controls and quarantine.

- (1) IMPORTING OR MOVING REGULATED ITEMS FROM INFESTED AREAS; PROHIBITION. Except as provided in sub. (3), no person may do any of the following:
 - (a) Import a regulated item under sub. (2) into this state if that item originates from an Asian longhorned beetle regulated area identified in 7 CFR 301.51-3.
 - (b) Move a regulated item under sub. (2) out of a regulated area that is identified in 7 CFR 301.51-3 and located in this state.

Note: The United States department of agriculture, animal and plant health inspection service (USDA-APHIS) periodically updates the listing of regulated areas in 7 CFR 301.51-3. Subsection (1) applies to new regulated areas as those areas are identified in the CFR.

Each year, as a service, the Wisconsin department of agriculture, trade and consumer protection distributes an updated federal CFR listing to nursery license holders and other affected persons in this state. More frequent updates, if any, are available on the department's website at www.datcp.state.wi.us. Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224-4573, by visiting the department's website, or by writing to the following address:

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Resource Management
P.O. Box 8911
Madison, WI 53708-8911

- (2) REGULATED ITEMS. The following are regulated items for purposes of sub. (1):
 - (a) The Asian longhorned beetle, *Anoplophora glabripennis* (Motschulsky), in any living stage.
 - (b) Cut firewood of all non-coniferous species.
 - (c) Trees, tree parts, wood or debris, more than ½ inch in diameter, from any of the following genera: *Acer* (maple), *Aesculus* (buckeye), *Albizia* (mimosa), *Betula* (birch), *Celtis* (hackberry), *Fraxinus* (ash), *Platanus* (sycamore), *Populus* (poplar), *Salix* (willow), *Sorbus* (mountain ash), and *Ulmus* (elm). This includes nursery stock, logs, green lumber, stumps, roots and branches, whether living, dead, cut or fallen.

Sec. 64-14. - Street trees.

62

(a)

Purpose. It is the purpose of this section:

(1)

To protect against dangerous conditions which may result in injury to persons or damage to property in public areas of the city.

(2)

To maintain plant health and guard against the spread of diseases and insect pests.

(3)

To regulate and control the planting, removal, maintenance and protection of trees, shrubs and other plants on the public streets, parkways and other municipally owned property within the city. This may include the identification and protection of trees with historic value or having unusual qualities.

(4)

To prescribe penalties for violations of the provisions set forth by this section.

(b)

Authority and power. There is created and established a tree commission for the city, which shall consist of nine members, seven of whom shall be residents of the city. The remaining two members may reside in a neighboring township within the Stoughton School District. One of the members shall be from the city council and appointed by the mayor. Six citizen members shall also be appointed by the mayor. The eighth member shall be appointed by the utilities director and shall be a non-voting member. The ninth member shall be appointed by the street superintendent and shall be a non-voting member. All members shall serve without pay. The members of the commission will elect one member as chair and one member as vice-chair annually.

(c)

Duties. The duties of the tree commission shall be:

(1)

To study the problems and determine the needs of the city as they relate to tree planting, protection and maintenance.

(2)

To recommend to the street superintendent, the type and kind of trees to be planted in public places such as municipal streets or parks as designated.

(3)

To assist the city with the dissemination of news and information with regard to the selection, planting and maintenance of trees.

(4)

To help educate the public on the value of trees.

(5)

To pursue grant monies to promote a healthy urban forest.

(d)

Term of office. The seven members appointed by the mayor shall be appointed as follows: One council member for one year and six citizen members for three years. Successors to those citizen members appointed by the mayor shall be appointed for terms of three years. Vacancies caused by death, resignation or otherwise, shall be filled for the unexpired term in the same manner as original appointments are made. A member of the tree commission may be removed by the mayor with approval of a majority of the city council.

(e)

Applicability. This section provides full power and authority over all trees, shrubs and other plants located within street right-of-way, city and municipal utility easements, parks and public places of the city and to trees, plants and shrubs located on private property that constitute a hazard or threat as described herein. The commission shall make recommendations to the public works committee on such rules and regulations as it may deem appropriate for carrying out the purpose of this section.

(f)

Licensing. It shall be unlawful for any person to engage in the business of planting, cutting, trimming, pruning, removing, spraying or otherwise treating public trees, shrubs or other woody plants within the city without first producing evidence of certification/license before the city, pursuant to § 14-311

(g)

Permits.

(1)

Required. No person shall plant or remove a tree from a public area, without first obtaining a written permit from the street superintendent for which no fee shall be charged. If an activity entails the felling of any tree or part thereof, located on private property, which as a result of such felling reasonably may be expected to fall upon city-owned property, a permit must be obtained.

The application must:

a.

State the applicant's name and address and must be signed by the applicant.

b.

Indicate in detail, the location, number, size and species of trees, shrubs or other plants that will be affected by such action.

c.

Include additional information that the commission may find reasonably necessary.

(2)

Performance of work. The applicant agrees to perform the work for which the permit is sought in accordance with the provisions of this section.

(3)

Standards and specifications list. If the requested plant material is on the tree commission standard and specifications list, which is not set out herein but is on file in the street superintendent's office, the permit may be signed by the street superintendent. Requests for plant material not appearing on said list must be submitted to the ~~tree commission~~ City Forester for approval prior to signing by the street superintendent. ~~Any person requesting a permit should allow five business days for processing.~~

(4)

Denial. The commission has the authority to deny a permit if the request is not in accordance with the provisions of this section.

(Code 1986, § 8.11; Ord. No. 0-6-2011, 3-22-2011)

NOTIFICATION PROCEDURES FOR SUSPECT EAB SAMPLES & REPORTS

The general principle is for people to use existing channels of pest reporting and querying, wherever possible. All insect samples should be forwarded to the DATCP identifier, Krista Hamilton, (608) 224-4594 or the UW identifier, Phil Pellitteri, (608) 262-6510, for screening and forwarding to the USDA.

General public should contact the DATCP EAB hotline at 1-800-462-2803 or email eab@datcp.state.wi.us

DNR staff should contact their Regional forest health specialist.

DATCP staff should contact Adrian Barta, (608) 224-4592 or (608) 516-0506.

UW-Extension agents and basin educators should contact UW Extension entomologists Phil Pellitteri (608) 262-6510 or Chris Williamson (608) 262-4608

Federal land managers should contact: USDA Forest Service, Forest Health Protection, St. Paul, MN (615) 649-6264

Arborists, municipal forestry staff and utility foresters should contact either their county Extension agent or the appropriate Urban Forestry Regional Coordinator listed in section 1 of the toolkit.

Jeff Roe Dick Rickert
608-267-0843

Nursery & landscape personnel should contact the DATCP Nursery Program at (608) 224-4572 or their county Extension agent.

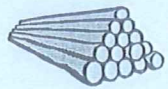
Insect samples will be examined by DATCP or UW for preliminary identification. Suspect *Agrilus planipennis* samples will be sent to the USDA Emerald Ash Borer identifier (Dr. James Zablonksy, APHIS-PPQ in Michigan) by next-day air; confirmation of Wisconsin samples will be given high priority. The first state record and subsequent first county records will be confirmed by USDA.

Easy Guide for Emerald Ash Borer Regulations



Nurseries

Ash nursery stock is prohibited from being distributed outside of the Emerald Ash Borer (EAB) quarantine area.



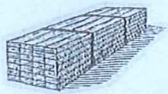
Mills & Loggers

Ash logs cannot be moved out of the quarantine area during the adult flight period (roughly April 1 through September 30) unless fumigated or debarked. From October 1 through March 31, ash logs may be allowed to be moved to an approved mill outside of the quarantine area for processing by March 31. Bark and wood waste must be processed by March 31. These processes must be approved by state or federal agriculture agencies. Contact officials for further information.



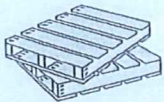
Firewood Producers & Users

All hardwood firewood is prohibited from distribution outside the EAB quarantine area unless it has been heat treated, fumigated or debarked (plus removal of 1/2 inch of wood). These processes must be approved by state or federal agriculture agencies. Firewood not for commercial sale (homeowner use) may be moved within the quarantine area but users should avoid moving firewood any distance from the area the wood originated from to reduce further spread of EAB.



Green Lumber Manufacturers

Ash lumber will need to be processed in an approved manner, such as complete removal of bark (plus 1/2 inch of wood), kiln drying by approved standards, or fumigation prior to distribution out of the quarantine area. All processes will need approval by state or federal agencies. Contact officials for further information.



Pallet Producers

Ash lumber (generated from ash from the quarantine area) used to make pallets will need to be processed in a manner approved by state or federal agencies. Contact officials for further information.



Wood Waste

Wood waste from pruning, storm damage, or removals should not be moved from the point of action in order to reduce the spread of EAB. Locations for wood waste drop-off may be established in the near future. Contact officials for more information.

Official Contact Information

Bob Dahl, Regulatory Supervisor
Wisconsin Department of Agriculture, Trade and Consumer Protection
608-224-4573 or Robert.dahl@wisconsin.gov

JoAnn Cruse, State Plant Health Director
USDA, APHIS, Plant Protection & Quarantine
608-231-9545 or Joann.m.cruse@aphis.usda.gov

Same?

QUARANTINE INFORMATION

Confirmation of an *Agrilus planipennis* infestation will result in quarantine regulations covering resources which may spread EAB, including: ash trees, limbs, branches or roots; ash logs, slabs or untreated ash lumber with bark attached; cut firewood of all non-coniferous species; ash chips and ash bark fragments larger than one inch in two diameters; or any other item which could harbor any living stage of EAB and could transmit an infestation.

Two levels of quarantine are possible, federal and state. A federal quarantine will regulate interstate (between states, i.e., Michigan to Wisconsin) movement of covered materials; a state quarantine will regulate intrastate (within the state, i.e., Waukesha to Wausaukee) movement. Both quarantines may be imposed concurrently—federal quarantines imposed on a statewide level while the state quarantines other geographical units. In almost all cases in Wisconsin, quarantines will be established at the county level. State regulation may be more stringent than federal regulation on movement of materials. Enforcement of quarantines falls to state and federal agency staff. Financial penalties for violation of quarantines can be substantial.

USDA and DATCP staff will work with affected industries and communities to minimize the impact of quarantines. Compliance agreements are a common tool to allow companies to conduct business while protecting areas of the state not yet infested by the emerald ash borer.

Community Readiness Team

Good plans are useless without a mechanism for their implementation. A local readiness team is needed to implement and guide the plan, coordinate and communicate information, and keep abreast of circumstances. The readiness team leader should have good technical background and be well-connected in the community. Suggested readiness team member roles and descriptions follow. (A person can fill more than one role on the readiness team.)

Readiness Team Leader

Name/Title: Karl Manthe - Street Superintendent
Address: 515 S. Fourth St, Stoughton WI 53589
Phone: 608-893-6303 Cell: 608-577-1897
Fax: 608-897-8387 E-mail: Kmanthe@ci.stoughton.wi.us
Tasks:

- oversee these team positions: Communications/Information/Public Relations Officer, Staff Training Expert, Fiscal Manager and Community Forestry Manager
- municipal contact for authorizing EAB actions; DATCP liaison for potential EAB finds within municipal jurisdiction
- with Communications/Public Relations Officer, assess training needs of municipal staff; approve public awareness messages/projects prior to implementation
- help site/locate marshalling yards with Community Forestry Manager & DATCP
- review municipal policy or ordinances for EAB appropriateness
- establish protocol for reporting EAB within the municipality

Communications/Information/Public Relations Officer

Name/Title: Pat Conlin - Police Lieutenant
Address: 381 S. Fourth St, Stoughton WI 53589
Phone: 608-893-3374 Cell: 608-209-7530
Fax: _____ E-mail: PCONLIN@ci.stoughton.wi.us
Tasks:

- oversee or communicate with these team positions: Media Relations Expert, Neighborhood Relations Expert, Business Relations Expert
- publish and distribute the EAB readiness plan to municipal council, media and others as specified in the plan
- oversee public awareness events, arrange for press conferences, write press releases, publish articles in municipal newsletter, maintain EAB domain on municipal Web site
- provide relevant EAB updates to readiness team members

Media Relations Expert

Name/Title: Christina Dollinger / Bill Graham
Address: 281 E. Main St
Phone: 608-646-0013 Cell: 608-209-7727
Fax: _____ E-mail: cdoll@ci.stoughton.wi.us
Tasks:

- identify media outlets for EAB status and progress reports
- identify sites for providing EAB handouts to the public
- identify EAB speaking opportunities for the Communications/Public Relations Officer, such as service/civic organizations
- assist the Communications/Information/Public Relations Officer

Community Forestry ManagerName/Title: Rick Gullickson / Senior ForesterAddress: 515 S. Fourth St, Stoughton, WI 53589Phone: 608-893-6303 Cell: 608-209-7781Fax: 608-893-9381 E-mail: RGullickson@ci.stoughton.wi.us**Pre-EAB Tasks:**

- coordinate with other municipal departments to secure resources for ground operations
- oversee these team positions: Community Forestry Technician, Debris Removal and Marshalling Yard Manager, Reforestation Advisor; (several of these roles may be handled by the Community Forestry Manager)
- inventory/assess public and private ash tree resource, including number, size, condition
- estimate potential removal costs of public and private trees
- with Reforestation Advisor, produce tree replacement plan, to include species, sizes and root stock; planting timeline; priorities, etc.
- supervise field operations, surveys and site visits
- identify tree service contractors meeting minimum qualifications and municipal standards (e.g., required equipment, safety standards, expertise, insurance, bonding, experience, etc.)
- establish tree service contracts
- create mutual aid agreements with other units of government, as appropriate
- arrange with electric utility for potential removal of conflicting ash trees

Tasks Following Infestation:

- with DATCP direction, oversee eradication activity and personnel on municipal parcels
- with the Debris Removal and Marshalling Yard Manager, secure debris disposal site and staging areas for marketable wood waste, as appropriate
- determine equipment needs for removals and transportation to marshalling yards
- with Debris Removal/Marshalling Yard manager, determine marshalling yard security needs
- with Fiscal Manager, determine funding sources for replacement planting
- with Neighborhood Relations Expert(s), coordinate tree removal and meet with residents about reforestation

Community Forestry TechnicianName/Title: Randy NelsonAddress: 515 S. Fourth St, Stoughton, WI 53589Phone: 608-893-6303 Cell: 608-209-7884Fax: 608-893-9381 E-mail: rnelson@ci.stoughton.wi.us**Tasks:****Reports to the Community Forestry Manager**

- perform day-to-day field operations with staff or contractors as directed by the Community Forestry Manager
- determine equipment available for tree removal, clean-up and transportation to marshalling yards
- assess staff and their technical qualifications/skills
- determine staffing levels and make work assignments for crews

Staff Training Expert

Name/Title: Randy Nelson / City Forester - Machine Operator
 Address: 515 S. Fourth St., Stoughton WI 53589
 Phone: 608-893-6303 Cell: 608-292-7182
 Fax: _____ E-mail: _____
 Tasks:

- assess relevant expertise and experience among staff
- provide or facilitate appropriate training for municipal staff, including public-contact staff, department heads and public works employees
- provide training updates with changing EAB status, as necessary

Neighborhood Relations Expert(s)

Ward/District/Geographic Area: City of Stoughton
 Name/Title: Vickie Erdahl / Administrative Assistant
 Address: 515 S. Fourth St., Stoughton WI 53589
 Phone: 608-893-6303 Cell: 608-220-2083
 Fax: 608-893-8387 E-mail: Verdahl@ci.stoughton.wi.us
 Tasks:

- serve as neighborhood contact for and liaison between residents and the Communications/Public Relations Officer
- distribute news releases, information and educational materials as directed by the readiness team; larger communities may need several neighborhood relations experts

Business Relations Expert

Dean?
 Name/Title: Dean Tangeman
 Address: 100 S. Prairie St., Stoughton WI 53589
 Phone: 608-877-0944 Cell: _____
 Fax: 608-877-0944 E-mail: tang-arbor@charter.net
 Reports to the Readiness Team Leader & Communications/Information/Public Relations Officer
 Tasks:

- may be a representative of the chamber of commerce or a local business, especially one directly connected with landscaping (e.g., realtor, land developer, nursery grower/retailer, landscaper and landscape maintenance firm); larger communities may want representatives from both the commercial and industrial business sector
- sounding board for local businesses directly or indirectly affected by EAB
- possible avenue for developing partnerships or funding

Fiscal Manager

Name/Title: Lauree Sullivan - Finance Director City of Stoughton
 Address: 381 E. Main St., Stoughton WI 53589
 Phone: 608-893-6677 Cell: 608-209-4043
 Fax: 608-893-5519 E-mail: LSullivan@ci.stoughton.wi.us
 Tasks:

- with Community Forestry Manager, analyze potential impact on municipal budget and assess environmental costs associated with loss of public and private ash trees
- determine reforestation costs for public tree losses
- communicate cost assessments to the Public Relations Officer and EAB readiness team
- if infestation occurs, provide recordkeeping and financial oversight on all community functions related to EAB as may be required by FEMA

Executive Summary

Readiness & Response Plan for Stoughton (RRPS)

The Emerald Ash Borer (EAB) will be infesting Stoughton's urban forest in the very near future. Management of EAB within Stoughton and surrounding areas will vary month to month, year to year. This will all depend on location of early infestation, safety factors and budget constraints. Other components such as wood waste areas, private trees, and treatment options, to name a few will have to be addressed as well. This RRPS will serve as a template for management of the EAB but will change as circumstances arise. Being prepared for these changes and knowing the options that are currently available will hopefully allow the City of Stoughton to make decisions for the residents in regards to safety, cost effectiveness, while serving the greater good of our urban forests.

In this RRPS we will address:

- definitions
- authority
- Reporting protocol
- Stoughton's urban forest executive summary
- contacts
- assessments
- communications
- information section

Assessment

A. Inventory Summary

Objective 1: Emerald Ash Borer Resources

While nobody can determine when the emerald ash borer will arrive in Stoughton, it is generally assumed that the insect *will* arrive in Stoughton in the near future. Currently, the insect has been positively located in 21 of the 72 Wisconsin counties, including most recently added Dane County. Since EAB's first detection eleven years ago, it has spread to 13 additional states and Canada. By all appearances it is unstoppable and is spreading quickly. The City of Stoughton should take proactive measures before an infestation occurs to prevent a crisis in public safety, budgeting and staffing.

Stoughton currently has 642 ash trees on its street right-of-way. However, after the most recent tree inventory completed in 2013, it is figured to be several times that number likely exist in public woodlands and private property. This is approximately 12.4% of the total population **of the municipal owned urban forest**. While this is a large number of trees, it is a manageable number and the average diameter is only 12". Most communities are not removing healthy ash in anticipation of EAB, but they are removing ash in poor or very poor condition. Stoughton has 89 ash that are already on the removal list for reasons "unrelated " to EAB and an additional 119 in poor condition. It is advisable to remove these ash trees prior to EAB because they are already high-risk or declining.

It is safe to assume that when EAB arrives in Stoughton, tree removal will become a major priority within the street department. Forestry activities will be reviewed to best handle routine activities and EAB removals. Using private contractors for removals of invested trees will need to be considered so other tree pruning or removals get addressed.

After the removals of ash, tree planting will be in full swing to replace the ash and it is important to continue focusing on diversity. The City currently works with contractors to plant trees in new developments and it would be beneficial to discuss the increase in tree planting with responsible contractors so that Stoughton can be assured a timely replanting program.

STAFFING

Maintenance and removals of trees occurs year round, with most pruning being performed during the winter. On an annual basis, the city prunes 600 trees, removes 45-50 trees and replants between 70-90 trees. Trees of all sizes should receive beneficial pruning including trees less than 6" that are designated as 'training prunes.'

The city uses a zone system of maintenance for snowplowing that can be used for tree maintenance also. Adjacent snowplowing routes can be combined to make five zones for forestry purposes. The first areas that should be addressed include an area between E Milwaukee and W Wilson from Van Buren to the railroad tracks. These two zones should receive forestry services first due to the high density of large diameter trees located there.

Stoughton does not have a designated forestry department; however they have a forestry program within the Street Department that is under the direction of a Street Superintendent. Stoughton hired a forester that is an ISA Certified Arborist and his duties include responding to public requests, planning, preparing, and completing work orders for the streets department.

The Street Department crew and forester perform a wide variety of tasks, including urban forestry. The Stoughton Utility performs work under power lines including pruning and removing tree to the trunk. The city is responsible for removing the trunk and stump grinding at that point. The Street Department crews perform nearly all tree removal/maintenance work, with some removals being contracted out. The city forester is dedicated to forestry, but also assists with other street department tasks. Most pruning work is scheduled during the winter months when trees are dormant and is completed by forester and street crews.

A schedule of activities (attachment 1) has been developed based on inventory findings and is broken into two categories. The first two years of the program include one-time only activities such as removals and high priority pruning's identified during the inventory. Beginning in the third year, the city will begin its routine maintenance program in earnest. All three years have similar time and monetary investments, but the routine activities will occur annually in perpetuity and so will be the focus of this discussion.

While the city prunes a portion of its trees yearly, it is not pruning all of its trees as frequently as recommended. To achieve maximum health and tree longevity, each tree should receive a pruning/inspection once every five years. The budgets discussed in this plan are based on this five-year cycle. However, some communities have extended their pruning cycle to seven years as a means to lower annual budgets. While the five year cycle is ideal, it is acceptable to prune on a seven year basis.

All trees under 6" in diameter should receive a pruning once every third year until it can no longer be pruned from the ground. The following chart pinpoints the current level of maintenance and the recommended level of maintenance.

Routine Activities		
<i>Activity</i>	<i>Current</i>	<i>Projected</i>
Routine Removals	83	100
Safety Pruning	200	355
Routine/Training Pruning	400	500
Tree Planting	217	200
Tree Monitoring	varies	250

The Street Department works with limited staffing levels to perform all aspects of its necessary forestry operations. It is recommended to hire at least one additional staff member to adequately perform the actual work duties identified in this plan. The forester will still be staffed to answer customer calls, meet with residents, perform special inspections, and be part of tree removal/pruning crew.

Typically, forestry work is performed periodically throughout the year with busy seasons including winter pruning/removals, and plantings in spring and fall. Additionally, for safety and effectiveness most activities necessitate a minimum three person crew. While the additional employee should have forestry qualifications, they will most likely be used during the off-season for other street department activities. Hiring an additional employee will allow additional and necessary forestry work to be completed and will also assist with routine street department activities. Additional duties identified in the plan that will need to be completed annually include increased amount of the following forestry activities: planting at least 200 trees, routine/training/safety pruning 855 trees (6 year cycle), removing 100 trees and monitoring 250 trees. When EAB arrives, at least 642 trees will need to be either removed or treated with chemicals. The Street Department will be short staffed to deal with this and may want to consider hiring additional limited time employees or contract out removals so that they will be able to deal with the additional workload generated by EAB.

With a tree population of well over 5,000 and the additional work duties and tree removals identified, Stoughton should allow the urban forester at least 16 hours of work weekly. The demand on his time will increase greatly as work begins to occur more rapidly and in a more timely fashion.

A category exists that identifies trees that need additional monitoring. These are trees that are declining or are beginning to exhibit progressive defects such as decay and dieback. There were 240 trees that need monitoring. This activity should be completed by an ISA Certified Arborist.

Additionally, any employee that will be completing forestry work should receive consistent training on proper procedures. As well as equipment training these employees should receive training on: removals, proper pruning procedures, construction damage and proper tree planting techniques so that they can supervise contracted tree planting and construction crews. Sources of training include: WAA (Wisconsin Arborist Association) workshops (held annually in fall), WAA annual conference (held annually in late January), WI DNR annual workshops (held annually in late summer) or thru private instruction by an experienced consulting forester.

7 Emerald Ash Borer

7.1 Introduction

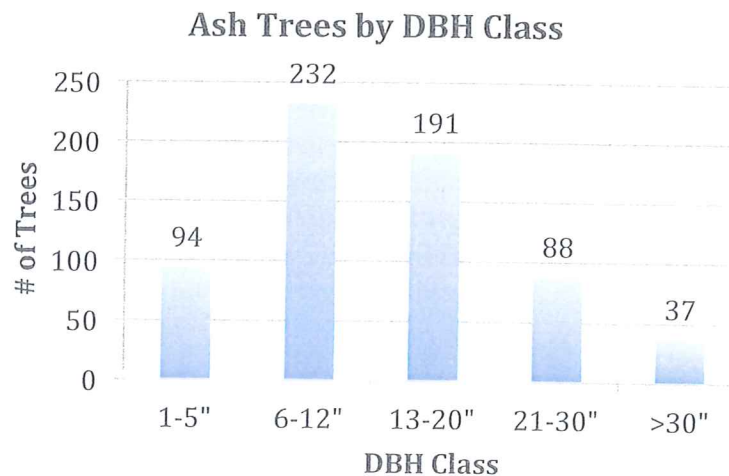
The emerald ash borer (*Agrilus planipennis*) is an invasive wood-boring beetle that feeds on the cambium layer of native ash (*Fraxinus*) species. As the larvae feed on the tree's cambium, they interrupt the vascular system, essentially girdling the tree. No ash trees in the United States have demonstrated resistance to this pest and damage has been devastating in infested areas.

The beetle is native to Eastern Russia and Northeast China, but was first found in the Detroit area in 2002 and has since spread to over a dozen states throughout the Midwest, East, and several Canadian Provinces. EAB was first detected in Newburg, WI in 2008, now one of several active infestations within the state. As of July 2012, the nearest confirmed case of emerald ash borer to Stoughton is Janesville, WI.

7.2 Susceptible Trees

Southern Wisconsin and the City of Stoughton are home to two susceptible ash species: green ash and white ash. There are 642 trees of these two species included in Stoughton's tree inventory, while several times that

number likely exist in public woodlands and on private property. The chart above illustrates the number of these 642 trees in each of 5 DBH classes.



7.3 Readiness and Response

Most communities that experience EAB feel underprepared for its arrival and consequences. Being proactive in preparing for EAB will help Stoughton respond more quickly and effectively when the beetle does arrive. Some of the things the city has already done in preparation include:

- Inventorying all of the ash along city streets and in public parks.
- Preemptively removed unhealthy, declining, or over-mature ash.
- Writing an EAB response plan.
- Under planting ash with non-susceptible species.

Some suggestions for future actions include:

- Develop an ash preservation program that allows city residents to treat public trees at their expense.
- Identify high value ash specimens to preserve with insecticide treatment.
- Continue to replant with greater tree diversity.

8 Additional Management Areas

8.1 Stoughton River Trail

The river trail traverses the City of Stoughton, following the Yahara River through woodlands, parks, and along rail corridors. There are a wide variety of tree species along the trail including box elder, eastern cottonwood, red oak, bur oak, black cherry, and green ash. This area was only inventoried for hazard trees, of which there were many. Many large oaks—and other species of trees—have never been pruned and contain significant deadwood or other hazards that could harm someone walking or bicycling along the trail. Future maintenance should address the hazardous situations identified in the tree inventory. Moving forward, monthly visual inspections by the city forester are recommended.

8.2 Frisbee Golf Course

The Kiwanis disc golf course is located in Amundson Park. A large portion of the course is situated in a wooded lowland along the Yahara River, composed primarily of box elder (*Acer negundo*), green ash (*Fraxinus pennsylvanica*), black cherry, (*Prunus serotina*) and quaking aspen (*Populus tremuloides*).

Equipment

The City's equipment includes: a 55' aerial truck, nine (9) dump trucks, three (3) pick-up trucks, three (3) one-ton dump trucks two (2) front end loaders, one (1) backhoe, one (1) Skidsteer (with grapple and stump grinder attachments), Toolcat, five (5) chainsaws, chipper, three (3) pole saws, four (4) hand saws, hard hats, ear protection, safety glasses, chaps, gloves and ropes. City crew members complete the bulk of equipment repair in-house. Stoughton's street department crew has previously completed all tree work, excepting work under utility lines.

The current amount of equipment is sufficient to complete all aspects of a forestry operation. The City has a Fleet Replacement Fund to schedule replacement/additional equipment.

Assessment

D. Debris Handling

Debris Handling Locations:

Stoughton's current wood residue policy is to:

- Chip suitable branches and provide chips to residents
- Offer bales/trunks for firewood

The city stores wood chips at the North West corner of Race Track Park. These chips are available to interested parties who may remove them at their convenience.

The city removes wood from public areas and places it in a holding yard. The wood is available to interested parties who may remove the wood at their convenience.

Emerald ash borer will require a much broader and ambitious wood residue policy. As of January 2013 the city has approximately 175 yards of wood chips and over 730 cubic yards of solid wood waste. Stoughton should identify immediately larger suitable sites for wood waste storage areas. The city may also want to begin negotiating agreements with wood mills and firewood suppliers to remove some of the wood from the holding yard.

Other actions may include recycling programs with multiple partners throughout the municipal government, private businesses, schools, clubs, etc. This could help reduce some wood waste. Also more avenues for wood chip residue need to be identified. i.e. (nurseries, landscapers, bio fuel etc.)

Assessment – Funding

If Stoughton removes and replaces all municipal trees, prior to being dead, the total cost could be approximately \$900,000.00. Using other municipalities' findings a multiplier of 2.5 has been derived from their experiences. This could cost Stoughton \$1,575,000.00 for removal and replacement if the trees are dead when removal starts.

- Wisconsin DNR Urban Forestry Grants

At current funding levels these grants will not be able to provide funds for control. The limited funds will be best used to improve urban forest management and EAB readiness plans.

- Community Development Block Grants
- Transportation funds. Funds to help with road help, EAB in Row and replanting
<http://www.dot.wisconsin.gov/localgov/aid/tr.htm>
- Utility Companies:
 - Provide assistance with removals
 - Subsidize tree planting programs that encourage energy conservation
- Revenue from wood waste
 - Develop relationships internal and external i.e. lumber, furniture, mulch, fuel and other products.
- Reallocate funds
 - Consider where these resources could best come from with the least impact on existing services
- Raise Taxes
- Seek additional support
 - Community leaders enlist aid of their state & federal elected officials to increase funding for EAB
- Loans

Ash Trees & EAB Treatment Guide

- 1) Is your tree a Fraxinus (Ash) tree?
Yes: go to # 2
No: Done. Plant a tree!
- 2) Is your Fraxinus tree in good health and possesses good structure?
Yes: go to # 3 See website: Treesaregood.com
No: Possible corrective treatment or trimming or removal. Replace with non Fraxinus species
Not Sure: Retain professional help
- 3) Do you intend to provide preventive treatments / maintenance for the life of your Fraxinus's life?
Yes: go to # 4
No: Possibly treat until replacement tree is of desired size or remove/replant
Not sure: Retain professional help
- 4) Would you provide preventative treatments yourself?
Yes: Read the label! Follow the directions.
No: Contact reputable certified arborist to set up a maintenance program
Not sure: Retain professional help
- 5) Is your Fraxinus a manageable size for you?
Yes: See Treesaregood.com for help in proper care of your trees
No: Contact reputable certified arborist to discuss a maintenance plan

Permit Application

Pesticide applications permit for municipally owned trees in R. O. W.

Please complete and return to the City of Stoughton Street Dept. for consideration. Incomplete applications will not be processed – all info is required. Please print legibly.

Company: _____ Phone: _____

Address: _____ City: _____ State: _____

Applicator License No: _____

Tree address: _____

Adjacent Property Owner: _____ Phone: _____

Type of tree(s): (species) _____ DBH: _____

Type of Treatment: _____ or circumference in inches

Product, Chemical: _____

EPA No: _____ Application Type/Rate: _____

Date/Time of Application: _____

Signature (Home Owner): _____ Comments: _____

Signature (applicator): _____

*Approval based on city inspection

*Attach certified Arborist report & photos (if available)

*Trees must exhibit structural soundness

*Pesticide permit may be revoked at any time

*Homeowner must renew the permit **EVERY** two years

Authorization: _____ Date: _____

Permit Expires on: _____

(Permit may be renewed by the City Forester at their discretion)

NOTE: If tree is found positive for infection(s) this permit may be voided and tree removed.

Submit application to: City of Stoughton
515 South Fourth Street, Stoughton WI 53589
608.873.6303

I agree to comply with City of Stoughton Street Trees Removal and Maintenance Policy (m) Public tree care (3) regarding trees and shrubbery. I agree to hold harmless the City of Stoughton, its agents, officers, and employees for any damage or injury caused by reason of pesticide treatment of street trees. **I understand that treating trees is not a guarantee of their survival and that any street tree that fails, even though it has been treated, will be removed.**

S:/Tree Commission/EAB Folder/Permit

Fitchburg EAB Readiness and Response Plan

Executive Summary

Goal

The goal of the Emerald Ash Borer Readiness and Response Plan is to acknowledge, manage, and minimize the ecological, economic, and aesthetic effects that Emerald Ash Borer will have on public and private lands in the City of Fitchburg.

The objectives are to minimize the impact of the emerald ash borer and the potential loss of ash trees in the urban forest using the best scientific advice and lowest cost to the community; to limit the physical and fiscal liability imposed by an infestation of EAB; to protect the community from hazardous trees and conditions; and to maintain the beauty and efficacy of the urban forest.

EAB

Emerald Ash Borer (EAB) is an invasive wood boring beetle that is feeds on the layer of actively growing tissue of ash trees (*Fraxinus*). It is 100% fatal to native ash trees regardless of variety, age, size, or site. The beetle is native to East Asia and experts believe is arrived in the United States approximately twelve years ago in solid wood packaging materials.

EAB was first discovered in Detroit in 2002. As of August 2009, the beetle has been found in Ohio, Indiana, Illinois, Maryland, Pennsylvania, West Virginia, Minnesota, Wisconsin, Kentucky, Missouri, New York, and Canada causing the death tens of millions of ash trees, over 15 million in the Detroit area alone. It was most recently found in Franklin, Wisconsin in Milwaukee County. Wisconsin forests contain more than 770 million ash trees, nearly 7 percent of the tree population. In most urban areas, it is estimated that ash makes up, on average, 20 percent of trees.

Assessment of Existing Resources

The City of Fitchburg has a relatively young, healthy urban forest that requires proper management to assure that it remains healthy and to control potentially higher long-term costs. Maintenance needs are currently minimized by the fact that the forest is young, however, as it grows and matures, funding must increase to support regular maintenance and assure a healthy forest into the future. Fitchburg's urban forest will increase in value and reduce public safety risks only if it is managed properly. This proposed plan provides the city with maximum economic, aesthetic and environmental benefits from its urban forest.

The Departments of Parks, Recreation and Forestry is staffed by one permanent part-time urban forester who is an ISA certified arborist, one maintenance supervisor, 3 full time employees, and one limited time employee who works 9 month of the year. The Department of Public Works is staffed by one street maintenance supervisor, 8 full time streets maintenance employees, and 3 full time utility employees. All are trained in tree removal and operating the appropriate equipment.

There are more than 700 ash trees on public tree terraces and in public parks. Approximately 11% of the City's street and park trees are ash. Current crew size and equipment capability is not adequate to handle all EAB related tree work even if distributed over a multi-year plan. Contracting additional crews of insured professional, ISA certified arborists will be necessary to remove trees that are too large, too tall, or too technical and outside of the range of the city owned equipment.

Street Tree Inventory

The city ash inventory is nearing completion. The counts to date in the urban service area are approximately 450 ashes on public streets, approximately 250 in parks and, according to sample plots,

approximately 63 in natural areas and woodlots. Numbers in rural right-of-ways (ROWs) and private property are unknown. The total number of trees of all species on streets and in parks is approximately 6,500. Ash trees represent approximately 11% of inventoried trees.

Operational and Cost Implications

Mitigation costs for removal, stump grinding, site restoration, and replanting ash in the current inventory will vary depending on the amount of time public works employee can devote to the cause and the amount of work that might have to be contracted. The following costs reflect 3 scenarios dealing with all public ash trees in the current inventory:

1. Total Mitigation Cost **Using Only In-House Labor: \$287,205.32**
2. Total Mitigation Cost **Using Only Contract Labor: \$480,858.00**
3. Total Mitigation Cost **Using 50% In-House Labor and 50% Contract Labor: \$384,031.00**

Treating selected trees to delay an infestation is another option. The cost of treating selected trees on municipal property with the injection method is based the DBH of each tree. Available current treatment options must be done annually to have any hope of keeping the trees protected. It is suggested that the goals of insecticide use are to protect selected specimen or heritage trees and slow the spread of EAB to allow the replacement of ash trees to be spread out over a period of up to ten years rather than complete it all in five or fewer. The following estimate is for all municipal trees of 15" DBH (diameter at breast height) and larger (based on the definition of Specimen trees) currently inventoried.

Contractor: \$21,994.00

In-house: \$7,540.80

Equipment

Operational costs must include additional equipment if the City is to manage EAB using primarily municipal employees. Minimally, the needed equipment includes a 55'-60' bucket truck for larger removals and a second chipper and truck with chip box.

Costs:

55'-60- bucket truck (used): \$ 40,000

Chipper: \$ 30,000

Chip box and truck: \$ 50,000

Total \$120,000

Wood Reutilization and Marshalling Yards

Second Season Recycling will be the primary site for wood reutilization efforts and handling wood debris. When EAB becomes a major issue for all communities in south central Wisconsin, recycling companies such as Second Season are likely to have difficulty handling all the material trucked to them by their contracted municipalities. They are increasing their rates over the next couple of years and might need to again when the wood stream increases.

If Second Season cannot take Fitchburg's ash material or if the county or state imposes tight quarantines, the City might have to set up its own yards. The cost of those yards includes fencing, barrier gates, and signage and depending on the amount of material, the necessity of contracting for a tub grinder.

Costs:**Ash Material Dropped at Second Seasons Recycling:**

Cost per ton

2010 \$16/ton;

After 2010 \$20/ton

Approximate green weight of standing ash trees on public property: 400 ton

Approximate ash tonnage per year: 80

Year 1: \$1280

Year 2: \$1600

Year 3: \$1600

Year 4: \$1600

Year 5: \$1600**Total \$7680****Marshalling Yards:**

Fencing/ gate: \$18,000

Signage: \$ 1,000**Total \$19,000****Tub Grinder:****\$2000 /day**

Number of days of use depends on amount of material.

Public Education and Communication

An outreach plan has been initiated to help inform residents of Fitchburg about EAB. Presentations regarding EAB have been provided to the Council of the Whole, Parks Commission, and city streets and parks employees. The city streets and parks employees were given of demonstration by DATCP employee to determine if EAB was present and a DNR Forest Pathologist, provided information on how to recognize EAB, and the signs and symptoms of infected trees.

Numerous articles have been published in the Fitchburg STAR and the City's quarterly newsletter to inform and update the public on the status of EAB locally and nationally. Presentations and updates have been made to the Park Commission and recorded by and aired on FACTv, the Urban Forester has made Arbor Day presentations to neighborhood associations and scout troops, training has been provided for the highway and parks maintenance staffs, and an EAB webpage is now active on the city website.

Fitchburg EAB Readiness and Response Plan

Goals

The goal of the Emerald Ash Borer Readiness and Response Plan is to acknowledge, manage, and minimize the ecological, economic, and aesthetic effects that Emerald Ash Borer will have on public and private lands in the City of Fitchburg.

The objectives are to minimize the impact of the emerald ash borer and the potential loss of ash trees in the urban forest using the best scientific advice and lowest cost to the community; to limit the physical and fiscal liability imposed by an infestation of EAB; to protect the community from hazardous trees and conditions; and to maintain the beauty and efficacy of the urban forest.

Mission Statement

The mission of the Urban Forestry Division of the City of Fitchburg is to understand the environment of the urban forest and use best management practices to assure that the forest is maintained in good health, that risk of injury and property damage is minimized and to maximize the benefits that the urban forest provides to the community and its citizens through diversity and function.

Purpose and Scope

This plan is intended to serve as the guidelines and prescriptions for preparing for and responding to emerald ash borer infestations in the City of Fitchburg. It covers all ash trees in parks, and public open space and municipal properties in the City of Fitchburg. It also addresses strategies for dealing with ash trees on private property and provides residents with information on preparedness and response for trees on their lands.

EAB Background

Emerald ash borer (EAB) (*Agrilus planipennis*) is native to East Asia and is a highly destructive insect that was originally detected in southeastern Michigan during the summer of 2002. Experts believe that the introduction was likely in the early 1990's, twelve years prior to its identification. It is presumed that the insect was introduced into southeastern Michigan unintentionally in solid wood packing materials used in international cargo shipments. EAB was first discovered in North America near Detroit, Michigan in 2002. By the time its presence was confirmed, infestations were well established. EAB is not a threat to human health but it does threaten our forest and urban tree populations. It is 100 percent fatal to our native ash trees of any size, any age, healthy or unhealthy. A tree that has been attacked by EAB will die within 2-4 years.

As of August 2009, the non-native beetle has since been found in Ohio, Indiana, Illinois, Maryland, Pennsylvania, West Virginia, Minnesota, Wisconsin, Kentucky, Missouri, New York, and Canada causing the death tens of millions of ash trees, over 15 million in the Detroit area alone. Wisconsin forests contain more than 770 million ash trees, nearly 7 percent of the tree population. In urban areas, it is estimated that ash makes up, on average, 20 percent of trees.

The larva (the immature stage of EAB) spends its life inside ash trees, feeding on the inner bark where it cannot be detected without removing the outer bark. This feeding disrupts the trees' ability to transport water and nutrients, causing the tree to starve and eventually die. The emerald ash borer can expand its range up to several miles per year during the adult beetles' June to August flight period. Human activities, however, have led to the spread of the EAB over much greater distances. Shipments of nursery stock and firewood have been inadvertently responsible for the majority of new EAB introductions.

Natural predators and pathogens keep EAB population in check in its natural habitat; in addition, there is some indication of actual resistance in ash trees from EAB's native range. EAB has few predators

in North America and ash trees have no natural resistance. North American Woodpeckers and other insectivores have been observed eating EAB larvae but this predation has not had a significant impact on EAB populations. There is one native and 3 introduced wasps that are natural predators of EAB that have shown promise in helping with control efforts. Trial introductions of the introduced species have been made in 2008 and 2009 in Michigan, Ohio, and Indiana.

The cost of mitigation to affected communities has been considerable since removal and replacement or treatment is necessary. Nurseries, sawmills, and firewood producers have felt the insect's impact through quarantine restrictions established to slow the spread of EAB. Quarantine is a system of rules administered by the USDA Animal and Plant Health Inspection Service and the WI Department of Agriculture, Trade and Consumer Protection. The rules are intended to help prevent the spread of EAB. People moving wood products can inadvertently transport EAB to new areas. When an EAB find is confirmed, the county where the find is located will be quarantined. If the find is located near neighboring counties, those counties also will be quarantined.

Despite quarantines, eradication efforts, and containment efforts by federal, state and local government entities, EAB continues to broaden its range in North America both naturally and unknowingly by the movement of infested firewood and nursery stock. It is illegal to move or transport ash material, the emerald ash borer, and hardwood firewood from EAB quarantined areas to a non-quarantined area without a compliance agreement issued by WI Department of Agriculture, Trade and Consumer Protection. Regulated items include cut hardwood (non-coniferous) firewood, ash logs, ash mulch or bark fragments larger than one inch in diameter, or ash nursery stock (DATCP statute 21).

DNR restricts firewood movement onto DNR managed properties in Wisconsin to prevent the spread of EAB to Wisconsin forests and recreational areas. However, firewood can be transported out of a quarantined area if it is from a firewood vendor certified by the WI Department of Agriculture, Trade and Consumer Protection. Hardwood firewood or ash material such as logs, mulch or nursery stock can be moved into or within the quarantined areas without penalty, but overall, firewood movement is a bad idea. Many invasive forest pests and diseases are inadvertently transported on firewood. Moving firewood can put the trees at your destination at risk.

As of August, 2009, EAB has been found in the following counties in Wisconsin: (in order of discovery) Washington, Ozaukee, Vernon, Crawford, Brown, Kenosha and Milwaukee. Although its arrival date in our area is uncertain, it is highly probable that EAB will impact ash trees and public service capacity in the City of Fitchburg, WI sometime in the near future.

The City has assembled an interdepartmental EAB Readiness team with the goal of developing this plan which details the City's authority to act, identifies assets at risk, examines available resources and makes key recommendations that will allow the City to manage EAB proactively and strategically. Although an impending EAB infestation will cause community tree loss and burden the City's ability to deliver exceptional public services, the City can greatly reduce the risk and the negative impacts associated with EAB by following the guidelines and implementing action items endorsed in this plan.

Monitoring and Detection Methods

Survey Program

Emerald ash borer visual survey and detection efforts in Wisconsin have been carried out cooperatively since 2004 by the Wisconsin Dept. of Agriculture, Trade & Consumer Protection (DATCP), the Wisconsin Dept. of Natural Resources (DNR), USDA APHIS, USDA Forest Service Research and the University of Wisconsin and UW Extension. The emerald ash borer is a serious insect pest that threatens the health of all ash tree species in Wisconsin. With an estimated 770 million forest ash trees at risk in Wisconsin, the state is committed to early detection and thoughtful management of this pest. To date, Wisconsin's survey efforts have included visual, detection tree and

purple panel trap surveys. Surveys have been conducted in high risk areas across the state, including state, federal, municipal and private lands.

Purple Panel Trap

Detection traps are the newest tool to assist with EAB detection. The traps are currently purple, almost three feet tall and one foot wide, and covered with a sticky substance. The adult beetle will stick to the trap if it lands on it. More recent research might influence a change of color for the traps.

Traps are placed in the tree canopy prior to the start of adult EAB emergence and are left hanging through the end of seasonal beetle flight. In 2008, approximately 3,800 traps were installed statewide. EAB was detected on a trap in Washington County in August 2008. During the summer of 2009 approximately 8,000 purple detection traps were deployed statewide for EAB detection purposes.

Visual Survey Methods

Visual detection surveys for emerald ash borer are conducted from the ground. Surveyors determine if trees are infested by visually scanning them for emerald ash borer-like symptoms and signs.

Symptoms characteristic, but not definitive, of emerald ash borer include branch dieback, epicormic sprouting at the base or along the trunk, woodpecker feeding, and bark splits. Emerald ash borer signs include metallic green adult beetles, cream colored larvae under the bark, D-shaped emergence holes in the bark and S-shaped larval feeding tunnels under the bark.

Survey work has been conducted at state and private campgrounds in Wisconsin since 2004. Due to the high risk of EAB introduction associated with infested firewood, comprehensive surveillance of areas such as campgrounds, where firewood supplies are generally greater, is viewed as a critical measure.

Although the state has born the responsibility of visual survey throughout the state and has shared results with local officials, however, responsibility is likely to shift to city staff when and if federal budgets for survey efforts are reduced.

Municipal Authority to Control EAB and Designation of Responsibility

The City of Fitchburg has the authority to control EAB through city ordinance Chapter 32 City Parks and Forestry Trees and Shrubbery Ordinance and through federal regulations and state statutes.

It will be the responsibility of the Director of Parks, Recreation and Forestry and the Urban Forester in conjunction with the Director of Public Works and their designees to carry out the provisions of applicable ordinances and plans.

Laws Regarding EAB

The emerald ash borer is regulated by the Wisconsin Department of Natural Resources (DNR) through Chapter NR 40, Wis. Adm. Code and by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) in Chapter ATCP 21 and 21.17, Wis. Ad. Rules.

Wisconsin Rules Helping Prevent EAB Spread

DATCP revised the rule (DATCP 21), allowing our state to restrict the movement of certain items coming from areas infested with emerald ash borer (EAB quarantined areas). These items include firewood, logs, mulch or nursery stock.

DNR revised the rule NR 45.04 (1) (g) restricting firewood movement onto DNR managed properties in Wisconsin to prevent the spread of EAB to Wisconsin forests and recreational areas.

Assessment of Existing Resources

Public Tree Assessment

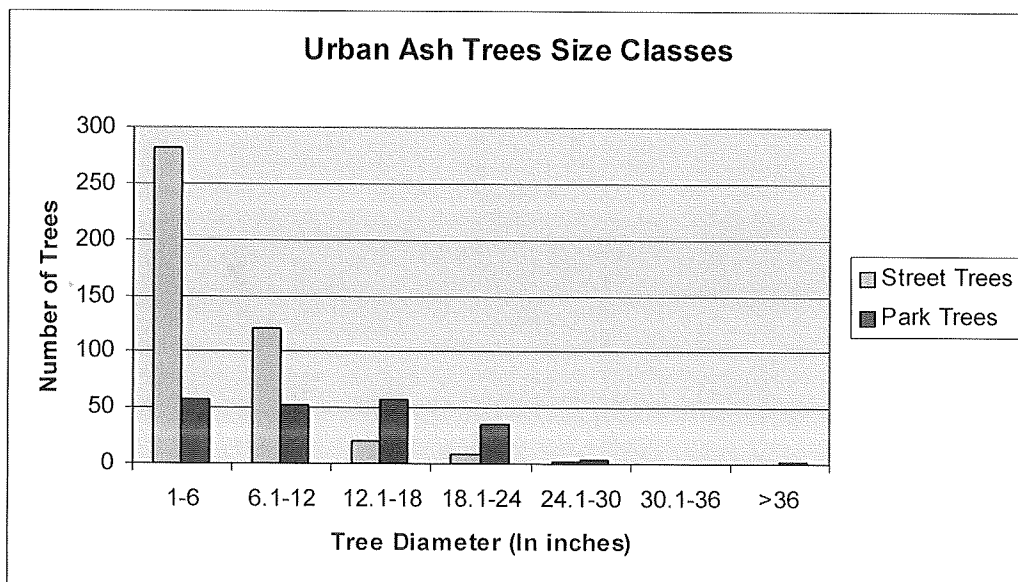
The City's urban forest is a public asset that appreciates in value over time and provides numerous benefits to residents, visitors and businesses. Community trees help mitigate air pollution, conserve energy, reduce storm water run-off and increase homeowner property values. The impacts of EAB will affect all Fitchburg citizens, businesses and visitors. The City is in the position to prepare and respond strategically to reduce these effects and avoid managing a crisis situation. This EAB Readiness Plan will further detail policy recommendations, budget requirements, maintenance schedules and resource needs to ensure that the City can continue to maximize and maintain the long-term economic, environmental, social and aesthetic benefits of the community forest.

The City of Fitchburg has a relatively young, healthy urban forest that requires proper management to assure that it remains healthy and to control potentially higher long-term costs. Maintenance needs are currently minimized by the fact that the forest is young, however, as it grows and matures, funding must increase to support regular maintenance and assure a healthy forest into the future. Fitchburg's urban forest will increase in value and reduce public safety risks only if it is managed properly. This proposed plan provides the city with maximum economic, aesthetic and environmental benefits from its urban forest.

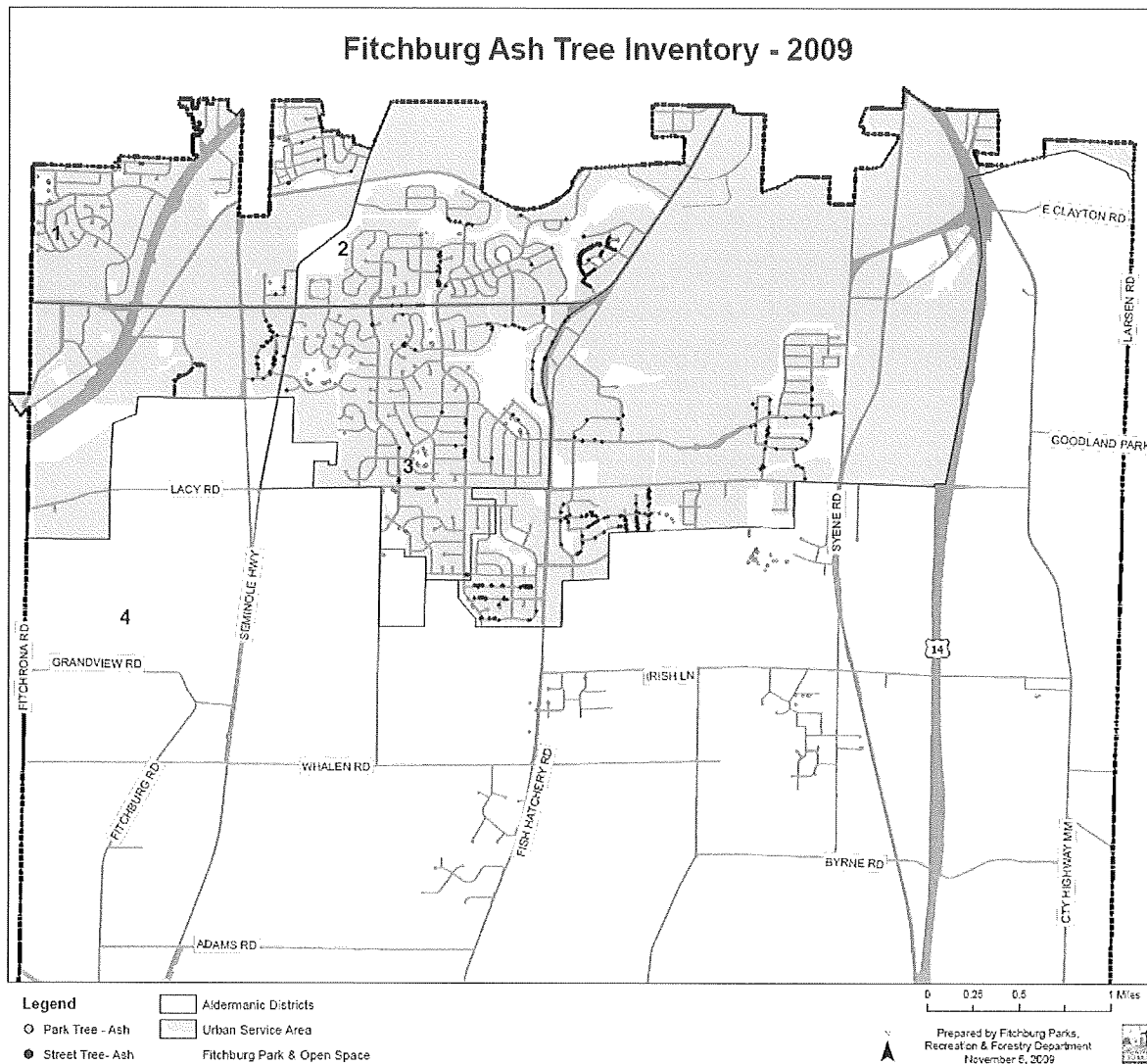
Inventory

The city ash inventory is nearing completion. The counts to date in the urban service area are approximately 450 ashes on public streets, approximately 250 in parks and, according to sample plots, approximately 63 in natural areas and woodlots. Numbers in rural right-of-ways (ROWs) and private property are unknown. The total number of trees of all species on streets and in parks is approximately 6,500. Ash trees represent approximately 11% of inventoried trees.

See the class size chart below for the numbers of ashes in each size class.



Current Ash Tree Inventory on Municipal Properties



Public Resources

The Departments of Parks, Recreation and Forestry is staffed by one permanent part-time urban forester who is an ISA certified arborist, one maintenance supervisor, 3 full time employees, and one limited time employee who works 9 month of the year. The Department of Public Works is staffed by one street maintenance supervisor, 8 full time streets maintenance employees, and 3 full time utility employees. Although none are certified arborists, all are trained in tree removal and operating the appropriate equipment.

The Public Works employees are responsible for all road and infrastructure maintenance, brush pick up and disposal, and rural and right-of-way tree pruning and removal on municipal properties. Parks workers are responsible for all parks and woodlot maintenance, including tree pruning and removal, and maintenance of recreation facilities. The Utilities employees are responsible for municipal water delivery and infrastructure. The streets and parks employees have been trained to recognize the signs and symptoms of trees that could be infested with EAB.

The City has one thirty (30) foot bucket truck and one (1) chipper. There are currently enough chainsaws and hand tools to meet the needs of the city crews however, backup chainsaws should be purchased to prevent unscheduled down time due to wear and tear.

The crew size and equipment capability is not adequate to handle all EAB related tree work even if distributed over a multi-year plan. Contracting additional crews of insured professional, ISA certified arborists will be necessary to remove trees that are too large, too tall, or too technical and outside of the range of the city owned equipment.

Pre-contracts with certified tree companies to lock in prices prior to an infestation will be investigated in an attempt to avoid higher prices in the event that many municipalities are hiring simultaneously. Such contracts could also cover potential storm damage and be revisited annually.

Ash Management Recommendations

The following elements of the City's EAB management plan are suggested, and are subject to approval and periodic revision as new information about the borer is available. This plan is also subject to change should state or federal policies dictate. The City of Fitchburg Department of Parks, Recreation, & Forestry is the lead agency responsible for plan implementation. Working with the Park Commission, the Department will provide public education/information regarding EAB as a routine service, and prepare an annual report for the Common Council.

Treatment options are available for slowing if not entirely preventing the spread of EAB. Tests of the insecticide treatments currently available found them to be about 95% effective, which means that although a tree is treated there is no guarantee that it will not become infested. Treatments can be cost prohibitive. Treatment costs range from \$4.80 per inch diameter at breast height (DBH) if done by staff to \$14.00 per inch DBH if done by a contractor. See table below for more information.

The removal, disposal, clean up, stump grinding, and site restoration for over 700 ash trees by city employees is likely to take over 3700 man hours or 154 days for a crew of three workers. For liability reasons, dead trees should not be allowed to remain standing for more than 1 year after succumbing to EAB. Given the staffing and economic conditions, the city's streets and parks staff would find it difficult to absorb the entire additional workload created by an EAB infestation without additional funding, assistance from contractors, and or preemptive removals of selected ash trees or a significant reduction in services to Fitchburg residents.

Most tree planting is contracted on an annual basis in the spring through the bid process. The maximum number of trees that are replaced each spring due to disease, decline, or abiotic damage is approximately 100. This number is based on an annual tree planting budget of approximately \$19,000 and contract tree planting at an average cost of \$190 per tree. If all city-owned ash trees were replaced using this budget, it would take 7 years to complete the planting. This would not include replacing other dead or declining trees in any given year.

Plan Recommendations

Budget and Resources

- Establish budget for EAB related activities. Although EAB timelines are uncertain, funding used to implement this plan will greatly increase the City's capacity to respond to current demands and to address future threats to the community forest.
- A key weakness is the lack of a second, taller bucket truck and a second chipper and chipper box. Purchasing these over the next two to three years will allow the City's crews to be more efficient and reduce the need to contract the work.

Public Education and Communication

- Encourage and facilitate public education on how the EAB is spread, in Partnership with DATCP, DNR, and the Dane County Tree Board. Engage citizens, business owners and decision makers to educate and inform them of EAB. Utilize the City website, newsletter, mailings, and public meetings will help prevent early EAB introduction and help garner public support.
- Notify neighborhoods of removals with postings on the City website, on FACTv, on the STAR on-line, in Terra Firma, and/or in the quarterly newsletter. A special letter of notification might be necessary in neighborhoods with ash populations over 20%.

Municipal Trees -- Treatment

- Treat selected trees. It is the staff's recommendation to chemically treat selected heritage or specimen ash trees to reduce the impact of EAB and manage the decline of the trees over a longer period of time in order to minimize, to the extent possible, the effects of an EAB infestation on the city's resources, and to protect those trees designated as specimen trees.
- Trees chosen for treatment will be determined based on health, condition, and location.
- The inventory of specimen and heritage trees will take place over the next 1 to 2 years.

Municipal Trees -- Removals

- Implement 5 year management plan beginning in 2010 to reduce the City's ash component.
- The need for removals will be at the discretion of the City's urban forester based on
 - the proximity of EAB infestation(s)
 - the health of the urban forest
 - potentially hazardous conditions
- The city will systematically remove all of its ash trees by first removing trees that are identified as being in poor health, in decline or flagging with at least 10% canopy dieback, diseased, infested or hazardous due to non-EAB related factors by either city employees or contractors after first checking with the city forester to determine whether or not EAB is present. Once the tree has been inspected and removed, the debris should be handled routinely unless the community is under quarantine by the federal or state governing body (DATCP or the DNR).
- Removals will be dispersed over neighborhoods to lessen impact on residents, aesthetics, and property values. Requests from adjacent residents will be honored when possible. This includes residents who request removal of trees, as well as those who request that ashes be retained (in expectation that protective treatments will be applied by the resident).
 - **First priority:** trees on public property that show any sign of decline, flagging, disease, or infestation should be removed but only after first checking with the city forester
 - **Second priority:** trees with a DBH of less than 8" in city parks and those less than 6" in tree terraces.
 - **Third priority:** trees in tree terraces more than 6" DBH and the remaining park trees except those that have been treated. Utility contractors will be encouraged to remove all ash trees within their easements.

- There are many specimen ash trees in City parks. Selected specimen trees will be treated and monitored based on individual tree health, condition and location. Treated trees will be removed if they become infested, diseased, or hazardous.
- Ash trees in wooded areas will be left alone. These trees will die once EAB arrives, but will be left in the woods to fall and decompose unless they present a hazard, in which case they will be felled and left in the woods.

Private Trees -- Treatment

- Protective pesticide treatments may be effective, and may be applied at residents' discretion and expense. Treated trees should be removed if treatments fail and are infested with EAB.
- More information for insecticide products available to homeowners go to
 - [http://www.entomology.wisc.edu/emeraldashborer/EAB Homeowner Insecticide Guide Final 2008.pdf](http://www.entomology.wisc.edu/emeraldashborer/EAB_Homeowner_Insecticide_Guide_Final_2008.pdf)
- Material safety data sheet for homeowner Bayer and Fertilome soil drench insecticides (imidacloprid)
 - [http://www.bayeradvanced.com/media/msdssheet/Tree&Shrub_Insect_Control_Conce ntrate_01Mar20.pdf](http://www.bayeradvanced.com/media/msdssheet/Tree&Shrub_Insect_Control_Conce_ntrate_01Mar20.pdf)
 - <http://www.fertilome.com/products/ProductLabels/10207.pdf>

Private Trees -- Removals

- There are many hundreds of ash trees large and small on private property in Fitchburg. No reliable inventory exists and ash density varies by neighborhood.
- Property owners are urged to monitor the EAB's movements. The decisions to treat, remove, or preserve private trees rests with the property owner. Residents should consider many variables when evaluating options, including tree size, location, and condition; access to the tree; potential targets should the tree fail; property value; shade, heating, and cooling values; treatment techniques, efficacy, and costs; proximity of EAB infestation; and intangible values.
- The City will enforce the relevant sections of City Ordinance Chapter 32 should it receive complaints about hazardous private trees. Staff is always vigilant for private trees that threaten the public or the street right of way, and this will not change. Private trees that are a threat to private property will be inspected only as complaints are received. We strongly recommend that private owners remove ash trees on their property. We will not order any private property owner to remove their ash trees unless it becomes infected. Once infected City Ordinance Chapter 32 will be in affect.

City Ordinance Chapter 32

32.04 Authority of City Forester

2. Over Private Trees and Shrub

(A) Whenever any tree or shrub, or part thereof, growing upon private property constitutes a public nuisance because it (i) interferes with the use of public areas, (ii) is infected with a plant disease, insect or pest, or (iii) endangers life, health, safety or welfare of persons or property, the City forester shall notify the record owner of the parcel or lot upon which such tree or shrub is located. The notice shall be in writing, shall identify the nuisance, shall specify the treatment or abatement required, and shall state the time within which the owner must abate the nuisance. The owner shall be afforded at least thirty (30) days to abate the nuisance unless the City Forester determines that immediate action is necessary for public safety. If the owner fails to abate the nuisance within the specified time, the City Forester shall do so forthwith at the owner's expense and

shall then give the owner written notice of the charge for doing so. If such charge is neither paid nor appealed with thirty days of the date of such notice, it shall be entered on the tax roll, pursuant to Wis. Stat. 66.60 (16), as a special charge against the parcel on which the tree or shrub was growing.

(B) The City Forester shall maintain a record and accounting of any work done pursuant to this section for which an assessment may be made. Such record shall include a description of the lot or parcel of land affected, the name and address of the owner of record, as shown on the tax rolls, a description of the nuisance and of the steps taken to abate it. And an itemization of the charges or expenses incurred by the City to abate the nuisance.

32.09 Interference with City Forester Prohibited

No person shall prevent, delay or interfere with the City Forester or with any agent or employee of the City in their performance of any duties imposed by this ordinance. Upon prior notification to the owner or occupant, the City Forester shall be permitted to enter upon private property during normal business hours (7:30 A.M. to 4:00 P.M., Monday through Friday) to carry out such duties.

- It would be prudent for residents to establish a relationship with an ISA Certified Arborist now in the event that ash evaluation, treatment, or removal is desired in the future. Contractors should be able to provide proof of liability insurance and worker's compensation coverage. The City also encourages residents to replace trees lost with species appropriate for the site, or to plant new trees in advance of EAB infestation and ash removal as a way of preserving the tree lined streets and beautiful neighborhoods that typify Fitchburg.

Debris Handling and Utilization Yards

- The debris from removals will be hauled to the Second Season Recycling site unless the federal or state officials dictate otherwise. If quarantine is instated, the community might be required to establish utilization yards. Suggested primary sites are: Irish Lane Open Space (5564/5554 Irish Lane), 4 acres, and Quarry Ridge Recreation Area, 4 acres, and Public Works Facility yard, 4 acres. Suggested secondary sites include Wendt Road ROW (Old Fitchburg), 6 acres, 1527 W Clayton Road (formerly Sodfather Sod Farm), 13 acres, and the McCoy/West Clayton Open Space, 30 acres of public property just east of 5062 W. Clayton Road, adjacent to the abandoned rail corridor. Emergency overflow sites could include other public lands within in the city.
- The McCoy/West Clayton Open Space site could be advantageous if an arrangement is made with the University of Wisconsin – Madison's Charter Street Heating Plant to purchase biomass to fuel their boilers. The rail line might provide an efficient option for transporting the biomass.
- Multiple utilization yards will be designated as sites for chipping, storing, and perhaps managing the reutilization of the debris. They should be opened to the public and contractors who remove ash trees that cannot be transported outside of a given area.
 - Multiple sites will allow the City to manage the wood resource and restrict the movement of ash wood products until EAB is no longer present if the need arises.
 - If chips are to be transported out of a quarantine area they must comply with chip size regulation of no larger than 1" in two dimensions.
- All selected sites will be fenced and gated as necessary and have restricted hours of operation.
- Ash wood and debris will not be disposed outside quarantine area except at approved sites

and, with a DATCP compliance agreement in place.

- Anyone accepting wood will be notified of the quarantine area. Wood should be used as firewood within quarantine area and should not be moved, sold or transported outside of that area.
- The ash wood utilization yard and City's yard waste recycling site will be posted with information on recognizing and reporting possible EAB infestations and regulations regarding EAB infested wood.

Restoration and Replanting

- The stumps of the trees removed will be ground or grubbed out by city employees or contractors. Site restoration will be handled similarly. Replanting will be managed through the regular spring or fall planting plans unless a special program is approved by the city council. The funding for all will come from the parks budget or the capital fund.
- As budget permits, all removed ash trees will be replaced with non-host species that will enhance the planting site, are appropriate for the planting site and add diversity. No plantings will be made that cannot be adequately maintained. All new plantings will conform to the "10-20-30" tree Species diversity rule.
 - As generally stated, this rule implies that the urban forest should not be made up more than 10% of the same species (macrocarpa), 20% of the same genera (Quercus), and 30% of the same family (Fagaceae).
- Specimen ash trees that die will be replaced. In wooded areas, natural regeneration will play a significant role in reforesting parkland, but invasive/non-native plants will create challenges.
- See Suggested Tree List attached.

Operational and Cost Implications

The city forester is monitoring the status of EAB in the state and region. He will continue to update the appropriate departments and city commissions with breaking news. Proposed funding for managing an infestation was submitted for the 2010 budget. In the proposal, the cost for mitigation and recovery was spread over 5 years. See the tables below for the proposed costs and budget for treatment and mitigation.

Cost Estimates for Treating Selected Trees

The treatment of ash with systemic insecticides has been shown to be effective in research and field studies. The two methods of application are trunk injection and soil drench. The trunk injection method applies the insecticide directly into the tree's vascular system as opposed to the soil drench method, which is applied to the critical root zone of the tree. The trunk injection method is a closed system with no aerial spraying reducing the likelihood of pesticide exposure to the public, applicators, pets and other animals, or potential for surface or groundwater contamination.

The treatments are estimated to be approximately 95% effective, which means there are no guarantees that a tree will not be infested and eventually die.

The cost of treating selected trees on municipal property with the injection method is based the DBH of each tree. Available current treatment options must be done annually to have any hope of keeping the trees protected. It is suggested that the goals of insecticide use are to protect selected specimen or heritage trees and slow the spread of EAB to allow the replacement of ash trees to be spread out over a period of up to ten years rather than complete it all in five or fewer. The following estimate is for all

municipal trees of 15" DBH and larger (based on the definition of Specimen trees) currently inventoried.

Estimated Ash Tree Trunk Injection Costs on All Trees 15" or Larger

Work Completed By	Material Cost per DBH	Labor Cost per DBH*	Total Cost per DBH	Total DBH Inches Treated**	Total Annual Cost
Contractor	\$14.00		\$14.00	1,571	\$21,994.00
Staff	\$3.05	\$1.75	\$4.80	1,571	\$7,540.80

*Labor costs are based on 1 hour at a 16" DBH tree (Average DBH of all ash trees over 15" in inventory is 19.4").

**Total DBH Inches Treated includes all municipal trees 15" or larger DBH, which are 81 trees.

EAB Mitigation Cost Analysis

In-House Mitigation Costs Associated with the Fitchburg EAB Readiness Plan

Class Size (DBH)	Number of Trees	Estimated Average Man Hours to Remove Tree, Grind Stump, and Restore Site	Crew Size	Total Hours Per Class Size	Hourly Rate	Total Billable Hour Cost
1-3	106	0.33	3	104.94	\$28.00	\$2,938.32
3-6	243	0.5	3	364.50	\$28.00	\$10,206.00
6-12	180	2.5	3	1350.00	\$28.00	\$37,800.00
12-18	82	4	3	984.00	\$28.00	\$27,552.00
18-24	44	6	3	792.00	\$28.00	\$22,176.00
>24	7	8	3	168.00	\$28.00	\$4,704.00
Totals	662			3763.44		\$105,376.32

Number of 8 hour work days per crew

470.43

Number of 40 hour weeks per crew

94.09

Contract Mitigation Costs Associated with the Fitchburg EAB Readiness Plan

Class Size (DBH)	Number of Trees	Estimated Average Man Hours to Remove Tree, Grind Stump, and Restore Site	Crew Size	Total Hours Per Class Size	Hourly Rate*	Total Billable Hour Cost
1-3	106	0.33	3	104.94	\$75.00	\$7,870.50
3.1-6	243	0.5	3	364.50	\$75.00	\$27,337.50
6.1-12	180	2.5	3	1350.00	\$75.00	\$101,250.00
12.1-18	82	4	3	984.00	\$75.00	\$73,800.00
18.1-24	44	6	3	792.00	\$75.00	\$59,400.00
>24	7	8	3	168.00	\$75.00	\$12,600.00
Totals	662			3763.44		\$282,258.00

*Hourly rate is calculated based on a daily rate of \$1800 for a three man crew.

Contract Tree Replacement Costs			Estimated In-House Tree Replacement Costs			
Cost of Tree	Number of Trees	Total Cost of Replacing All Removed Ash Trees	Cost of Tree	Number of Trees	4 Man Crew Labor Cost at 40 Minutes/Tree	Total Cost of Replacing All Removed Ash Trees
\$300.00	662	\$198,600.00	\$200.00	662	\$37,072	\$181,829.00

Total Mitigation Cost Using Only In-House Labor for Removal, Stump Grinding, Site Restoration, and Planting	\$287,205.32
--	---------------------

Total Mitigation Cost Using Only Contract Labor for Removal, Stump Grinding, Site Restoration, and Planting	\$480,858.00
--	---------------------

Total Mitigation Cost Using 50% In-House Labor and 50% Contract Labor for Removal, Stump Grinding, Site Restoration, and Planting	\$384,031.00
--	---------------------

Equipment

Operational costs must include additional equipment if the City is to manage EAB using primarily municipal employees. Minimally, the needed equipment includes a 55'-60' bucket truck for larger removals and a second chipper and truck with chip box.

Costs:

55'-60- bucket truck (used):	\$ 40,000
Chipper:	\$ 30,000
Chip box and truck:	\$ 50,000
Total	\$120,000

Wood Reutilization and Marshalling Yards

Second Season Recycling will be the primary site for wood reutilization efforts and handling wood debris. When EAB becomes a major issue for all communities in south central Wisconsin, recycling companies such as Second Season are likely to have difficulty handling all the material trucked to them by their contracted municipalities. They are increasing their rates over the next couple of years and might need to again when the wood stream increases.

If Second Season cannot take Fitchburg's ash material or if the county or state imposes tight quarantines, the City might have to set up its own yards. The cost of those yards includes fencing, barrier gates, and signage and depending on the amount of material, the necessity of contracting for a tub grinder.

Costs:

Ash Material Dropped at Second Seasons Recycling:

Cost per ton

2010	\$16/ton;
After 2010	\$20/ton

Approximate green weight of standing ash trees on public property: 400 ton
Approximate ash tonnage per year: 80

Year 1:	\$1280
Year 2:	\$1600
Year 3:	\$1600
Year 4:	\$1600
Year 5:	\$1600
Total	\$7680

Marshalling Yards:

Fencing/ gate:	\$18,000
Signage:	\$ 1,000
Total	\$19,000

Tub Grinder:

\$2000 /day

Number of days of use depends on amount of material.

Public Education and Communication

With the assistance of the Wisconsin DNR, an outreach plan has been initiated to help inform residents of Fitchburg about EAB. To date presentations regarding the background and status of EAB have been provided to the Council of the Whole, Parks Commission, and city streets and parks employees. An early draft of this plan was presented to the Council of the Whole and Parks Commission.

The city streets and parks employees were given a demonstration by DATCP employee, Becky Grey, of log peeling to determine if EAB was present. Kyoko Scanlon, WDNR Forest Pathologist, provided information on how to recognize EAB, and the signs and symptoms of infected trees. She also provided shirt pocket cards that compared EAB to other non-invasive or less destructive native borers.

Numerous articles have been published in the Fitchburg STAR and the City's quarterly newsletter to inform and update the public on the status of EAB locally and nationally. Presentations and updates have been made to the Park Commission and recorded by and aired on FACTv, the Urban Forester has made Arbor Day presentations to neighborhood associations and scout troops, training has been provided for the highway and parks maintenance staffs, and an EAB webpage is now active on the city website.

Reporting Protocol and Contacts

Reporting & Submitting EAB Suspects & Samples

To help ensure that suspect samples are resolved as quickly and thoroughly as possible, all samples are to be sent to the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). Please call or contact DATCP using the toll-free hotline or the e-mail address:

HOTLINE: 1-800-462-2803

E-MAIL: eab@datcp.state.wi.us

All insect samples should be forwarded to DATCP, with a phone call to the hotline in advance to let DATCP staff know that a sample is being delivered. Please use the following address:

Becky Gray
WI Dept. of Agriculture, Trade and Consumer Protection
2811 Agriculture Drive
Madison WI 53718-6777

City Contact Information

Local EAB Team and Officials

- **Edward Bartell, Urban Forester 270-4289**
 - Scott Endl, Director of Parks, Forestry, and Recreation 270-4288
 - Tony Roach, City Administrator 270-4209
 - Jay Allen, Mayor 270-4215
 - City Alderpersons
 - Alder District #1
 - Andrew Potts 310-4173
 - Carol Poole 273-3168
 - Alder District #2
 - Swami Swaminathan 274-3168
 - Darren Stucker 280-8300
 - Alder District #3
 - Richard Bloomquist 274-8326
 - William Horns 276-8594
 - Alder District #4
 - Steve Arnold 278-7700
 - Shawn Pfaff 278-8344
 - Paul Woodard, Director of Public Works 270-4261
 - Dan Cimino, Parks Maintenance Supervisor 575-2918
 - Mark Hodel, Street Maintenance Supervisor 444-6322
 - Rick Eilertson, Environmental Engineer 270-4264
-
- **DNR Liaison**
 - **Jeff Roe, Regional Urban Forestry Coordinator 275-3256**
 - **Media**
 - FACTv
 - **Organizations**
 - Fitchburg Parks Commission
 - Fitchburg Conservation Resource Commission

Definitions

dbh – diameter at breast height; represents the diameter in inches of a trunk cross-section measured at 4½' above ground level; a basis for estimating or identifying tree volume, value, management needs and costs, utilization options, etc.

delimit – to establish geographic limits or boundaries; emerald ash borer quarantine areas are determined after *delimiting* or determining the extent of area infested by EAB.

EAB – the emerald ash borer insect; as an adult it measures approximately ½" in length by 1/8" wide, is metallic green in color and somewhat bullet shaped. The larvae can reach a length of a little more than 1" in length, are white to cream colored, have a 10 segmented abdomen with a pair of brown, pincer-like appendages on the last segment.

EAB readiness team – a group of people responsible for all aspects of preparing for emerald ash borer within a particular jurisdiction/municipality; team members have specific roles and tasks.

EAB readiness and response plan – a document delineating local EAB readiness activities and processes; includes scope & purpose, authority, responsibility, policies & procedures, actions/tasks, available resources, forms & contracts, technical references & support information (such as surveying and reporting protocols), and similar content.

eradication – total elimination of ash trees within a specified geography area where EAB has been verified. This was the initial and only thought process when the DNR EAB Toolkit for Wisconsin Communities was initially developed (February, 2007). With the advent of new information and experiences throughout the nation, other management controls are now being considered as well.

infestation – refers to an area where the ash trees have been positively identified as having a sustained population of EAB.

marshalling or wood utilization yard – a fenced-in location within a quarantine area where infested or quarantine-area trees are collected and held for further handling.

preemptive removal - in the case of EAB it refers to removing live trees prior to them becoming infested with EAB.

quarantine area – a defined geographic area from which goods may not be transported; *quarantines* will be established by federal or state agencies to restrict ash wood movement out of infested areas to avoid emerald ash borer infestation of new areas; *quarantines* can be applied to an individual property, township, county or entire state.

Information Section

Frequently Asked Questions

1. Where did the Emerald Ash Borer (EAB) come from?

The native range of EAB is eastern Russia, northern China, Japan and Korea.

2. When was EAB first discovered in North America?

EAB was first identified in southeast Michigan in 2002. It likely arrived several years earlier.

3. How did it get to North America?

We don't know exactly, but it most likely traveled in ash wood used for stabilizing cargo in ships or for packing consumer products.

4. Where is EAB now?

As of August 2009, the non-native beetle has since been found in Ohio, Indiana, Illinois, Maryland, Pennsylvania, West Virginia, Minnesota, Wisconsin, Kentucky, Missouri, New York, and Canada. Small infestations have also been eradicated from Virginia. A federal quarantine is in place for all hardwood firewood, ash logs and trimmings, and ash nursery stock in Illinois, Indiana, Ohio, and Lower Michigan. Anyone moving firewood or ash products from these states is subject to state and federal fines starting at \$250.00.

5. How does EAB harm ash trees?

The larval stage of EAB feeds under the bark of trees, cutting off the flow of water and nutrients. Infested trees gradually die over a 2-4 year period.

6. Which trees are susceptible?

All sizes and even very healthy ash trees can be killed. All of Wisconsin's native ash trees (green, white, blue and black ash), as well as many horticultural cultivars (cultivated varieties of ash or hybrids between species of ash), are susceptible to EAB infestation. Research studies are ongoing to test for resistance in various cultivars with the hope that some may survive an infestation in Wisconsin, areas close to infestations (but outside of eradication areas) may benefit from accelerating ash harvest activities to reduce the amount of food or host material available for the insect. Management options are currently being developed; check with your DNR forest health specialist for the most up-to-date information.

7. How important are ash trees to Wisconsin?

There are approximately 727 million ash trees scattered throughout Wisconsin's forests. Ash also comprises 20% of Wisconsin's street trees. Ash serves as an important species in our northern and southern forests and is a key component of forests growing in wet areas including swamps and along river ways. Wisconsin's forest industry also relies on ash for paper, furniture, millwork and dozens of other forest products.

8. What does EAB look like?

The adult beetle is dark metallic green and about one-half inch long.

9. How does EAB spread?

EAB moves short distances by flying and longer distances through movement of infested ash. Adults typically do not fly far from where they emerge, but this depends on the availability of food (ash trees). In Michigan, studies have shown that the vast majority of insects fly only several hundred yards from where they emerge. EAB has moved on nursery stock or logs in the past, but *movement of firewood is the most common way EAB is being spread today.*

10. What is being done about EAB?

There is a national effort to limit the spread and impact of EAB. A national plan, coordinated by the United States Department of Agriculture, Animal Plant Health Inspection Service (APHIS), helps guide what federal, state and local officials must do to manage this insect. Infested areas are quarantined, which means that selected materials such as firewood, ash nursery stock and ash logs may not be moved out of infested areas. Many states are educating the public on the dangers of moving firewood; the primary way EAB and many other invasive pests and diseases of trees are spreading.

11. What is being done in Wisconsin?

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) are currently leading efforts to detect, prepare for and regulate the movement of EAB into and within Wisconsin. The Department of Natural Resources (DNR), U.S. Forest Service, DATCP and the University of Wisconsin have conducted detection surveys of areas deemed high risk for introduction of EAB. These include camping areas and locations where ash trees may have been planted within the last 10 years. Public information and education efforts are focusing on reporting possible sightings of EAB and limiting movement of firewood. If EAB is found in Wisconsin, each infestation will be evaluated carefully to determine the most appropriate management action among a range of options. Decisions on whether or not to remove trees from an area will be made on a case by case basis depending on the site, the extent of the infestation, and the likely source. ***The state strategy is guided by the national EAB Science Advisory Panel and its success relies heavily on federal funds. The state's strategy will be constantly evaluated and may change based on new science-based management options, available funding, and any national strategic changes.***

12. Is there anything I can do now to protect the ash trees in my yard from EAB?

There are systemic insecticides on the market, but their effectiveness varies. The decision to treat is a personal preference, but consumers should educate themselves and use caution when purchasing products that claim to protect trees against EAB. Also, if treated trees occur within an area where removal has been determined to be a viable option, they may not be given special consideration.

13. If I have ash in my woods, should I be doing anything?

Areas close to infestations may benefit from accelerating ash harvest activities to reduce the amount of food or host material available for the insect. Management options are currently being developed; check with your DNR forest health specialist for the most up-to-date information.

14. Should I still consider planting ash in hardwood forest plantations?

Consider limiting ash to 10 percent of the total species mix. Diversity is the key.

15. Is ash still a viable choice when considering what to plant in my yard?

In general, having a diversity of species in your yard, on your street or in your community is your best defense against all tree health problems. If ash comprises 10 percent or more of the tree species in your local area, it would be best to choose an alternative. Ongoing studies are testing native ash and cultivars for resistance to EAB feeding injury. Results are preliminary; resistant cultivars may be available at a future date. Check with your state or county horticultural extension agent for the latest information.

16. What can I do to help?

Do not move firewood. Purchase or cut all firewood from the same general location where you plan to use it. When camping or at a cabin, do not take any leftover firewood home with you. Educate yourself on how to recognize signs and symptoms of EAB. Excellent sources of online information

are: emeraldashborer.info, dnr.wi.gov/invasives, emeraldashborer.wi.gov. Report possible sightings of EAB by calling 1-800-462-2803.

Wisconsin DNR funding credit statement (only if funded by a DNR UF Grant) – “This document was funded in part by an urban forestry grant from the State of Wisconsin Department of Natural Resources Forestry Program as authorized under s. 23.097, Wis. Stat.”