

CITY OF FRANKLIN

ENVIRONMENTAL COMMISSION MEETING

Wednesday, February 22, 2017 – 7:00 P.M.

FRANKLIN CITY HALL

Conference Room Lower Level

9229 West Loomis Road, Franklin, Wisconsin

AGENDA

I. CALL TO ORDER AND ROLL CALL

II. CITIZEN COMMENT

III. APPROVAL OF MINUTES

- A. Minutes of the regular meeting of January 25, 2017

IV. UNFINISHED BUSINESS

- A. Discussion of environmental articles for the City of Franklin Newsletter.
- B. Solar powered renewable energy facilities group buying (cost savings value of volume purchasing) programs for residential, commercial and governmental and institutional properties; City of Franklin interest in potential sponsorship, partnership and/or participation.

V. NEW BUSINESS

- A. Common Council January 17, 2017, direction to the Commission to review and provide a recommendation on an ordinance to amend §178-6. Of the Municipal Code to include Emerald Ash Borer as an infectious tree disease; and an ordinance amending Chapter 240 of the Municipal Code “Trees” to provide that ash trees found to be infected with Emerald Ash Borer are declared a public nuisance.
- B. Arbor Day activities on May 6, 2017.

VI. DISCUSSION OF FUTURE AGENDA ITEMS

VII. SCHEDULE NEXT MEETING

VIII. ADJOURNMENT

Notice is given that a majority of the Common Council may attend this meeting to gather information about an Agenda item over which they have decision making responsibility. This may constitute a meeting of the Council per *State ex rel. Badke v. Greendale Village Board*, even though the Common Council will not take formal action at this meeting.

Notice is given that upon reasonable notice, efforts will be made to accommodate the

Environmental Commission Agenda
February 22, 2017
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needs of disabled individuals through appropriate aids and services. For additional information, please contact the Franklin City Clerk's office at (414) 425-7500.

CITY OF FRANKLIN
ENVIRONMENTAL COMMISSION MEETING
MINUTES
January 25, 2017

unapproved

CALL TO ORDER & ROLL CALL

- I. Chairman Wesley Cannon called the January 25, 2017 regular meeting of the Environmental Commission to order at 7:02 p.m. in the Lower Level Conference Room, Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

On roll call, the following were in attendance: Chair Wesley Cannon, Commissioners Patricia Pomahac, Arthur Skowron, Marc Manthey and Stephanie Flynn (arrived at 7:10 p.m.) and Ald. Dan Mayer. Absent was Vice Chair Curtis Bolton.

CITIZEN COMMENT

- II. The citizen comment period opened at 7:02 p.m. and closed at 7:03 p.m. No one came forward.

APPROVAL OF MINUTES

Minutes of the regular meeting of November 30, 2016.

III.

- A. Commissioner Skowron moved to approve the minutes of the regular meeting of November 30, 2016 as presented. Seconded by Commissioner Manthey. On voice vote, all voted 'aye'. Motion to approve as written.

UNFINISHED BUSINESS

Discussion of environmental articles for the City of Franklin Newsletter

IV.

- A. Commissioner Flynn to follow up with submission of article for May newsletter. No further action to be taken.

Solar powered renewable energy facilities group buying (cost savings value of volume purchasing) programs for residential, commercial and governmental and institutional properties; City of Franklin interest in potential sponsorship, partnership and/or participation.

- B. Commissioner Flynn to follow up on the link on Web site to be included in May newsletter. No action taken.

NEW BUSINESS

Natural Resource Features Special Exception for Indian Community School of Milwaukee, Inc. (Thomas Oechler, property owner), for the purpose of allowing for filling, grading and construction of a proposed system of trails (approximately 600 lineal feet), boardwalks (approximately 600 lineal feet), an observation deck/outdoor

V.

- A. Commissioner Skowron moved and Alderman Mayer seconded a motion to approve a Natural Resource Special Exception for Indian Community School as proposed. The Commission suggests Indian Community School allow access to the boardwalk and trail areas to Franklin Public Schools, both public and private, for supervised educational opportunities and consider periods of public access for recreational and educational purposes. On voice vote, all voted "aye", motion approved.

classroom, elevated platforms/piers and creation of 4 wetland scrapes (ponds) (approximately 1 acre in total size), within and adjacent to wetlands located north of the existing school building, [625 linear feet +/- of 8 foot wide boardwalk on piers, 225 linear feet +/- earthen trail on 0.03 acres (1,180 square feet +/-) of fill to be placed within the wetland, and 4 wetland “scrapes” totaling 0.96 acres +/-, also within the wetland, as part of the mitigation for the project, in addition to ongoing prairie maintenance and buckthorn removal] for property located at 10405 West St. Martins Road, such property being zoned I-1 Institutional District (Tax Key No. 841-9985-001).

Discussion of Milwaukee County Parks 2017 Citizen Based Wetland Monitoring Program.

- B.** Commissioner Pomahac gave an overview of the 2017 Citizen-Science Wetland Monitoring Program held at Wehr Nature Center on Saturday January 21, 2017. Discussion only, no action taken.

DISCUSSION OF FUTURE AGENDA ITEMS

- VI.** Arbor Day activities at the City of Franklin Library will be held on May 6th, 2017. Further discussions will be held at the next meeting to decide what trees and shrubs will be handed out. Discussion only. No action taken.

SCHEDULE NEXT MEETING

- VII.** The next regularly scheduled meeting for the Environmental Commission is February 22, 2017.

ADJOURNMENT

- VIII.** Commissioner Skowron moved to adjourn the Environmental Commission meeting of January 25, 2017 at 7:40 p.m. Seconded by Commissioner Manthey. All voted 'aye'. Motion carried.

TENTATIVE AGREEMENT WITH FRANKLIN FIREFIGHTERS, FOR 2016-2018 SUCCESSOR LABOR AGREEMENT

G.9. Alderman Taylor moved to approve the Tentative Agreement between the City of Franklin and the Franklin Professional Firefighters, I.A.F.F. Local 2760, for a 2016-2018 successor labor agreement and authorize the Mayor, Director of Clerk Services, and Director of Administration to execute a labor agreement incorporating the provisions of the agreement and to authorize the Director of Administration to incorporate such language into the Employee Handbook as he determines is necessary. Seconded by Alderman Dandrea. Upon voice vote, Five Ayes; one Abstention (Alderman D. Mayer). Motion carried.

BENEFIT EXCEPTIONS FOR SERGEANTS WITH THE PROFESSIONAL POLICE OFFICER ASSOC.

G.10. Alderman Taylor moved approve an amendment to the Employee Handbook as follows: 1) to retain a 2017 payment to Sergeants (to be issued in February) equivalent to the College Incentive payment previously provided by the WPPA labor contract that expired 12/31/15, 2) to increase the wages for Sergeants by .8% beginning with the start of the first pay period of 2017, 3) to direct the Director of Administration to modify the Employee Handbook to reflect the .8% adjustment to the Market Rate Special Circumstance for Sergeants, and 4) to amend the Sergeant's Compensatory Time policy language as set forth in the Council Action Sheet dated 1/17/2017. Seconded by Alderman Dandrea. On roll call, Alderwoman S. Mayer, Alderman Taylor, Alderwoman Wilhelm, and Alderman Dandrea voted Aye; Alderman Barber and Alderman D. Mayer voted No. Motion carried.

AMEND MUNICIPAL CODE TO INCLUDE EMERALD ASH BORER AS INFECTIOUS TREE DISEASE AND AMEND TO DECLARE INFECTED ASH BORER TREE A PUBLIC NUISANCE

G.11. Alderman Taylor moved to refer to City staff (City Engineer and Arborist) to review when they feel the weather is more suitable; and following their review then refer the enforcement of emerald ash borer infected trees subject matter to the Board of Public Works and the Environmental Commission for their review and recommendations of and upon both draft ordinances, the City of Franklin Emerald Ash Borer Management Plan, the Greenfield Plan and Wisconsin Emerald Ash Borer Program materials presented at this meeting, and such further information as the Board and Commission deem appropriate, for return to the Common Council. Seconded by Alderman D. Mayer. All voted Aye; motion carried.

<p style="text-align: center;">APPROVAL</p> <p style="text-align: center;"><i>Stu</i></p>	<p style="text-align: center;">REQUEST FOR COUNCIL ACTION</p>	<p style="text-align: center;">MEETING DATE</p> <p style="text-align: center;">January 17, 2017</p>
<p style="text-align: center;">REPORTS AND RECOMMENDATIONS</p>	<p>An Ordinance to Amend §178-6. of the Municipal Code to Include Emerald Ash Borer as an Infectious Tree Disease; and An Ordinance Amending Chapter 240 of the Municipal Code "Trees" to Provide that Ash Trees Found to be Infected with Emerald Ash Borer are Declared a Public Nuisance</p>	<p style="text-align: center;">ITEM NUMBER</p> <p style="text-align: center;"><i>G.11.</i></p>

The above entitled ordinance amending §178-6. of the Municipal Code subject matter was referred to this meeting from the December 6, 2016 meeting. Attached are a copy of the action sheet and draft ordinance from that meeting. The subject matter was referred due to a question regarding the enforcement of the ordinance on private property. Following prior concerns stated by the City Attorney at the meeting on December 6, 2016 involving the potential time and costs involved with regard to enforcement of the subject matter on private property, further review was undertaken. While the Municipal Code is silent with regard to any specific reference to ash trees as a species, the Code has other existing provisions regarding trees. §178-5. Public nuisances affecting peace and safety, provides at sub. F.: "Dangerous trees. All trees which are a menace to public safety or are the cause of substantial annoyance to the general public." Chapter 240 Trees, in part regulates the authority of the City Forester over trees on public and private lands:

§240-9. Powers and duties of City Forester.

A. Authority over public trees and shrubs. The City Forester shall have the authority to plant, trim, spray, preserve, renew and remove public trees and shrubs or cause such work to be done as may be necessary to ensure the safety or preserve the symmetry and beauty of public streets or grounds and to protect public sidewalks, streets, sewers and mains from damage or injury.

B. Authority over private trees and shrubs.

(1) Notice to abate nuisances. Whenever the City Forester shall find on examination that any tree or shrub or part thereof growing or located upon private premises is a public nuisance as previously defined in this chapter, or endangers the life, health, safety or property of the public, or is infested with parasites or insect pests or disease which may spread or scatter to public trees and shrubs, he or she shall notify the owner or his or her agent, in writing or by publication in a newspaper of general circulation in the City, that the nuisance must be sprayed, removed or otherwise abated as directed in the notice within the time specified, which shall not be less than 10 days, unless the City Forester shall determine that immediate correction or removal is necessary for public safety.

(2) Abatement by City. If the owner of such premises or his or her agent shall refuse or neglect to comply with the notice within the time specified, the City Forester shall proceed pursuant to § 178-8., Abatement of public nuisances, of this Code.

The City Attorney posed a question on the League municipal lawyers listserv. on January 10, 2017: "[w]ould appreciate being informed as to any municipalities enforcing a local code prohibition of emerald ash borer on private property, and the method of enforcement. Query is driven by my hypothetical: 5 one acre residential lots; #1 has one ash; #2 has five; #3 has fifteen; #4 has forty; and #5 has a hundred. Thanks." As of this writing, no response (rare). Additionally, a brief discussion was had with a municipal attorney whose office represents many municipalities, with no information of any enforcement on private property. Additional online research was undertaken, specifically with regard to area municipalities. The attached draft ordinance amending Chapter 240 Trees, simply plagiarizes the Greenfield ordinance, which declares emerald ash borer infected trees a public nuisance, to be abated pursuant to a City response plan. A copy of the Greenfield plan is attached. The plan in part provides at page 8: "1. Who will be responsible for removing EAB-infested trees?"

Answer: The residents of Greenfield are responsible for maintaining all privately owned trees in a safe manor and condition. The City will not force removal except in instances where public safety is a concern. The City of Greenfield will continue to strictly enforce its hazard tree policy.

The City of Greenfield Department of Public Works will continue to be responsible for the safe management and removal if necessary of all municipally owned park and right of way trees.”

Subsequent to distribution to staff of the above, the attached copy of the Franklin Emerald Ash Borer Management Plan adopted by the Common Council on May 18, 2010 was received. Note item 9.d. on page 2 of the Plan Summary: “[p]rivate trees cutting and removal will be by property owners.”

The City should additionally amend the Plan if it is determined that the §178-6. or the Chapter 240 amendment is appropriate. The Greenfield plan remains attached for review of its “Factors that Influence Selection of Control or Containment Options” listing for consideration of the prioritization of abatement procedures and perhaps incorporation into the Franklin Plan.

Also attached is a copy of “Reducing the Impact of Emerald Ash Borer Guidelines for Managing Ash in Wisconsin’s Urban Forests”, prepared by the Wisconsin Emerald Ash Borer Program, which “is a cooperative effort between the Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources, the University of Wisconsin-Madison, the University of Wisconsin-Extension, the United States Department of Agriculture-Forest Service and the United States Department of Agriculture - Animal and Plant Health Inspection Service – Plant Pest Quarantine v. 8/03/2010.”

COUNCIL ACTION REQUESTED

A motion to refer the enforcement of emerald ash borer infected trees subject matter to the Board of Public Works and the Environmental Commission for their review and recommendations of and upon both draft ordinances, the City of Franklin Emerald Ash Borer Management Plan, the Greenfield Plan and Wisconsin Emerald Ash Borer Program materials presented at this meeting, and such further information as the Board and Commission deem appropriate, for return to the Common Council;

or

As the Common Council deems appropriate.

ORDINANCE NO. 2017-____

AN ORDINANCE AMENDING CHAPTER 240 "TREES" OF THE MUNICIPAL CODE TO PROVIDE THAT ASH TREES FOUND TO BE INFECTED WITH EMERALD ASH BORER ARE DECLARED A PUBLIC NUISANCE

WHEREAS, Chapter 240 of the Municipal Code of the City of Franklin, Wisconsin regulates trees and provides for the powers and duties of the City Forester; and

WHEREAS, Chapter 240 and all other provisions of the Municipal Code do not regulate ash trees found to be infected with emerald ash borer disease; and

WHEREAS, while the City of Franklin has undertaken substantial efforts to remove infected ash trees and prevent the spread of emerald ash borer disease on public property, it has not undertaken regulatory efforts to address such concerns on private property; and

WHEREAS, the subject matter of regulating emerald ash borer infected ash trees on private property has been reviewed by the Board of Public Works, which recommended that

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: §§240-9., 240-10. and 240-11. of the Municipal Code of the City of Franklin, Wisconsin, are hereby renumbered to §§240-10., 240-11. and 240-12., respectively.

SECTION 2: §240-9. of the Municipal Code of the City of Franklin, Wisconsin, is hereby created to read as follows: "Emerald Ash Borer. Ash trees found to be infected with Emerald Ash Borer (EAB) are declared a public nuisance, to be abated as set forth in this Chapter and in the City of Franklin Emerald Ash Borer Response Plan on file in the Office of the City Engineer."

SECTION 3: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 4: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

ORDINANCE NO. 2017-_____

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SECTION 5: This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2017, by Alderman _____.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2017.

APPROVED:

Stephen R. Olson, Mayor

ATTEST:

Sandra L. Wesolowski, City Clerk

AYES _____ NOES _____ ABSENT _____

APPROVAL	REQUEST FOR COUNCIL ACTION	MTG. DATE 12/06/2016
Reports & Recommendations	ORDINANCE TO AMEND SECTION 178-6 OF THE MUNICIPAL CODE TO INCLUDE EMERALD ASH BORER AS AN INFECTIOUS TREE DISEASE	ITEM NO.

BACKGROUND

Alderman Steve Taylor requested that Staff, with the assistance of the Board of Public Works, propose a strategy for addressing private property trees that are affected with the emerald ash borer (EAB). After consideration in October and November, the Board requested that it be modified for further discussion and consideration at the November meeting.

ANALYSIS

The City has a policy to address EAB for public trees. The City does not chemically treat trees but will remove them if they are seen to be infected. It is estimated that the City has removed over 3,000 EAB trees and annual removals range from 300 to 800 EAB trees. The City's first priority is to address EAB trees that have been planted along urban roadways within public right-of-ways. The second priority is address naturally-growing EAB trees along rural roadways and third priority is to remove naturally-growing EAB trees located on public lands (parks, vacant right-of-ways, donated MMSD lands, etc).

Section 178-6 of the Municipal Code discusses Dutch Elm Disease (DED). This ordinance was probably adopted circa 1960's and although DED is still present, it is not considered a current threat. Staff proposes that an EAB ordinance be incorporated into the DED ordinance in such a way that it can be easily amended when the next fungus/beetle infection is found to affect other tree species.

In addition, Staff would like to remove some language that requires excessive staff time to implement the ordinance.

DED is a fungus primarily spread by beetles. Both DED and EAB are highly infectious and it is advantageous to the community for all affected trees to be removed. Staff proposes to modify Section 178-6 to include EAB and make it easier to add. Below is the existing ordinance (*italicized*) with proposed changes (**bold and underlined**)

§ 178-6 ~~*Dutch Elm Disease*~~ **Infectious Tree Diseases**

A. *Public nuisances declared. The Council, having determined that the health of the elm trees within the City is threatened by a fatal diseases known as "Dutch Elm Disease," hereby declares the following to be public nuisances:*

- (1) *Any living or standing elm tree or part thereof infected with the Dutch Elm Disease fungus or which harbors any type of the elm bark beetles.*
- (2) *Any dead elm tree or part thereof, including logs, branches, firewood, stumps or other elm material, from which the bark has not been removed and burned or sprayed with an effective elm bark beetle destroying insecticide.*
- (3) **Any living or standing ash tree or part thereof which harbors any type of the emerald ash borer beetles.**

(4) Any dead ash tree or part thereof, including logs, branches, firewood, stumps or other ash material, from which the bark has not been removed and burned or sprayed with an effective emerald ash borer beetle destroying insecticide.

B. Nuisances prohibited. No person shall permit any public nuisance as defined in Subsection A to remain on any premises owned or controlled by him or her within the City.

C. Inspection. The City Forester, or designated representative, shall respond to written complaints and inspect or cause to be inspected all premises and places within the City at least twice each year to determine whether any public nuisance as defined in Subsection A exists thereon, and shall also inspect or cause to be inspected any elm tree reported or suspected to be infested with the Dutch Elm Disease or elm bark bearing material infested with elm bark beetle, disease or beetle identified in Subsection A.

D. Abatement of nuisances.

(1) If the City Forester or designated representative, upon inspection and examination, ~~shall determine~~ that any public nuisance as herein defined exists in or upon any public street, alley, boulevard, parkway, park or other public place, including the terrace strip between curb and sidewalk within the City, and that the danger to other trees within the City is imminent, he or she shall immediately cause it to be removed and burned or otherwise abate the same in such a manner as to prevent as fully as possible the spread of Dutch Elm Disease or the insect pests or vectors known to carry such disease fungus.

(2) If the City Forester or designated representative, determines with positive certainty that any public nuisance as herein defined exists in or upon private premises and the danger to other elm trees within the City is not imminent, he or she shall immediately serve upon the owner of the property, if he or she can be found, or upon the occupant, a written notice to abate such nuisance ~~within~~ with no less than 30 days of the service of such notice. If the owner or occupant does not abate such nuisance within the time limit, the Forester, or designated representative, shall cause the same to be abated. No damages shall be awarded to the owner for destruction of any elm tree, elm wood or any part thereof pursuant to this chapter.

It should be noted that Staff requested other Wisconsin municipalities to provide input on how they address EAB. Below is a summary of that research.

- **Mount Horeb** (Chapters 8 and 10) nuisance trees not specific to any species.
- **Middleton** (Chapter 20) defines "Dutch Elm Disease" includes all standing elm trees or parts thereof, logs, branches, stumps or other elm materials infested with the fungus *ceratocystis ulmi* or which harbors any of the Elm Bark, Beetle, *scolytus multistriatus* - (European) or *hylurgopinos rufides* (American).
- **Oconomowoc** (Section 8A) infected trees not specific to any species
- **Port Washington** (Section 7.20) hazardous or infected trees not specific to any species
- **Racine** (Section 102-76) identifies Dutch Elm Disease, Oak Wilt Disease, and Emerald Ash Borer
- **Beaver Dam** (Section 54-10) Private trees are addressed under sub (c)
- **Cedarburg** (Section 6-4-11) infected trees not specific to any species

- **Chenequa** (Section 3.07) nuisance trees not specific to any species
- **Deforest** (Section 16.25) nuisance trees not specific to any species
- **Fox Point** (Section 310) Private trees are addresses in 310-119(B)
- **Milwaukee** (Section 116-53) Private trees are addressed in 116-66-67.

OPTIONS

Adopt Ordinance change; or
Deny Ordinance; or
Table

FISCAL NOTE

This is proposed to be a private property matter and would have no impact on the City budget with the exception of City Forester time to perform the role outlined in the ordinance.

RECOMMENDATION

The Board of Public Works discussed this issue at the October and November 2016 meetings and made a recommendation to Common Council to adopt the modified Ordinance.

Motion to adopt Ordinance No. 2016-_____, a resolution to amend Section 178-6 of the Municipal Code to include Emerald Ash Borer as an infectious tree disease.

ORDINANCE NO. 2016-____

AN ORDINANCE TO AMEND §178-6 OF THE MUNICIPAL CODE TO INCLUDE
EMERALD ASH BORER AS AN INFECTIOUS TREE DISEASE

WHEREAS, the emerald ash borer is infecting ash trees throughout the City of Franklin to cause Emerald Ash Borer (EAB) disease, and;

WHEREAS, Section 178-6 of the Municipal Code addresses another infectious tree disease known as Dutch Elm Disease (DED) caused by elm bark beetles, and;

WHEREAS, there will likely be future widespread infectious tree diseases, and;

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: ~~§178-6. Of the Municipal Code of the City of Franklin, Wisconsin, is hereby amended to read as follows (additions double underlined, deletions in strikethrough):~~

§ 178-6 ~~Dutch Elm Disease~~ Infectious Tree Diseases

A. Public nuisances declared. The Council, having determined that the health of ~~the elm trees within the City is threatened by a fatal diseases known as "Dutch Elm Disease,"~~ hereby declares the following to be public nuisances:

- (1) Any living or standing elm tree or part thereof infected with the Dutch Elm Disease fungus or which harbors any type of the elm bark beetles.
- (2) Any dead elm tree or part thereof, including logs, branches, firewood, stumps or other elm material, from which the bark has not been removed and burned or sprayed with an effective elm bark beetle destroying insecticide.
- (3) Any living or standing ash tree or part thereof which harbors any type of the emerald ash borer beetles.
- (4) Any dead ash tree or part thereof, including logs, branches, firewood, stumps or other ash material, from which the bark has not been removed and burned or sprayed with an effective emerald ash borer beetle destroying insecticide.

- B. Nuisances prohibited. No person shall permit any public nuisance as defined in Subsection A to remain on any premises owned or controlled by him or her within the City.
- C. Inspection. The City Forester, or designated representative, shall respond to written complaints and inspect or cause to be inspected all premises and places within the City at least twice each year to determine whether any public nuisance as defined in Subsection A exists thereon, and shall also inspect or cause to be inspected any elm-tree reported or suspected to be infested with the Dutch Elm Disease or elm bark bearing material infested with elm bark beetle, disease or beetle identified in Subsection A.
- D. Abatement of nuisances.
- (1) If the City Forester or designated representative, upon inspection and examination, ~~shall~~ determines that any public nuisance as herein defined exists in or upon any public street, alley, boulevard, parkway, park or other public place, including the terrace strip between curb and sidewalk within the City, and that the danger to other trees within the City is imminent, he or she shall immediately cause it to be removed and burned or otherwise abate the same in such a manner as to prevent as fully as possible the spread of Dutch Elm Disease or the insect pests or vectors known to carry such disease fungus.
- (2) If the City Forester or designated representative, determines with positive certainty that any public nuisance as herein defined exists in or upon private premises and the danger to other elm trees within the City is not imminent, he or she shall ~~immediately~~ serve upon the owner of the property, if he or she can be found, or upon the occupant, a written notice to abate such nuisance ~~within~~ with no less than 30 days of the service of such notice. If the owner or occupant does not abate such nuisance within the time limit, the Forester, or designated representative, shall cause the same to be abated. No damages shall be awarded to the owner for destruction of any elm tree, elm wood or any part thereof pursuant to this chapter.

SECTION 5: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 6: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

SECTION 7: This ordinance shall take effect and be in force from and after its passage and publication.

ORDINANCE NO. 2016-_____

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Introduced at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2016, by Alderman _____.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2016.

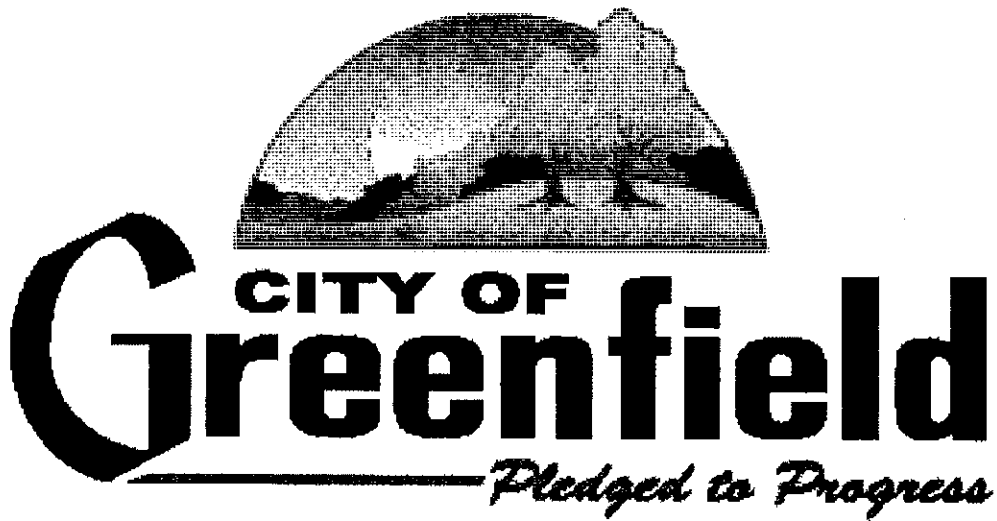
APPROVED:

Stephen R. Olson, Mayor

ATTEST:

Sandra L. Wesolowski, City Clerk

AYES _____ NOES _____ ABSENT _____



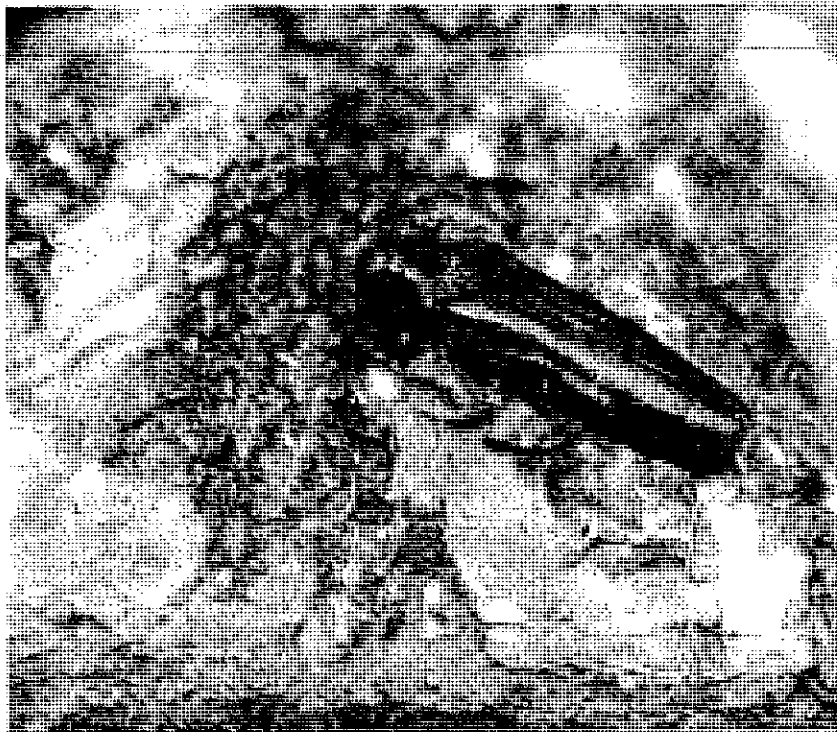
**DEPARTMENT OF
NEIGHBORHOOD SERVICES
PUBLIC WORKS DIVISION
FORESTRY**

**EMERALD ASH BORER
RESPONSE PLAN**

This plan details a response to EAB infestations that may be found in the City of Greenfield and surrounding communities.

The plan is based on the most recent scientific studies and recommendations from key partners and multiple state and federal agencies. Updates to this plan will be made as needed and posted on the City of Greenfield website.

This plan is in a dynamic state. Progress in research and management programs and recommendations by the DATCP, DNR and the Wisconsin EAB Management Team will likely impact the City's response.



EAB Executive summary

The Emerald Ash Borer (EAB) is an invasive species from Asia that arrived in the United States in wood packing material. The pest was first detected in Michigan in 2002 and has subsequently spread to Canada and a number of other states including northern Illinois. The pest kills all species of North American ash trees and has killed an estimated 30 million trees to date.

When it comes to the potential devastation of EAB, there is a lot at stake in Wisconsin. There are an estimated 737 million ash in our forests and another 5 million in our communities. Although we do not have accurate information on the number of ash trees in the City, it is estimated that on average, 20 percent of the trees in Greenfield are ash species. Impacts to the City will be substantial. Similar size communities that have experienced EAB infestation have seen dramatic increases in water and energy consumption, storm water run off and flooding and the problems associated with disposal and utilization of so much wood.

On August 4, 2008 officials from the Wisconsin Department of Natural Resources and the Wisconsin Department of Agriculture, Trade and Consumer Protection confirmed the arrival of EAB in the Village of Newburg. Three days later, a second EAB find a short distance from the first site was confirmed. Within a week, EAB quarantine regulations were put in place. As recently as October 2008 EAB was found in Kenosha county.

Since it was first discovered in Detroit, Michigan in 2002, EAB has spread to nine other states and to Canada. "This continued movement, coupled with the high price tag connected to the death of infested ash trees, are reasons why communities should prepare for this destructive invasive insect." Richard Rideout Wisconsin DNR Urban forestry director said. "EAB is not a problem that belongs to any single agency or location."

The actions taken by the City of Greenfield will be guided by the DATCP, DNR and Wisconsin's EAB team. Each infestation will be individually examined and evaluated to determine the most appropriate course of action for that particular EAB find. The response to an infestation must take into account the unique circumstances surrounding the specific infestation. The State of Wisconsin and the City of Greenfield are committed to using the best available science and information about the economic, environmental and social consequences of the available options, as the basis for making appropriate management and control recommendations.

While there is much work yet to be done to fully prepare for EAB's ultimate arrival, Wisconsin is taking proactive steps to prevent EAB from arriving and to find it early, before populations become established. DATCP, DNR staff and the University of Wisconsin, along with other partners at the state and federal level, continue to work diligently on matters of early detection, regulatory safeguards and public outreach in an effort to protect and preserve the ash resource across the entire state.

The Response Plan

The City of Greenfield response will be guided by and where discrepancies occur will differ to the State of Wisconsin EAB response Plan. Devised by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and the Department of Natural Resources (DNR) The plan was created with the input of the University of Wisconsin-Madison, USDA Animal and Plant Health Inspection Service – Plant Protection and Quarantine (APHIS-PPQ) and the USDA Forest Service.

Goal

The goal of the Greenfield Emerald Ash Borer Program is to identify appropriate and effective response actions to be taken by the City and its residents when EAB arrives. These actions include prevention, detection, communication, regulation and management activities.

Objective

The objective of the plan is to minimize the destructive effects of EAB on our ash resources. Ash trees are a prolific species well adapted to the urban environment. In Greenfield, ash trees are one of the first species to reestablish on disturbed sites. The highly adaptable ash tree has been widely planted as landscape trees in our homes and parks for decades.

Background

EAB is native to Asia and appears to have been introduced on solid wood packing material to the Detroit, Michigan area sometime in the early to mid 1990s. The beetle went unnoticed for many years for a variety of reasons: EAB is small, ash often don't show symptoms in the first years they are infested, and many ash in the Detroit area were in poor health for other reasons. EAB was finally recognized in 2002 when the borer started causing widespread death of ash in the Detroit area and across the Canadian border in Windsor, Ontario. Quarantines on nursery stock, logs, firewood and other potential vectors of EAB were instituted, but EAB had already become established in many areas and it was just a matter of time before they were detected.

In 2003, EAB was found in northwestern Ohio. Nursery stock shipped to Maryland in violation of quarantine led to its introduction in that state and in northern Virginia. Populations of the borer found in Indiana in 2004 and in Illinois in 2006 may also have become established prior to the recognition of EAB in Detroit in 2002. EAB continues to spread and, in 2007, was found in western Pennsylvania. A recent introduction in West Virginia appears to have a firewood origin.

In Wisconsin, DATCP and DNR have been surveying for the pest since 2004. Surveys have been done using commonly accepted delimitation strategies in counties nearest established populations and using other common techniques in areas of high risk such as campgrounds.

The City of Greenfield established a moratorium on planting all ash species and extended that moratorium to all developments in the City shortly after EAB was first identified in Michigan.

In 2008, established populations of EAB were found in Ozaukee & Washington counties. In October 2008 EAB was also found in Kenosha County however that find does not appear to be part of an established population. The Wisconsin EAB team is investigating the site to decide if county should also be under quarantine. To date, four Wisconsin counties are under quarantine to control the movement of ash trees and ash products.

Current Detection Activities

The State of Wisconsin has been conducting targeted surveys of high-risk areas since 2004. Surveys include destructive sampling of girdled ash trees and deployment of the purple prism traps throughout the state.

The City of Greenfield is working to establish an accurate estimate of the ash population and its distribution in the community using information gathered from the City's right-of-way inventory, aerial survey maps and ground observation.

The City Forester will investigate all reports of suspect ash trees in the community and make a determination as to whether the incident warrants further investigation by state EAB officials.

Residents are encouraged to report trees that exhibit visible signs of Emerald Ash Borer infestation such as crown thinning, vertical bark splits, D-shaped exit holes, dead and dying branches, woodpecker damage and epicormic sprouts.

Management and Response Activities

Once EAB is identified in the City of Greenfield or Milwaukee County, the City will assist the DATCP and the Wisconsin EAB team wherever possible.

Although most of the actual command staff will be comprised of representatives from DATCP, DNR and USDA-APHIS, the Greenfield City Forester, Tree Commission and selected DPW staff will assist as needed.

Projected early EAB management activities will include press releases, distribution of EAB literature and educational meetings available to City and County residents and interested industry personnel.

The City Forester and State Command Staff will assist Greenfield residents with identification and management options of infected trees on private property.

The City of Greenfield does not endorse total ash tree eradication, unless otherwise dictated by the DATCP. Greenfield residents will be however be expected to maintain their ash trees in a safe manor and condition.

The City of Greenfield will maintain a strict policy of removal or treatment of infected park and right of way ash trees. However in some instances the City may reserve the right not to remove infected ash trees where it is deemed that such removal will cause excessive damage to remaining healthy trees or the environment and where the dying trees will not pose a hazard to the community at large.

Once EAB is found in Milwaukee County, the DATCP will likely issue a county wide quarantine to restrict the movement of EAB and infested host material.

Disposal and Utilization

Ash trees killed by EAB or those taken as part of a management plan may result in a significant number of trees. As a result, one of the largest challenges in EAB management will be disposal and utilization of ash material. Because quarantine regulations restrict the movement of ash material out of quarantined areas (with some exceptions), wood utilization becomes even more difficult. These restrictions may limit the ability to use this material as commercial landscape mulch, wood pulp chips and solid wood products (lumber, railroad ties).

Given the potentially large volume of resulting wood debris, wood utilization issues are of primary concern. The state EAB task force is currently gathering information regarding the location of potential utilization assets, such as biomass fuel users, firewood processors, tree care firms, sawmills, pulp mills, mulch manufacturers, and landfills. The City of Greenfield is exploring local wood utilizations options and will weigh them against options provided by the EAB task force.

It is hoped that new markets will become available or can be developed. For example, wood chips can be used as a bulking agent for sewage sludge composting or as feedstock for creation of pyrolysis oils. Pyrolysis oils can be used as heating oil, a carrier for creosote treating, or as a feedstock for the production of various wood chemicals and wood pellets.

Implementing EAB Management Strategies

Implementing one or all of the management strategies will perhaps slow, or in some cases stop, the movement of EAB. While researchers continue to develop tools to manage EAB, delaying the spread and population expansion of the insect allows more time to develop even more effective management tools. Wisconsin communities, homeowners and woodland managers and forestry professionals will need as much time as possible to implement practices that could buffer the effects of quickly losing large numbers of ash trees.

Management strategies are based on research findings and the experience of managers working with EAB. Some of the management options are considered experimental and may change as new information is acquired. The most current and best information must be used when evaluating options.

Management Strategies

Factors that Influence Feasibility of Control or Containment Strategies

1. Age and Size of Infestation

Recent research has provided a reliable method for determining the age of an infestation. Infestations that have been present for several years have had the opportunity to become established and spread. It is much more difficult to determine the boundaries of these infestations. Large infestations covering a range of habitats and landowners are typically more difficult to manage aggressively.

2. Ash Density and Distribution Within and Adjacent to Infestation

This information, obtained from a combination of existing resource maps, database and newly collected data will give decision-makers insight into the amount of resource at risk in the area. Areas with higher densities of ash will create serious management challenges.

4. Proximity to Other Infestations

Examining how each infestation fits in the bigger picture of a larger infested area will guide strategic management decisions and allow more efficient use of available resources. The proximity to existing infestations affects the likelihood for success of certain management strategies. This factor is closely related to the likelihood of reintroduction.

6. Risk of Artificial Spread from a Location

Knowledge of the level of risk of artificial spread and how it may occur will help determine the likelihood of successfully managing an infestation and determine the strategies needed to minimize artificial spread. If a site is deemed a high risk for further spread, managers may wish to focus additional efforts at reducing that risk.

7. Presence of Natural Dispersal Corridors

The presence of natural dispersal corridors could provide additional challenges and require managers to focus on options for limiting spread through these corridors. The presence of such corridors may increase the likelihood of a particular management strategy designed to restrict movement through that corridor. In contrast, a site that is very isolated with limited corridors for dispersal may be managed differently since spread may be less likely.

Making decisions related to the implementation of control or containment options must include evaluation of the factors that influence feasibility and selection.

Factors that Influence Selection of Control or Containment Options

1. Environmental impact
2. Land ownership
3. Land use and classification (e.g. state natural area, agricultural, river edge, swamp, etc.)
4. Cost of implementing management
5. Availability of resources to carry out management
6. Sociological impact
7. Size of infestation

The above factors have been identified as important to analyze as part of the process for selecting a control or containment option. The order of the factors is not significant. The influence of one may outweigh others and each infestation should be analyzed separately.

Management Strategies

Integrated EAB Control or Containment: Taking No Action

Taking no action means EAB is permitted to multiply and expand without any human intervention. The rate of spread of EAB across the landscape will be much greater if no action is taken.

Considerations

When choosing to take no action, EAB management is reactive instead of proactive. The general consensus based on research findings and survey work concludes that most ash will be eliminated from the landscape.

1. There is little or no evidence of any inherent resistance or tolerance in any species of native ash in North America.
2. There is little or no evidence of any environmentally based resistance due to soil types, moisture, nutrients, light, heat and topographic position.

EAB in Greenfield

1. Who will be responsible for removing EAB-infested trees?

Answer: The residents of Greenfield are responsible for maintaining all privately owned trees in a safe manor and condition. The City will not force removal except in instances where public safety is a concern. The City of Greenfield will continue to strictly enforce its hazard tree policy.

The City of Greenfield Department of Public Works will continue to be responsible for the safe management and removal if necessary of all municipally owned park and right of way trees.

2. Can the DPW handle the additional work without additional financial resources?

Answer: Not likely. The DPW and City forester are exploring management options to improve crew and equipment efficiency. The City is also exploring wood utilization options to help defer some of the expenses associated with wood storage, treatment and removal. Communities that have already experienced EAB infestations have had their budgets stretched to the limits often suspending maintenance and equipment purchases for several years as EAB moves through the community.

3. How will EAB infested trees be disposed of?

Answer: The City will provide a safe area for storage and processing of diseased wood removed by City crews and Greenfield residents only.

Commercial tree and landscape companies will be charged a fee to dispose of ash wood in the municipal storage area. Fee yet to be determined.

4. Who will be notified of a possible EAB problem, and how will citizens receive EAB information?

Answer: General EAB information will be distributed on a county wide basis. The Department of Public works, the City Forester and the City website can provide answers to specific questions posed by residents.

Conclusions

Ultimately effective management of this potentially devastating pest must be a dynamic process of continual analysis, assessment and adjustment of techniques and policy as needed.

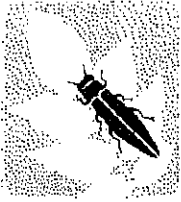
Our urban forest is a valuable and under-utilized resource that can be 'put to work' to positively impact storm water problems, air pollution, and climate change. We need to protect what we have while planning and replanting for a sustainable, pest resistant urban forest in the City of Greenfield. The support, cooperation and commitment of the City fathers and residents of Greenfield will determine whether we can preserve the quality of life and our environment in Greenfield.

Available resources

EAB information can be found at the Wisconsin Emerald Ash Borer Resource website at emeraldashborer.wi.gov (exit DNR) and at the Websites of the DNR, DATCP, the University of Wisconsin and UW-Extension, the U.S. Department of Agriculture-Animal and Plant Health Inspection Service, and the U.S. Forest Service. These agencies share responsibility for responding to EAB. The [Wisconsin Emerald Ash Borer Resource Web site](#) also has a link to the [Wisconsin Emerald Ash Borer Response Plan \(pdf\)](#) (exit DNR), which details how state and federal agencies will respond to EAB finds.

Another valuable source of information is the [Emerald Ash Borer Toolkit for Wisconsin Communities](#), a compilation of documents and resources prepared by DNR Urban Forestry staff. The Toolkit is regularly updated and includes planning documents, copies of sample ordinances, and information about management strategies that can be used “as-is” or adapted to meet a community’s circumstances. All or select parts of the Toolkit now can be downloaded from the DNR [Urban Forestry](#) Web site. A CD of the Toolkit can also be ordered from that webpage at no charge.

Greenfield’s DPW and City Forester, UW-Extension staff and private sector consulting arborists are valuable resources for City residents.



Wisconsin Emerald Ash Borer Program

Reducing the Impact of Emerald Ash Borer Guidelines for Managing Ash in Wisconsin's Urban Forests

August 3, 2010

This document provides Wisconsin communities and the professionals that serve them with guidance and recommendations on how to manage their urban forests in the face of emerald ash borer (EAB). It is not a guide for controlling EAB, nor does it provide details on implementing management tactics. There are numerous publications and resources that contain that information and this document provides links to those detailed resources.

These guidelines and recommendations were developed by a panel of agency, university and private industry experts and reflect application of the best science and experience currently available to minimize the impact of EAB on Wisconsin's urban forests. There is no state mandate to implement these recommendations. It is up to individual local governments to adopt or adapt these recommendations as fits their situation and resources. Because the science and practice of dealing with EAB is changing rapidly, this document will only be produced electronically so that information and links can be continually updated.

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www.emeraldashborer.wi.gov

EAB Hotline: 1-800-462-2803

The Wisconsin Emerald Ash Borer Program is a cooperative effort between the Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources, the University of Wisconsin-Madison, the University of Wisconsin-Extension, the United States Department of Agriculture-Forest Service and the United States Department of Agriculture-Animal and Plant Health Inspection Service - Plant Pest Quarantine v. 8/03/2010

RES. 2010-6644
REVENUE BOND
FINANCING
(DASH MEDICAL
GLOVES, INC.)

G-3. Alderman Olson moved adopt Resolution No. 2010-6644, AN INITIAL RESOLUTION REGARDING INDUSTRIAL DEVELOPMENT REVENUE BOND FINANCING FOR DASH MEDICAL GLOVES, INC. Seconded by Alderman Taylor. All voted Aye; motion carried.

EMERALD ASH
BORER
MANAGEMENT

G-4. Alderman Wilhelm moved to proceed with the implementation of Emerald Ash Borer Management Plan as recommended by the Board of Public Works and Environmental Commission and to report back to the Common Council quarterly, unless a special presentation is required. Seconded by Alderman Solomon. All voted Aye; motion carried.

IAFF LOCAL 2760
TENTATIVE 2010-
2012 LABOR AGMT.

G-5. Alderman Solomon moved to approve the tentative agreement for a 2010-2012 labor agreement with the Franklin Professional Firefighters, I.A.F.F. Local 2760, and authorize the Mayor, Director of Clerk Services, and Director of Administration to execute a labor agreement incorporating the provisions of the tentative agreement. Seconded by Alderman Taylor. At 8:22 p.m. Mayor Taylor passed the gavel to Council President Taylor who chaired the meeting. At 8:26 p.m. the gavel was returned to Mayor Taylor who then returned to chairing the meeting.

On the vote for the main motion, all voted Aye; motion carried.

UDO AMENDMENT
NATURAL
RESOURCE
PROTECTION PLAN
EXEMPTION

G-6. Alderman Olson moved to direct staff to prepare an ordinance to exempt in part existing principal structure developed parcels from Natural Resources Protection Plan and conservation easement requirements upon applications for accessory structure or building remodeling or addition permission, for natural resources that are not within 100 feet of the area to be disturbed by the new development, and to include comments submitted by Alderman Wilhelm and staff, and to schedule the ordinance for public hearing before the Plan Commission. Seconded by Alderman Taylor.

Alderman Solomon moved to call the question. Seconded by Alderman Skowronski. All voted Aye; motion carried.

On the vote for the main motion, all voted Aye; motion carried.

ORD. 2010-1999
AMEND BUILDING
CONSTRUCTION
PROVISIONS

G-7. Alderman Solomon moved to adopt Ordinance No. 2010-1999, AN ORDINANCE TO AMEND THE MUNICIPAL CODE BUILDING CONSTRUCTION PROVISIONS TO REQUIRE CERTIFICATION OF GRADE PRIOR TO CONSTRUCTION OF FOOTINGS AND FOUNDATION. Seconded by Alderman Schmidt. All voted Aye; motion carried.

APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MTG. DATE 5/18/10
Reports & Recommendations	SUBJECT: Implementation of recommended Emerald Ash Borer Management Plan	ITEM NO. <i>C-14</i>

BACKGROUND

On August 4, 2010 the Council directed the Board of Public Works and Environmental Commission to jointly develop a recommended policy as how the City should react to infestation of the Emerald Ash Borer (EAB). A sub-committee made up of two members from the Board and two members from the Commission along with staff has met monthly, reporting to respective Board and Commission. After extensively considering the ash borer, its infestation into Oak Creek and Franklin and strategies to deal with the potential, the Board of Public Works and Environmental Commission hereby present its findings in a recommended management plan.

ANALYSIS

The EAB has been detected in several locations in the City of Franklin, as expected infestation is beginning to spread from the Southwood East Subdivision. The rate of infestation does not appear to be overly aggressive to date.

Staff has surveyed a number of Wisconsin communities and others in neighboring states of Michigan, Ohio, Indiana and Illinois.

As can be seen on the summary survey sheets, little activity has started in Wisconsin. Most communities are not treating public trees. Communities that treat are doing it to retain higher value types of ash – white typically. Others are treating to stage out infestation to better manage the handling of trees. Out-of-state surveys, most notably from Michigan, indicate the potential rate and severity of infestation.

This has lead to the sub-committee to express its concern that the plan needs to be adaptable to adapt to change.

OPTIONS

The management plan was recommended based on several decisions which can be found on the sheet titled Emerald Ash Borer Management Plan Recommendations.

FISCAL NOTE

A plan cost estimate has been developed. It maximizes the use of City Department of Public Works. There is no proposed ash tree treatment of public trees or handling of private trees. It assumes eight (8) years of DPW involvement to remove and replace public trees. Presently the annual cost of material and rental is estimated at \$90,750. The recommended program uses extensive Highway personnel; and therefore, would require adding two full-time persons to the Highway Department for the next 8 to 10 years to maintain City infrastructure.

There will be no significant material or rental expenditure in 2010. A budget for 2011 will need to be established once the tree survey and monitoring is complete.

RECOMMENDATION

Motion to proceed with the implementation of recommended plan and to report back to Council quarterly, unless a special presentation is required.

RJR/sg
Encl.

**RECOMMENDED
EMERALD ASH BORER MANAGEMENT PLAN SUMMARY
CITY OF FRANKLIN
2010**

The following is a plan to control the impact of the infestation of the emerald ash borer and potential premature loss of ash trees using the most updated scientific advice and at the lowest cost to the City of Franklin. It should be recognized that due to the uncertainty of the points of infestation and rate of infestation, this plan will need to be dynamic to respond to change.

The following is an anticipated sequence of events and action items:

1. Developed acceptance of plan by Borer sub-committee, recommendation by Board of Public Works and Environmental Committee and authorization of Common Council to proceed.

A number of plan decisions were required and are made part of this plan.

The anticipated program and annual costs of this plan is made part of this plan.

2. Using a Department of Public Works Forestry grant fund match this summer, a consultant will inventory and survey City planted and maintained terrace trees (trees placed back of curb). The consultant survey will rate the trees based on size, vitality and structural condition. This rating will guide decisions which ash trees are infested have the lowest value and therefore would be first to be taken down. This will be done in an orderly progression.
3. A windshield survey of ash trees along rural roadways will also be completed in 2010. The survey will be specific to the number and condition of ash trees. Public Works will remove infested and declining ash trees on City right-of-way. Although unknown at this time, the number will be in the thousands. Removed trees along rural roadways will not be replaced.
4. Notification of residents of this plan. The resident will be made aware plan details regarding how only ash trees within public right-of-way will be dealt with by the City. In addition, the resident will be notified that:
 - a. A replacement tree will be provided, one per lot side abutting a street(s).
 - b. The City will not be treating terrace trees. If the residents desire, they may introduce root drench or hire a licensed pesticide applicator and notify the City of each (annual) application.
 - c. Notifying the City of treated trees is so that the City will not remove a tree that a resident has treated and these trees can be monitored for effectiveness of the treatment.
5. The Department of Public Works will begin cutting down infested trees in the fall of 2010. It is anticipated cutting will begin in the Southwood East Subdivision area, the only area presently showing infestation.

An eight (8) year removal of the 3,000 terrace ash trees will uniformly result in a manageable 375 trees taken and replaced per year. To keep ahead of the potential of infestation, trees rated poorly in sections immediately adjacent to Southwood East are proposed to be taken.

6. All infested and declining ash trees within City parks, near active area around City buildings will also be removed by the Public Works Department. Dead ash trees in public natural areas that are not in active park areas will not be removed.
7. A marshalling yard on lands near the Department of Public Works facility may be required in the future. The yard would be managed by Public Works for disposal of public trees.
8. In the spring of 2011, the Public Works will finish stumping as soon as possible trees taken in the fall of 2010, landscape sites and replace trees with new (2" diameter) trees, a species to be determined.
9. The process will continue until public ash trees within the City have been removed and processed.
 - a. Priority given to completing removal of terrace trees which present the highest potential of public hazard.
 - b. Priority also given to infested trees in close proximity to public buildings and active park areas.
 - c. The need for a marshalling yard will be determined with analysis of rate of trees received, processed and removed.
 - d. Private trees cutting and removal will be by property owners.
10. Additional management information is available for review.

EMERALD ASH BORER MANAGEMENT PLAN DECISION

1. Insecticide treatment
 - √ - No Treatment due to cost, liability and uncertainty of success
 - √ - City to annually treat "valued" terrace ash trees
 - If the City were to treat, assume 300 trees x \$30/ea = \$9,000/year
 - City to treat most terrace ash trees greater than 8 inches in diameter
 - Assume 1,000 trees x \$25/ea = \$25,000/year

2. Tree to be taken down and hauled
 - √ - Public trees in street terrace
 - √ - Public trees in road right-of-way
 - √ - Public trees in active park areas
 - Public trees in public lands
 - Trees in WE Energies, Milwaukee County
 - Franklin School properties
 - Trees on private lands

3. Begin taking down infested street terrace ash trees with noticeable poor condition this September, 2010

4. Replacement of trees taken
 - √ - No replacement by City of Franklin
 - One terrace tree placed per lot side
 - Assume 3,000 trees x \$150/ea = \$450,000

5. Stump and landscape site at terrace taken tree

6. Establish marshalling yard
 - √ - Wait to determine need based on public trees and private wood received following present practice and the resulting amount of wood to be processed at the existing DPW yard
 - Establish yard for all public trees \$81,000
 - Enlarge for private trees \$65,000
 - No location established to date

A land lease cost of non-City lands will likely be required

7. Tub grinder is required to process wood product to acceptable size. The following are options:
 - √ - Purchase reconditioned unit – \$200,000
 - Long term contract with private contractor – \$25,000/yr x 8 years
 - Agreement with Waste Management – uncertain

8. Pursue agreement with lumber yard(s) for log processing

√ Management Plan Recommendation

May, 2010

EMERALD ASH BORER MANAGEMENT PLAN
COST ESTIMATE

This alternative maximizes the use of City Department of Public Works. There is no proposed treatment of public trees or handling of private trees. It assumes eight (8) years of DPW involvement.

Material/Rental Costs

Replacement Trees:		
3,000 trees @ \$150/tree	\$	450,000
Landscape Materials:		
3,200 sites @ \$10/site		32,000
Treatment of Valued Trees (estimated 300) 8 yrs.		36,000
Tub grinder Rental/Purchase		200,000
Replacement Stumper and Miscellaneous Tools		10,000
MATERIAL/RENTAL TOTAL	\$	728,000
ANNUAL COST	\$	91,000

Labor/Equipment Costs

		<u>DPW Hours</u>
Cut down and haul		
5,700 trees* @ \$150/tree	\$	11,860 hrs
Stump tree		
3,200 trees @ \$50/tree	128,000	2,150 hrs
Landscape sites		
3,200 sites @ \$80/site	256,000	3,840 hrs
Replace tree & maintain		
3,000 trees @ \$150/tree	450,000	12,000 hrs
Treat valued trees (estimated 300) 8 yrs.	36,000	1,200 hrs
Manage DPW yard		
5,700 trees @ \$ 56/tree	319,200	5,700 hrs
LABOR/EQUIPMENT TOTAL	\$2,044,200	36,750 hrs
MANAGEMENT PLAN (8 YR)		
TOTAL COST	\$2,772,200	36,750 hrs
TOTAL ANNUAL COST	\$ 346,525	4,594 hrs

*This tree total includes 3,200 terrace, 2,000 public right-of-way and 500 park, public lands and buildings.

ASH TREE SURVEY RESULTS
MAY, 2010

City	# Terrace Trees	# Ash Trees	Treating Ash Trees	Size Of Trees Being Treated	White Ash, Green Ash Or Both	Pick-Up Brush From Residents	Accept Brush From Residents	Accept Brush From Contractor	Comments
Brookfield	4,000	200	No	n/a	n/a	No	Yes	For fee	
Franklin	10,000	3,000				Pick-up 3 x year, 3cy	Yes	No	
Greendale	10,700	1,300	No decision at this time			Pick-up under 2.5 cy for \$40	Yes	No	
Greenfield	7,500	1,200	No -- all ash trees are under 8"	n/a	n/a	Yes	Yes - \$8 cy	No	
Menomonee Falls	?	?	No	n/a	n/a	Pick-up 2x year	Yes -- use of Waste Mngmt	No	
Mequon	?	?	No	n/a	n/a	No	Yes	No	
Milwaukee	200,000	30,000	12,000 -- 2009 12,000 -- this year.	8" and over	Both	Pick-up under 2cy	Yes	No	a. Removal of declining trees b. Trunk injections (safer) c. Treatment primarily to slow infestations / removals
New Berlin	1,145	172 (15%)	Yes -- merit soil drenching	5" and under (majority of trees) see comments	Both	No	Yes	No	
Oak Creek	10,000	1,000	Yes	under 6" --	Both	Yes	Yes	No	Treating trees under 6" until all large trees are removed, at which time they will begin removing the small trees
Wauwatosa	30,000	5,400	No	n/a	n/a	Yes - \$55.00 minimum charge	Yes -- \$5 daily or \$20 annual permit req.	No	
West Allis	23,000	4,300	Yes	Over 6" injection, under 6" soil drench	White Ash - in good condition	Yes	Yes	No	a. Treatment primarily to slow infestations / removals b. Save white ash

City	# Terrace Trees	# Ash Trees	Treating Ash Trees	Size Of Trees Being Treated	White Ash, Green Ash Or Both	Pick-Up Brush From Residence	Accept Brush From Residents	Accept Brush From Contractor	Comments
Gurnee, IL	13,000	3,500	No	n/a	n/a	Small piles of brush are picked up with trash Yes	No	No	
Wilmette, IL	17,300	1,700 remain (1,200 already removed)	One historic ash	n/a			No	No.	a. 70 ash were treated for educational purposes. A few are doing OK. b. Note following cycle: infestation and dieback occur over 2 years, major sprouting and woodpeckers occur in the 3 rd year, and the tree is dead in the 4 th year
Fort Wayne, IN	57,000	13,000	Yes - see comments	12" - 18" 2" - 8" cut down	White Ash - they uptake treatment better	No	Yes - minimal fee charged	No	a. 1 st attempt - Soil Injection 11,000 trees. b. Presently - Treated 1,100 primarily to slow infestation and removals. c. 2010 - Remove / replace 300 trees
Bowling Green, OH	10,000	1,000	200 treated in 2006 - almost all are dead now	6" and under	Both	Yes	Yes	No	They have noted: Dutch Elm took 20 years to spread EAB has taken 6 years to spread
Ann Arbor, MI	47,000	7,000 (all removed)	No - all removed	n/a	n/a		No	No	a. Had a temporary marshalling yard provided by the state - no longer in service b. All ash trees removed
Grosse Pointe Farms, MI	6,000	583	Yes, all trees over 5" treated - see comments	5" or larger	Both	Yes	At contractors yard	No	a. Started in 2002 - soil injection b. Last 3 years - trunk injections c. Lost 40 treated trees to EAB d. They have 500 elm trees that have been treated since 1960 for Dutch Elm disease
Romulus, MI	12,800	3,217 (22%)	No	n/a	n/a	No	No	No	a. A tree with 20% crown dieback will be dead the next year b. Had a temporary marshalling yard provided by the state - no longer in service c. All ash trees removed

CITY OF FRANKLIN
RESIDENT OPTIONS
PRIVATE ASH TREE DISPOSAL

The City of Franklin will not be providing any service for ash tree cutting, hauling or disposal of trees from private lands. The following are options available to residents:

1. Long standing practice of the Department of Public Works to receive branches, woody material up to 6 inches in diameter brought to the yard by property owner. No charge.

8:00 a.m. – 3:00 p.m. Monday thru Saturday

2. Waste Management Landfill will accept branches, leaves or woody material brought and handled by the property owner. No charge presently.

8:00 a.m. – 4:00 p.m. Wednesday
7:00 a.m. – Noon Saturday

3. Property owner can hire a tree service (private contractor) to privately cut, haul and dispose of trees at the expense of the owner.

This material will not be accepted at the DPW yard.

Wisconsin's Urban and Community Ash Resource

There are over 5.2 million ash trees in Wisconsin's communities – on streets and rights-of-way and in parks, private landscapes, natural areas and woodlots. About 20% of all trees in Wisconsin 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. On average, ash also make up about 20% of all street trees, but for some communities, over 50% of their street trees are ash!

More detail on the composition and value of Wisconsin's urban forests is available at:
<http://www.dnr.state.wi.us/forestry/UF/assessment.htm>

Why Manage Ash Now for EAB?

EAB is very difficult to detect and could be anywhere in the state - Right Now!

To date, infestations found in Wisconsin were detected 4-5 years after the infestation actually began, some after the trees started to die, but others where the trees showed few or no symptoms. EAB has been found in or adjacent to all four corners of the state. There is no reason to believe that any part of the state is safe from EAB. Because EAB is moved long distances by individual human activities, certain sites are at higher risk for introduction of EAB. These include:

- Campgrounds, recreational areas, and cottage communities – from infested firewood
- Public, commercial and residential areas landscaped since 1995 – from out-of-state infested nursery stock
- Sawmills, pallet operations, other wood utilization firms – from infested sawlogs from undetected infested areas.
- Major transportation corridors and industrial areas – from infested firewood and packing materials

However, every community has some of these types of sites or has residents that burn firewood that could have inadvertently been brought in from known or unknown infested areas, so all Wisconsin communities are at risk.

More information on current survey efforts and where EAB has been detected is available at:
<http://www.emeraldashborer.wi.gov/article.jsp?topicid=14>

The impact of EAB on Wisconsin's Urban Forests will be devastating.

Our native ash species have no known resistance to attack by EAB. Unless treated with insecticides, once ash trees are infested, EAB will likely kill them in 2 to 4 years. Though we can't predict what will happen in Wisconsin, experience in other states has shown that once EAB is detected in an area, more detections follow quickly and loss of ash trees increases rapidly over a few short years. If we can slow the spread of EAB and ash mortality through management, we can buy time for research to potentially catch up and provide us even more options for managing this destructive pest. If we do nothing, rapid loss of our urban ash trees will likely:

- cost communities and their residents \$2-4 billion to remove and replace their trees. This will overwhelm local government and private property owner budgets, and overwhelm public and commercial capacity to remove the trees, handle the wood, and produce and plant new trees.
- increase fraud, substandard work, non-ash tree removal, damage and injuries from fly-by-night operators drawn to the disaster
- increase storm water runoff due to lost tree canopy
- increase energy use and cost for cooling and heating due to loss of shade

- increase water use for irrigating sun-parched landscapes due to loss of shade
- increase electric outages from dead ash trees falling on power lines
- reduce air quality from loss of trees' pollution filtering and air cooling capacity
- set up a repeat of this disaster if lost trees are replaced by too few species all the same age

Doing nothing is a risky option!

Many communities will wish to do nothing to manage their trees for a variety of legitimate reasons: no budget, no staff, higher priorities, etc. This strategy will work only until EAB is found in your community – and it will be found – and then you'll be faced with an even bigger problem!

When EAB is first detected in an unprepared community, a few dead trees will rapidly spread into many dead trees. If infested trees are allowed to stand, the insects will breed and spread far and wide, both naturally and from unknowing movement by residents moving firewood. Dead ash trees, especially large ones, quickly become public safety hazards that have to be removed immediately to protect lives and property. Staff, equipment, and funding for contracts will have to be found from somewhere on short notice. In addition, **it will cost 2 to 3 times more to take down dead ash trees** than live or dying trees because dead trees are more hazardous to work in and have a tendency to shatter into many pieces when they fall, creating greater clean up costs.

Then there's the question of what to do with all that wood on short notice. There are fewer utilization options for wood from dead trees which can eliminate potential income to offset costs. Even chipping is more expensive because dead trees are harder on equipment. And where will you store the wood and debris?

And finally, how will you pay for replacing the trees and where will the trees come from? Experience in other states has shown that communities that don't prepare don't have funding to replace the lost trees, which just compounds the loss of the ash trees.

EAB offers opportunities to improve the urban forest resource and expand business.

Despite all the negatives of EAB, managing for EAB can improve your community forest and its overall management program. For example:

- Ash and maple are over-represented in our urban forests. EAB has highlighted the devastating result of this lack of diversity. A long-term management plan for the current and soon-to-be vacant planting spaces can help create a more diverse, adaptable and resilient forest in the future.
- EAB has improved public awareness of the value of urban forests. An inventory can quantify this value for community leaders and residents.
- EAB threatens so many aspects of the community that people don't realize are impacted by the urban forest. Partnering with these interests – community engineers, planners, waste managers, businesses, utilities, environmental groups, neighborhood associations – can result in stronger long-term support for tree management.

Beginning to manage for EAB now can also stimulate local business. For example:

- Urban forestry, tree service and landscape professionals can provide tree inventories, GIS layers, urban forest management plans, staff training, tree health care, planting, maintenance and removal services.
- Communities can work with nurseries to develop innovative ways to provide a broad diversity of tree species.

- EAB will generate a flood of wood to cope with. Large and small entrepreneurs can come up with creative solutions to produce products for a profit or at least offset some of the disposal costs not only for ash, but all urban wood,

On the other hand, waiting until EAB causes an emergency demand for services will overwhelm existing business and attract out of town disaster chasers.

Who is Responsible for Managing Ash and EAB?

The short answer is: Everyone! EAB has spread beyond the point where the federal or state governments alone can control it. While the federal and state governments have a role in public outreach, coordinating detection, regulating the movement of infested material, recommending control strategies, providing financial incentives and technical assistance and supporting research, ultimately it is up to the local governments, businesses and private property owners to regulate and manage ash and EAB in their own jurisdictions and control EAB in their own trees.

More information on responsibilities can be found in the 2008 Wisconsin EAB Response Plan at: <http://www.emeraldashborer.wi.gov/article.jsp?topicid=16>

How to Manage Ash in Your Urban Forest

Ash Management Goals

With EAB in or adjacent to all four corners of Wisconsin, it is recommended that all communities adopt the following four broad goals.

- 1. Develop and implement an inventory-based management plan**
Inventories will provide you with information on what trees including ash you have so you can determine what goals you are trying to reach and what resources you need to manage your urban forest efficiently and effectively.
- 2. Reduce the risk of introduction and spread of EAB**
This will give you more time to prepare for EAB and respond once you detect it. It will also give researchers more time to develop better management tools.
- 3. Minimize the impact of EAB**
If left unchecked, EAB can have a rapid and devastating affect, not only on your urban forest, but also on your community, overwhelming its resources, and causing long-term impact to its environment, quality of life and economy. Proper management now can both reduce those impacts and spread them out over a longer period of time.
- 4. Prevent future catastrophic losses**
While EAB is a devastating threat, it also presents an incredible opportunity to demonstrate the value of your urban forest so you can develop support for management and create a more resilient and sustainable urban forest for your community.

Tactics to Accomplish Management Goals

The following tactics can be used to accomplish these four management goals:

1. Develop and implement an inventory-based management plan

a. Inventory the urban forest resource to determine the potential impact of EAB

An inventory should identify tree species, and count or estimate their numbers, size, location and condition. The inventory can be simple or detailed, but without one, it is impossible to assess your community's risk for EAB, the impact it will have on your community and budget, or even the ash management tactics you should consider using.

A street and park tree inventory will tell you what ash you'll have to deal with directly. However, most of the ash in a typical community will be on private property. When EAB starts killing private trees it will affect the community's waste stream and standing dead trees will create a public nuisance. A community-wide inventory will provide you with information on what to expect from private property. An analysis of the inventory data with software programs such as i-Tree Streets or i-Tree Eco (<http://www.itreetools.org/>) will also give you the value of the trees and services they provide to help you justify your management choices to decision-makers.

*More information on inventories can be found in Section 5c of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

b. Determine costs and resources

The treatment, removal, disposal/utilization and replanting of community ash trees will cost money and you need to identify sources of funding and resources. This cost information will show you the direct impact EAB will have on your budget and staff. It will help you make choices on whether to treat or remove trees, whether to spread the costs over time or deal with them all at once and what kind of training, equipment, supplies and contracts you'll need. Regardless of your choices, EAB will require more funding, whether it's redirected from other accounts or from new sources.

*Information on estimating costs can be found in Section 8.b of the EAB Toolkit and ideas on funding sources can be found in Section 10 of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

c. Prepare and implement an EAB readiness and response plan

Like inventories, community readiness and response plans can range from very simple to complex depending on your needs. Regardless, these plans will help you organize your community's strategies to deal with EAB.

*Section 2 of the EAB Toolkit will walk you through the process at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

d. Train staff in needed skills

Your staff will need training whether you're going to do the work yourself or not. If you are going to survey, treat, remove or replace your ash yourself, your staff will need to have those skills. If you're going to contract for those services, your staff will need to be well informed to produce contract specifications, manage the contracts and inspect the work. In any case, citizens will be calling you for information about their private trees or what you're doing about their public trees

and to answer them you'll need to be well informed on ash identification, EAB signs and symptoms and EAB management options.

Training is available from UW Extension, DNR, UW and technical colleges, and through professional organizations and on-line resources. Contact your DNR urban forester for information at: <http://dnr.wi.gov/forestry/uf/staff/>

e. Prepare specifications, contracts and cooperative agreements for needed resources

If you wait until the crisis hits, there likely will be few contractors available, no equipment for lease, few trees for replanting and no community willing to share their over-stretched resources and equipment. Enter into agreements and negotiate contracts as soon as possible before EAB hits, so you'll be first in line to receive the services and equipment you'll need when it does.

*Sections 2 and 8 of the EAB Toolkit will help you through the process at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

2. Reduce the risk of introduction and spread of EAB

a. Educate and involve elected officials, business and private property owners

Your community's residents and power-brokers can be part of the solution such as in early detection, creating cooperative agreements, or supporting budget requests, but they can also be part of the problem – bringing in or moving infested firewood, opposing best management tactics or cutting budgets. Engaging them now will assure you have enough support to succeed and that they have enough information to make informed consumer decisions on their own property.

*For more information on education and awareness see section 9 of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

b. Enact or strengthen ordinances

You will need to have the legal authority to carry out the management strategies you select or deal with the threats you could face. At the very least, dead and dying ash trees will pose a public safety hazard, so you will need the authority to declare infested or dead trees a public nuisance and have that nuisance abated on private property. Other ordinances to consider to reduce introduction and spread include regulating firewood sale and movement, licensing tree service companies, and requiring private property tree removal permits. Ordinances addressing tree preservation and tree planting requirements in developments and reconstruction would help achieve the goals of minimizing EAB impact and preventing future losses. It is important to enact ordinances broad enough to encompass not only EAB, but potential future pests as well.

*Section 4 of the EAB Toolkit will help you through ordinance development at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

c. Facilitate early detection of EAB

Detecting EAB as soon as possible will give you the most options and time to deal with it and slow its spread. New infestations are most often found by informed residents, arborists, and others working in and around ash trees. Work with UW Extension, DNR and DATCP to find training and education so as many people as possible are helping you watch for EAB. However, since early detection methods are not very reliable and trees in new infestations typically don't show obvious symptoms for the first few years, you can't be certain where EAB is until it has already begun damaging a tree.

*Information on detection is in Section 6 of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

- d. Develop disposal and utilization sites, methods and markets before quarantines are imposed.**
Find sites within your county and methods to store, treat, dispose or utilize infested ash wood that minimizes transportation distance. Small communities and those without much ash may want to work with nearby communities, towns or their county for collective wood disposal. Waiting to establish these after an infestation is found will limit options, increase costs and delay destruction of the EAB infested wood, accelerating the insect's spread.

*For more information on disposal and utilization see section 8.c. of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

- e. Contact Dept of Agriculture, Trade & Consumer Protection (DATCP) regarding compliance agreements**

Once EAB arrives, your county will be quarantined. If you or your waste hauler will be moving infested branches and logs to a disposal or processing site outside of a quarantined area, you will need a compliance agreement with DATCP to reduce further spread of EAB in your community. Determining now what steps you will need to get an agreement in place will prevent any delays in responding to your first and future finds of EAB.

*For information on compliance agreements, contact:
<http://emeraldashborer.wi.gov/articleassets/EasyGuideEABRegulations.pdf>*

- f. Avoid pruning or removing ash during the adult EAB flight period (May-July)**
Since EAB is very hard to detect early on, your ash trees may be infested before you're aware of it. If you prune or remove infested trees during adult emergence and move the material without chipping or treating it, you might inadvertently spread EAB around your community. If you have to prune or remove ash trees during this time, treat the wood as if it were infested to prevent possible spread of EAB.

*For information of how to treat infested wood, see:
http://emeraldashborer.wi.gov/articleassets/Managing_Infested_Wood_1-15-09.pdf*

- g. Identify trees or areas to use for sinks or lethal trap trees once EAB is found**
When EAB is found in your community, one method being tested to minimize spread is to create groups of girdled trees known as sinks that will attract EAB to that area rather than dispersing farther away. The trees are removed that fall to destroy the EAB. Lethal trap trees work on the same principle, but are also treated with a systemic insecticide which kills the larvae once they hatch and start feeding. Trees identified for possible treatment should be easily accessible and treatable.

*For more information on sinks and trap trees see page 21 of Wisconsin's EAB Response Plan at:
<http://emeraldashborer.wi.gov/articleassets/2008WIEABResponsePlan.pdf>*

3. Minimize the impact of EAB

a. Preserve non-ash large canopy trees

When EAB starts killing your ash trees, the remaining trees that are not ash will become even more important in providing environmental, social and economic services to your community. Large canopy trees provide the most services so it will be critical to protect them while the newly planted trees grow to fill the gaps. These trees can be preserved through routine maintenance, protection during street reconstruction, home remodeling, or business redevelopment, and preservation during new development. You can accomplish this through community policies, ordinances and public education.

b. Identify large canopy and high value ash for preventive insecticide treatment

Healthy, properly located, large-canopy trees provide the most environmental, social and economic benefits to a community. Preserving these trees as long as possible will do the most to minimize impact of EAB on your community. To help you determine the cost/benefit of treatment versus removal and replacement use the EAB Cost Calculator developed by Purdue University at: <http://extension.entm.purdue.edu/treecomputer/index.php>

When to begin preventive insecticide treatments is open to debate. The official recommendation is to begin treatments when EAB is within about 15 miles of your site. However, since early detection methods are not very reliable and trees in new infestations typically don't show obvious symptoms for the first few years, you can't be certain where EAB is until it has already begun damaging a tree. Available resources, the value of the tree and your tolerance for risk will have to go into your decision on when to start treatment.

More information on insecticide treatment can be found at:

<http://emeraldashborer.wi.gov/articleassets/InsecticideOptionsForProtectingTreesFromEAB.pdf>

c. Preemptively remove uninfested ash trees in priority order

This tactic is intended to reduce the peak rate that trees are lost to EAB thereby reducing the impact of EAB on the community's budget and the long-term health of the community's urban forest. Experience in states infested with EAB shows that a community's resources quickly become overwhelmed when EAB starts killing trees. Funds have to be taken from anywhere and everywhere to deal with the public safety threat of standing dead trees. And once the trees are down, there are no funds to replace them. If replacement funding is found, diverse tree species in the quantity needed may not be available. Public pressure to fill those vacant holes with trees could lead to overplanting a few, cheap and plentiful species, setting you up for a future disaster.

The extent to which a community will need to use preemptive removal will depend on the number, size, location and condition of their ash trees and the proximity of EAB. This again shows how an inventory is essential. Communities with large numbers of ash, particularly ones in poor condition need to implement preemptive removal immediately. Communities with few ash may be able to handle the losses with existing resources and won't need preemptive removals.

Of the trees that you have NOT identified for preventive insecticide treatment, use the following in priority order to set a preemptive removal plan:

1. Large, structurally unsound ash in poor condition
2. Smaller ash in poor condition

3. Ash that are improperly placed or are interfering with other infrastructure, for example ash blocking traffic signs or under power lines.
4. If you have not accomplished your goal after completing the first three priorities, continue with this fourth priority. Of the remaining ash trees, annually remove and replace the number of ash that your budget allows until you reach a total population number that you could handle when EAB starts killing your trees. If EAB is in your community or nearby you should either preventively treat, or remove and replace ash more aggressively, but remember, even if EAB is not yet confirmed in your area, it may already be there.

d. Fill existing vacant planting spaces with diverse tree species

About 40% of possible urban tree planting spaces are vacant according to a statewide estimate. Planting these spaces now before EAB comes to town, will not only give your community a head start on tree replacement, but will give those new trees a chance to grow and spread the age of your urban forest out more evenly.

The reason EAB will be so devastating to your community's urban forest is there are too many ash trees – on average, 20% of community trees are ash. While Dutch elm disease taught us not to plant an entire community to one species, losing 20% of our entire canopy to a catastrophic pest is still too much. The new diversity rule of thumb is to strive for no more than 5% of one species, 10% of one genus and 20% of one family. Even if you followed this rule, a pest like EAB could still kill one-tenth of your trees, so communities should strive for even more diversity while continuing to make sure to use species adaptable to your climate and site. Avoid planting tree genera and species that are already over-represented, and encourage your residents to do the same. Maple is the most commonly over-represented species in Wisconsin communities making up 44% of all street trees.

For ideas on replacement species see:

<http://www.uwex.edu/ces/wihort/landscape/AshAlternatives.doc>

e. Maintain all new and existing trees

As the ash die out, the new and remaining trees will become all the more important. Community trees need care such as pruning, watering and mulching to maintain their health, vigor and structural strength. This will minimize additional tree loss to storms, pests and other damage, increase the value of those trees and prevent trees from becoming a financial and public safety liability. In Wisconsin, studies have shown that every dollar invested in tree planting and care returns \$3 in benefits.

For basic information on tree care, see the Tree Owner's Manual at:

<http://www.treeownersmanual.info>

4. Prevent future catastrophic losses

a. Don't over-plant any tree species

Dutch elm disease destroyed a huge portion of our urban trees because we over-planted American elm. EAB will wipe out 20% of our urban trees because we over-planted ash. What's next? The "big 4" urban street trees are maple (44%), ash (20%), honeylocust (8%) and linden (7%). If Asian long-horned beetle comes to Wisconsin, it could wipe out our maples – almost half of our urban forest! Do an inventory and focus your planting efforts on genera and species that are under-represented in your community. Strive for the new diversity rule of thumb – no more than 5% of one species, 10% of one genus and 20% of one family.

The uncommon trees are less common for a reason. They may be harder to grow, more expensive or in less demand. This makes them a business risk for nurseries to grow and stock. Work with your nurseries to help them with that risk and assure a steady, long-term supply of less common species. If you wait until all your ash are dead, public demand will require rapid replacement and the only trees available in the quantity you need will be ones you already have too many of.

b. Spread tree planting over time and location

Not only should your urban forest be species diverse, but ideally it should diverse in age. If you wait to plant until all your ash are gone, all the replacements will be the same age. This means all the trees will require maintenance at the same time and they will mature and die at the same time. Just like payroll deduction to a savings account, planting trees every year will provide you a diversified portfolio of benefits over time with less risk of loss.

Diversifying the distribution of your trees is a harder balancing act. If you plant all the same species of trees all in one area, a pest like EAB would not only wipe out a whole area, but because the trees are close together, the pest will spread faster. If you plant trees randomly throughout the community, no one area will lose all its trees to a specific pest and the pest might spread more slowly. However, the down sides to this are loss of visual uniformity, not every species is appropriate everywhere and tree maintenance may be more expensive and complicated because different species require different maintenance at different times. Many communities compromise between these two extremes by planting the same species on one city block and then vary the species block by block.

c. Design new planting spaces with tree success in mind

It is becoming much clearer to everyone that trees are part of the infrastructure of a community. For trees to thrive and achieve their full potential benefits to the community, new construction needs to be designed to provide sufficient root volume for tree success rather than viewing trees as an afterthought to be fit in wherever some space is available. Work with your community planners, landscape architects, engineers and utilities to include an arborist in the team that designs both new construction and reconstruction. Trees are part of the solution to storm water management, drinking water supply, air quality, energy conservation, business development and property value.

For more information on trees as infrastructure visit the Smart Forestry for Smart Growth toolbox at: <http://dnr.wi.gov/forestry/SmartForestry/toolbox/>

Selecting Management Tactics

Unfortunately, there is no black and white rule on which ash management tactics a community should use. The tactics a community selects to reduce its ash liability will be based on the number, size, condition and location of its ash trees, the value of those trees and the benefits they provide, the proximity of EAB to the community, the funding and resources available, how aggressive the community wishes to protect its urban forest and the public's support for the chosen options.

To best protect your community, be as aggressive as possible and search out creative ways to succeed. In general, the greater the proportion of ash you have and the closer EAB is to your community, the more aggressive you should be. While it would be best if communities implemented all of the ash management tactics, you will no doubt be faced with the tough choice of which tactics you can afford to undertake. Use the following table as a guide to help identify the priority of each action you could or should take based on your situation.

Customizing your priority actions

In the table, go through each tactic one by one and find the situation that best fits your community - high, medium or low priority- and place the selected priority in the "Your Priority" column. Once you've completed this, you will have a listing of your priority actions. It is likely that you will still have too many actions than you have the time and funds for, so use the "Rank" column to further prioritize your actions. Actions rated "high priority #1" should be done first and foremost. Actions rated "high priority #2" should be done next and so on until you have an action plan that your community can afford to implement.

Management Tactic:	High Priority Situation:	Medium Priority Situation:	Low Priority Situation:	Rank:	Your Priority:
1. Inventory-based Management Plan:					
a. Inventory your urban forest resource to determine potential impact of EAB	No inventory, inventory is out of date or inventory is insufficient to determine EAB impact	Current inventory of public trees, but have not quantified EAB impact	Current inventory of public and private ash and have quantified EAB's impact	1	1
b. Determine costs and resources for treatment, removal, disposal and replanting	EAB response costs and/or sources of needed funds, materials and labor have not been determined	Costs and resources have been assessed for public, but not private property. Public sources of funding, materials and labor established	Costs and resources have been assessed for public and private property and sources of funding, materials and labor established	1	
c. Prepare and implement an EAB readiness and response plan	All communities, all situations should prepare, implement and regularly update an EAB response plan that fits your needs	NA	NA	1	
d. Train staff in needed skills	Insufficient staff with little or no training	Some staff trained in some skills	Sufficient number of existing staff trained in all needed skills	2	
e. Prepare specs, contracts and coop agreements	Few staff and resources, unable to handle expected workload and wood volume	Existing staff or contractors can handle early stages of EAB infestation	Sufficient resources to handle expected workload and volume of wood, &/or specifications, contracts, agreements in place	3	
2. Reduce Risk of Introduction & Spread:					
a. Educate officials, businesses & residents	Elected officials and administrators are not aware of the impact EAB will have on the community. Business and residents aren't aware of how their activities could spread EAB or how they can help protect their ash and the community's forest	Elected officials and administrators are engaged in the EAB issue. The media is covering EAB.	NA	1	
b. Enact or strengthen ordinances	No tree ordinance, or existing ordinances do not provide authority for all needed EAB prevention and response	NA	Up-to-date ordinances that give you all needed authority to prevent and respond to EAB on public and private property	1	
c. Facilitate early detection of EAB	All communities, all situations	NA	NA	1	

d. Develop disposal & utilization sites, markets	No disposal sites in the county, no utilization options or markets	County sites available but far away, few or no utilization options	Various sites available, existing utilization options & markets	1
e. Contact DA/TCP regarding compliance agreement	Potential disposal or processing sites are outside your county	Close to a county border and identified disposal sites could be overwhelmed by maximum wood volume (public and private)	Far from a county border and identified disposal sites could handle maximum expected wood volume (public and private)	2
f. Avoid ash pruning/removal during May-July	All communities, all situations	NA	Specific exceptions can be made if all ash wood and branches can be processed on site to kill any EAB	2
g. Identify trees or areas for sinks or lethal trap trees	Greater than 20% ash trees Sufficient staff or resources to establish and remove sink/trap trees in a timely manner and to gain public acceptance.	10-20% ash trees Sufficient staff or resources to establish and remove sink/trap trees in a timely manner and to gain public acceptance.	Less than 10% ash trees or insufficient staff or resources to establish or remove sink/trap trees in a timely manner.	3
3. Minimize the Impact of EAB:				
a. Preserve structurally sound, non-ash, large canopy trees	All communities, all situations	NA	NA	1
b. Preemptively remove uninfested ash trees	Greater than 20% ash, many large poor condition ash, insufficient resources to handle EAB workload, volume of wood and replanting with diverse species	10-20% ash trees, more large, structurally unsound ash, some resources to handle EAB workload, volume of wood and replanting with diverse species, but insufficient to handle peak load	Less than 10% ash, most ash small diameter, large ash are structurally sound, sufficient resources to handle EAB workload, volume of wood and replanting with diverse species	1
c. Identify large &/or valuable ash for insecticide pre-treatment	EAB nearby, large ash a significant proportion of community's tree canopy, large ash in culturally or economically important locations	Community at higher risk of EAB introduction, large ash in culturally or economically important locations	EAB far away, few large valuable ash, no public or private resources or interest to pre-treat large ash	2
d. Fill vacant planting spaces with diverse species	High percentage of vacant planting spaces, tree population heavily weighted in 1-4 genera	Moderate number of vacant planting spaces, tree population has 5 to 9 evenly distributed genera	Few vacant planting spaces, tree population has at least 10 evenly distributed genera	2
e. Maintain all new and existing trees	Trees in poor to fair condition, new trees need structural training, community has public &/or private maintenance capacity	Trees in fair to good condition, community has public &/or private maintenance capacity	Community has no public or private capacity to maintain public trees	3
4. Prevent Future Catastrophic Losses:				
a. Don't over-plant any tree species	All communities, all situations	NA	NA	1
b. Spread tree planting over time and location	All communities, all situations	NA	NA	2
c. Design new planting spaces for tree success	Community plants public trees and has the resources to regulate and inspect reconstruction and development	Community plants public trees, but does not regulate reconstruction and development	Community does not plant public trees and does not regulate reconstruction and development	3

The advantage of this prioritized list is you can add the next highest action to your plan if your resources increase or you can remove the least important action if your resources are cut. Remember, this is only a guide. Your community may have different combinations of situations and priorities. The final decision is yours to make.

Additional Technical Resources

If you need help using this guide or have other questions about urban ash management or emerald ash borer, please see the following resources:

Contact:	For:
DNR Regional Urban Foresters http://dnr.wi.gov/forestry/uf/staff/	Local government urban forest management and staff training assistance Networking with other managers
DATCP EAB Program http://emeraldashborer.wi.gov/contactus.jsp	EAB Survey, quarantine and infested materials movement information and training
UW- Extension Statewide: http://emeraldashborer.wi.gov/contactus.jsp County: http://www.uwex.edu/ces/cty/	Insecticide treatment and EAB biology Homeowner information Public awareness assistance
Wisconsin EAB web portal http://www.emeraldashborer.wi.gov	Wisconsin EAB information and links
National EAB web portal http://www.emeraldashborer.info	National EAB information and links
EAB University http://www.emeraldashborer.info/eab_university.cfm	Web-based EAB training seminars
Commercial Urban Forestry Consultants http://dnr.wi.gov/forestry/UF/resources/consultants.pdf Certified Arborists for Hire http://www.waa-isa.org/arborists/search.asp	Contractual technical assistance and service