Emerald Ash Borer and the future of our urban forest
History of EAB

• Imported to Michigan from China in the 1990’s
• Positively identified in 2002 as EAB
• Spread to 10 states and Canada
• August of 2008 positive identification in the Village of Newburg
• Since it’s discovery over 25 million ash trees have died
Description & Life Cycle

- Shiny emerald green beetle
- Average length is ¾”
Adult Borer
Description & Life Cycle

- *Shiny emerald green beetle*
- *Average length is $\frac{3}{4}$”*
- *Feed only on ash trees*
- *Eggs hatch in early summer and tunnel into tree*
- *Larval feeding under the bark, consuming the cambium and phloem layers, causing the tree to die*
Larval feeding
Larvae

Fireman’s Park, Village of Newburg
Detection

- Difficult in early stages
- Early detection is key in slowing infestation
Considerations

- Research findings concludes that most ash trees will be eliminated from the landscape
- Little or no evidence of any resistance to this non-native insect
- Chemical treatments are an option with no guarantee
Chemical Treatments

- Insecticides can protect ash trees
- Results are variable and success is not guaranteed
- Large scale treatments are not an option
- Annual treatments would be required to provide protection
Homeowners

- Tree Identification
  - Paragon Map Service
  - Information available on City web site and PRF office

www.ci.west-bend.wi.us
Homeowners

- Tree Identification
- Chemical Treatments
  * May be an option for private trees
  * Residences may treat street trees

* Information available on City web site and PRF office

www.ci.west-bend.wi.us
Homeowners

- Tree Identification
- Chemical Treatments
- Additional Information

www.emeraldashborer.wi.gov

Dept of Ag, Trade, & Consumer Protection
1-800-462-2603
Fireman's Park, Village of Newburg

“Most likely every ash tree in the Village of Newburg is infested”
Future for West Bend

- General Statistics
General Statistics

- # of street trees: 12,285
- # of vacant street tree planting sites: 8,956
General Statistics

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- # of vacant street tree planting sites: 8,956
- # of ash street trees: 3,150
- # of ash in parks & public property: 358
- # of ash in woodlots on public property: ?
**General Statistics**

- # of street trees: 12,285
- # of vacant street tree planting sites: 8,956
- # of ash street trees: 3,150
- # of ash in parks & public property: 358
- # of ash in woodlots on public property: ?
- Total value of our street trees: $12,452,519
- Value of our ash street trees: $3,362,180
Future for West Bend

- General Statistics
- Visual Impact
Future for West Bend

- General Statistics
- Visual Impact
- Costs Associated
Costs Associated

- Cost for street tree removals: $1,575,000
- Cost for park & public property tree removals: 179,000
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- Cost for replanting street trees: 913,500
- Cost for replanting in parks & public property: 103,820
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- Cost for replanting ash street trees: 913,500
- Cost for replanting ash in parks & public property: 103,820

Total Impact: $2,771,320

- Annual cost to chemically treat street trees: 126,000
- Annual cost to chemically treat park & public trees: 9,880
Future for West Bend

- General Statistics
- Visual Impact
- Costs Associated
- Funding
Funding

- **NO** federal or state funding available
- Local funding
- Urban Forestry Grant
  * Urban Forestry Master Plan 2009
    * Including EAB response plan
    * Potential future grants to offset tree replacement
Future for West Bend

- General Statistics
- Visual Impact
- Costs Associated
- Funding
- Options
Options

- **Treatments** - $135,880 annual investment
  * No guarantee
  * Annual treatments
  * Save trees ???
  * Slow the spread of EAB
Options

- **Treatments** - $135,880 annual investment

- **Tree Establishment** – start prior to infestation
  * Establish trees at vacant street tree planting sites
  * Establish trees in parks and public properties
Options

- **Treatments** - $135,880 annual investment
- **Tree Establishment** – start prior to infestation
- **Preemptive Tree Removals**
  * Removal of healthy ash trees
  * Remove trees in a controlled fashion
  * Reduce future safety hazards
  * 350 trees/year - ten years removal process
Options

- Treatments - $135,880 annual investment
- Tree Establishment – start prior to infestation
- Preemptive Tree Removals
- Take no action
  * Wait for infestation
  * Only remove infested trees
  * Reactive instead of proactive
City of West Bend
Park, Recreation, and Forestry Dept.
Ph: 262.335.5080

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1-800-462-2803