

## TREE RECOVERY ACT: A COMPREHENSIVE RESPONSE STRATEGY LB461, introduced into the Nebraska Legislature in 2015 to fund the Tree Recovery Act, would provide:

- **Cost-Share Assistance to Communities:**
  - 50/50 cost share grants for EAB-affected ash removals, disposal and replanting
  - 50/50 cost share grants for community tree planting after severe weather events.
- **Slow the Spread** approaches to reduce EAB populations and the rate of spread, providing municipalities more time to cash flow the required investments:
  - Expand monitoring and detection for EAB
  - Rapid detection, removal and processing of infested trees
  - Proactive removals of declining or hazardous ash trees, and isolated infestations
  - Community education, citizen-based EAB detectors
- **Utilize woody material** (using Nebraska Forest Service existing funding) to create new products, markets and stimulate economic development

### State investment via the Tree Recovery Act will allow municipalities to conduct early and aggressive, proactive EAB management that will:

- Reduce the risks to life and property by removing infested and dead trees promptly.
- Buys time and enables municipalities to avoid expensive ramp up costs
- Stabilize municipal budgets, space out expenses over a longer period of time and reduce costs to remove, dispose of and replace dying and dead trees.
- Maintain home values and preserve the property tax base over the long term
- Slow the spread of EAB by early detection, rapid response and proactive chemical treatments, substantially postponing removal costs and extending municipal budgets
- Significantly reduce electricity outages and associated costs and lost revenues
- Permit replanting ahead of removals, ensuring the benefits provided by doomed ash trees will continue to support The Good Life in Nebraska cities and towns.



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## EMERALD ASH BORER & SEVERE WEATHER EVENTS: THREATS TO NEBRASKA'S COMMUNITY TREES AND MUNICIPAL BUDGETS

**Emerald Ash Borer (EAB)**, an invasive insect that attacks all ash species in North America is *not* a "business as usual" tree pest.

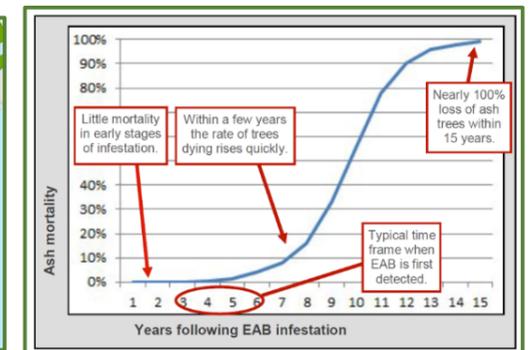
Since 2002, EAB has killed hundreds of millions of ash trees across the eastern U.S., and is now spreading relentlessly across Iowa, Kansas, Missouri, Colorado and Minnesota. With infested areas bordering Nebraska on three sides, and because I-80 (a likely conduit for EAB transport) runs the length of Nebraska, it is highly likely that EAB is already in Nebraska. However, EAB has not yet been detected in Nebraska because early, low level infestations are very difficult to find. It generally takes three to six years after introduction to detect EAB.



EAB Extent 2002



EAB Extent 2014



Ash "Death" Curve

Repeated experiences in other states show that ash tree mortality increases exponentially (see chart above) and on a large scale beginning six to seven years after introduction, **with nearly 100% of ash trees within a community killed within 15 years of introduction.**



Ash lined street, Toledo Ohio 2006.



Same street in 2009. Photos by Dan Herms, Ohio State University

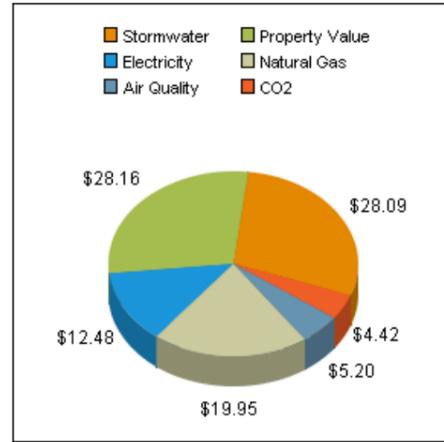


## FISCAL IMPACTS OF EAB ON NEBRASKA COMMUNITIES

Nebraska communities have nearly one million ash trees (~256,000 ash trees on public property and 640,000 on private property), worth approximately \$823 million.

- EAB has the potential to kill every ash tree in Nebraska communities.** Costing \$1,074/tree, estimates of unavoidable response costs to municipalities are:

	<u>Public</u>	<u>Private</u>
Removal costs:	\$146 million	\$365 million
Disposal costs:	\$59 million	\$147 million
Replacement costs	\$70 million	\$174 million
<b>TOTAL RESPONSE COSTS:</b>	<b>\$275 million</b>	<b>\$686 million</b>



\$98/Tree in Annual Benefits

- Trees are community "green" infrastructure:** Benefits (@ \$97 million/year) lost due to the death of 896,000 ash trees include:

- Increase of one billion gallons in annual storm water runoff
- Loss of \$26 million in property values (and subsequent reductions in property tax revenues)
- Increase in 161 million kilowatt-hours demand for annual cooling
- Increase of 580 million pounds of atmospheric carbon

### IMPACT OF SEVERE WEATHER ON COMMUNITY TREE BUDGETS

Nebraska's community forest resources are suffering increasing losses from more frequent and more severe weather events. Floods and drought of unprecedented intensity, as well as increasingly severe tornadoes, straight-line winds, hail storms and extreme temperature fluctuations are occurring more frequently. These events are impacting the health, viability and safety of the community forest resource.

The 2014 UNL report detailing climate change impacts on Nebraska project an increased frequency and intensity of severe weather events and drought.

#### Recent Severe Weather Event Examples:

**2011 Missouri River Flooding:** 6,250 public trees died in Omaha, Bellevue and South Sioux City parks, costing \$5.1 million for removal, disposal and replanting.

**2012 Drought:** Tens of thousands of community trees on public lands statewide died, costing millions of dollars for removal, disposal and replanting.



**2014 Tornadoes and High Winds:** Pilger, Beaver Crossing, Sutton, Wakefield, Burwell and Stuart lost at least 5,650 trees, costing \$4.4 million for removal, disposal, and replanting.  
**Chadron 2013 Snowstorm:** an early fall snowstorm required the city of Chadron to spend \$170,000 to remove woody debris.

**Due to budget limitations, many communities never completely replant public trees lost in storms, reducing community vitality, attractiveness and economic development opportunities.**

### A CRITICAL NEED FOR A PROACTIVE RESPONSE

#### Some certainties:

- EAB will have a huge effect on our communities and will overwhelm municipal budgets.
- Dealing with EAB is unavoidable - it cannot be ignored.
- Spending on EAB management cannot be avoided.
- EAB multiplies at exponential rates once established.
- Ash trees dead more than two years can unpredictably fall over or drop dangerous large branches.
- Municipalities that ignore EAB are forced to rapidly ramp up tree removal costs.
- Municipalities face increased liability due to dead and unstable trees.
- Risk of injury to tree workers and the public increase around dead, unstable ash trees.
- Utilities have lost millions in outage costs due to falling ash trees killed by EAB.
- Home values decline in neighborhoods with heavy ash losses, affecting the tax base.

