

# Rapid City

## Emerald Ash Borer

### Management Plan



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**1. Emerald Ash Borer Threat** Emerald ash borer (EAB) is an insect native to northeastern Asia that was accidentally introduced into the United States during the 1990's in ash shipping crates from China. The beetle was first discovered in Michigan in 2002, but is believed to have been there as much as 10 years prior to its discovery. Since its arrival the beetle has spread rapidly and is now found in 30 states, including the neighboring states of Nebraska, Iowa, and Minnesota.

EAB is a metallic green, torpedo-shaped insect about half an inch long that kills all species of ash native to the United States. Once the insect arrives in Rapid City ("the City") all ash trees left untreated will eventually become infested and die.

Ash trees were heavily planted to make up for the loss of canopy caused by the removal of American Elm trees killed by Dutch Elm Disease. Ash trees currently make up nearly 20% of the Rapid City tree population. The city has an estimated ash tree population of 40,000 trees. Individual high value trees can be protected from infestation, but it is not practical to treat all of the trees within the City. This management plan is for the City and its citizens to prepare for EAB before it arrives and how to deal with the trees once an infestation has been detected.



## **2. Pre-EAB Infestation**

### **Immediate action for homeowners:**

Stop planting ash trees. The City has a list of other suitable tree species that can be planted. The list is located on the Parks and Recreation website at <https://www.rcgov.org/departments/parks-recreation/parks-division/urban-forestry.html>

Consider removing young ash trees and older declining ash trees. Young trees have yet to give the owner much benefit, and are inexpensive and easy to remove. Older mature ash trees that may be in a state of decline are safer to remove prior to EAB infestation.

Do not bring in firewood from neighboring states.

It is recommended that no chemical treatment for EAB should be used until an infestation is identified in the area.

### **Immediate action for Rapid City:**

The City has not planted ash for nearly 10 years, and is focused on increasing species diversity of City trees.

Starting the summer of 2018, Rapid City will begin a full street tree and park inventory, to be completed by 2020. This will provide the exact population and location of the public trees within the City.

Starting the spring of 2018 the City will start reducing our ash stock in our managed park areas by 100 trees per year. Reduction efforts will go on until we are below ash stocking levels of 5% or EAB is detected in the City.

Ash trees of poor quality and less than 10 inches in diameter will qualify for removal.

Woodland areas, riparian zones, and unmanaged Rapid City property will not be included in the management plan.

All ash trees that are removed will be inspected by the City's Urban Forester or Tree Crew Foreman for EAB infestation. The South Dakota Department of Resource Conservation and Forestry will be notified if any tree is suspected of having EAB.

Trees will be replaced on 1:1 ratio as the budget allows.

Wood use:

Suitable ash logs will be turned into boards for use in park projects. Other ash wood will be mulched or available to be cut for firewood.

### **3. EAB Infestation Identified**

All trees that are removed during pre-infestation stage will be inspected for any signs of EAB. City forestry staff will monitor other trees that show signs of a possible infestation. If a possible infestation is found The South Dakota Department of Agriculture Resource Conservation and Forestry will be notified for a positive identification.

If a tree is shown to harbor EAB, the South Dakota Department of Resource Conservation & Forestry, along with the USDA Animal & Plant Health Inspection Service (APHIS), will provide positive identification and will handle the press release announcing EAB infestation in the area.

At that time, management of the EAB infestation will fall upon the local authorities.

### **4. Post Infestation Identification**

#### **Annual survey and removal:**

Once an infestation is present in the area, the City will conduct an annual spring survey of public ash trees. This will consist of a walking survey to inspect ash street and park trees within a one mile radius of the initial infestation. A city-wide windshield survey of all the ash street trees and park trees will be done throughout the growing season.

Once an infestation has been found beyond the one mile buffer, annual windshield surveys of street trees and walking surveys of all park trees will be completed.

Trees on private property that are suspected to harbor EAB will need to be inspected. If an EAB infestation is confirmed, the tree will need to be removed by the landowner in accordance of ordinance [12.32.100](#).

Street trees in the Right of Way adjacent to private property identified with EAB will need to be removed by the adjacent landowner in accordance with city ordinance [12.32.080](#) and [12.32.090](#).

Park and city owned trees that have EAB will be removed and destroyed through chipping and mulching. This will kill the insect or larva and the wood can then be composted into mulch.

### **Removals of non-EAB Infested Ash:**

Pre-emptive ash removals will no longer take place within a 1.5 mile area once infestation is confirmed. Only ash trees that are found to have the insect, are of poor quality, or are deemed hazardous will be removed. There will be no eradication efforts, only safe tree management within the 1.5 mile zone. It is assumed that all of the ash in Rapid City will become infested over time. Ideally ash stocking levels will be low enough once an EAB infestation is found, making monitoring and removing infested trees more manageable.

Ash trees in other parts of the City may continue to be removed as time and money allow. Management of the EAB infestation will take priority.

### **Centralized Ash wood depot:**

Infested ash wood must be disposed of at one central site within the City. All contractors, citizens, and municipal entities will be required to dispose of ash wood at the Rapid City Landfill. No ash firewood is to be stockpiled within the City limits.

The landfill has the capabilities to treat any ash wood that comes into the facility. Once EAB is identified in the City the landfill will have protocols to separate any ash wood from the rest of the yard waste.

### **Wood Utilization:**

Exceptions to disposal of EAB trees will be ash logs that are milled into lumber and treated.

Any contractor or homeowner that is planning on storing ash logs for milling into lumber is required contact the Rapid City Forestry Department and apply for a free permit for storing ash wood.

### **Ash tree treatments:**

Preventive chemical treatments are available and proven effective to protect individual ash trees. Downtown Rapid City and West Boulevard, along with other large legacy and memorial trees will likely receive some chemical treatments. Annual budgets will determine how many trees, and what areas will be treated for the duration of the infestation. Treatments have to continue for the life span of the tree; a tree may become infested with EAB if treatments are skipped. Chemical treatments for trees are long

term investments for high value trees. The chemical treatment to be used will be determined at the time an EAB infestation is confirmed, as new treatments are still being developed. Homeowners should not consider treating their tree until an infestation is found in the region (15 miles).

**Legacy trees:** Large trees in good condition that are over 12 inches in diameter. The trees may be located anywhere in the city but must be shown to provide an exceptional benefit to the City.

**Memorial trees:** Trees that have been donated to the City by private citizens. Many of these trees have plaques in remembrance or memorial to individuals. These trees are special and may have some historical ties. Most of these trees are in Memory Lane or the Arboretum.

**Downtown Rapid City:** Downtown trees are very hard to grow. Mature ash trees located downtown and in good condition will be preserved. Ash trees in poor condition will be removed and replaced with suitable species.

**West Boulevard:** West Boulevard is a historic district that contains a wide, park-like, green median. The area is a showcase for the City, and all efforts will be made to preserve the large diameter ash trees that are in good condition through this corridor. Small ash trees and ash trees in poor condition will be removed and replaced with suitable species

**Plan timeline:**

Once EAB is established in an area it is assumed to be present indefinitely. All ash in Rapid City will be affected by an EAB infestation. Only trees that are treated for the entirety of their life will be spared from EAB attacks. Ash trees will continue to regenerate naturally in creek corridors and woody draws. The trees in these areas can sustain EAB populations even after all the mature ash trees have died. It is to be expected that ash tree losses to the city will be near 100%. The plan will be followed indefinitely.

EAB Management plan developed by the Rapid City Urban Forestry Board and The Rapid City Parks  
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