



2012

**Tree Policy/Tree
Disease Management**

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1. TREE MANAGEMENT ON CITY-OWNED PROPERTY, CITY RIGHTS-OF-WAY, AND CITY EASEMENTS

1.1 Purpose and Definitions

It is the policy of the City of Northfield to recognize and preserve existing natural resources of the community and to encourage the greening of the City. The City finds that the preservation of healthy trees and other vegetation, where practicable, is in the best interest of City residents' health and welfare. To that end, the City has found it necessary and desirable to establish a policy to assist the City staff in preserving healthy trees throughout the City.

For the purposes of this policy, City Property is defined to include City-owned Property (such as City Park Property), City Rights-of-Way, or City Easements. This policy shall apply to all City Property.

For the purposes of this policy, small trees are defined as those which have a mature height of no more than 20'. Medium trees shall have a maximum height of 20'-40', and large trees include those having a mature height of more than 40'.

For the purposes of this policy, a tree's location is determined by the location of the tree trunk centerline at ground level.

1.2 City Forester Duties

A. The City Forester or his/her designee shall identify diseased and hazardous trees that threaten the health and safety of the public and coordinate all activities of the City relating to the control and prevention of tree diseases in accordance with City code Chapter 86 Sec 86-62 Nuisances.

B. The City Forester or his/her designee shall make known and enforce regulations and specifications concerning the trimming, spraying or otherwise chemically treating, removal, planting, pruning and protection of trees, shrubs, vines, hedges and other plants on City-owned Property.

1.3 Placement and Care of Trees on City Property

A. The City Forester or his/her designee shall be notified and give approval for all planting of trees on City Property within the City of Northfield.

B. Trees on City Property shall be planted no closer to one another than at distances determined by the City Forester or his/her designee. As a general guide, the following shall apply:

1) 30 feet for small trees; 2) 40 feet for medium trees; 3) 50 feet for large trees;

C. Planting directly over or under utility lines shall be avoided. Only small trees shall be planted on City Property under or within 10 lateral feet of any overhead or underground utility.

D. Care of Trees on City Property. Trees on City Property shall be maintained by the Public Works Department or its designee. Other plantings on City Rights-of-Way or City Easements shall be maintained by the owner of the property in conformance with City Code.

E. Tree Removal on Public Land. City street trees will be removed only when one or more of the following criteria are met:

- The tree is in a state of decline due to disease or insect pest for which there is no likelihood of a cure.
- The tree poses a safety risk that cannot be corrected or where an unreasonable safety risk would be created by the construction process or root pruning.
- Where infrastructure improvements required to be made around the tree will likely kill the tree or render it a hazard.
- Where tree preservation is not cost effective compared to the value to the tree's monetary value.
- The tree poses an extreme public nuisance because of its species, size, location, fruit & seed drop, limb breakage or other objectionable condition, as determined by the City Forester.
- The aesthetic value of the tree is extremely low or where the tree interferes with the growth and development of a more desirable tree.
- Ash trees are removed during infrastructure projects due to the potential Emerald Ash Borer infestation.

F. Stump Removal. After the city has removed diseased or hazardous trees from the boulevard, or other city owned property, the city will remove the stumps. The stumps will be ground down to a few inches below the grass line, black dirt and grass seed will then be applied. Homeowners are asked to water the newly seeded areas.

G. Tree Trimming Boulevard Trees. The Street Maintenance crew trims boulevard trees annually, mostly during the winter months. Proper pruning keeps the City's trees healthy and strong and prevents possible damage from falling branches. Regularly trimming trees also helps maintain visibility along City streets, and reduces the potential for damage to city vehicles, such as street sweepers and plow trucks. The Street Maintenance crew will also trim broken branches and storm damaged trees as time and resources allow.

H. Preferred Trees. The city maintains a list of approved landscape trees and plant materials. Any other plant materials proposed for City Property shall first be reviewed and approved by the City Forester.

2 CITY OF NORTHFIELD DISEASE MANAGEMENT PLANS

2.1 Purpose

By implementing the provisions in this plan, the City will take a proactive approach to protecting the urban forest from disease and pest infestation. Our goal is to buffer the impact by implementing current aboricultural management activities.

2.2 Administration

The City Forester, through the City of Northfield's Public Works Department will be responsible for implementing and follow up on the provisions of this plan

2.3 Communication

The City Administrator, City Council, and the Parks and Recreation Advisory Board will receive periodic updates through normal channels. All media relations will follow normal city protocol.

A. OAK WILT

Introduction:

Oak Wilt is an aggressive disease that affects all species of oaks (*Quercus* spp.) found in Minnesota. It is caused by a non-native fungus (*Ceratocystis fagacearum*) that invades the water vessels of oak trees and eventually kills most infected trees. In the United States, oak wilt is found in most northeastern states and in Texas. In Minnesota, oak wilt is typically found in the southern half of the state.

While all species of oak can be affected, oaks in the red oak group (oaks with pointed lobes on their leaves) are by far the most susceptible. Northern red and pin oaks can die within two to three months of infection. White oaks are the most resistant and may survive for years after infection. Bur oaks are intermediate and may die within two to three years of infection.

There are two means of spread: one above ground and one below ground. Below ground spread happens when oak roots grow into one another and become fused or graft together. The fungus can then move from tree to tree through these root grafts. Above ground spread occurs when sap-feeding beetles pick the spores up on their bodies and travel to a fresh wound on another tree. The beetle transfers the spores to the open wound causing another infection center. Because of the close relationship between wounds and infection, it is important not to wound oak trees during the primary infection period — April, May and June

Infected trees wilt from the top down, a few branches at a time. Leaves begin to drop at a rapid rate. The fallen leaves may be brown, green or a combination of brown and green. Infected branches may have brown streaks in the wood beneath the bark. As the disease spreads, an infection pocket is created with dead trees at the center and infected trees with wilting crowns around the edges in a bulls-eye pattern.

Control:

As per City Code (Sec 86-67), the City Forester shall cause the infected tree or wood to be chipped, removed, burned or buried or otherwise effectively treated so as to destroy and prevent as fully as possible the spread of Oak Wilt.

B. DUTCH ELM DISEASE

Introduction:

Dutch Elm Disease (DED) is caused by a fungus, *Ophiostoma novo-ulmi*. The Elm bark beetle is identified as the vector of the fungus. The beetles breed under the bark, transmitting the fungus into the tree. It can also spread via root grafting, but this is less common. When wilting occurs in an isolated part of the canopy, also called flagging, this is a sure sign the tree has been infected. After flagging is spotted the elm can rapidly decline, eventually leading to the demise of the tree in a very short time period (weeks to months).

Control:

As per City Code (Sec 86-67), the City Forester shall cause the infected tree or wood to be chipped, removed, burned or buried or otherwise effectively treated so as to destroy and prevent as fully as possible the spread of Dutch Elm.

C. EMERALD ASH BORER

Introduction:

Emerald Ash Borer (EAB) is an introduced pest that is currently killing all species of ash trees (*Fraxinus* sp) in thirteen states and two Canadian provinces. Since its discovery in Detroit, Michigan in 2002, the insect has spread killing all the ash trees in its path. The City of Northfield must prepare and manage EAB on three fronts – street trees, public property (i.e. parks) and trees on private property.

Control:

Boulevard Trees:

- The City will accept the Land Development Code (LDC) with sections of excluding any new ash trees on public property and boulevards with the recommendation that citizens and businesses discontinue the use of ash in new plantings
- The City will remove any boulevard ash trees during infrastructure work.
- The City will remove the tree if it is in a state of decline due to disease or insect pest for which there is no likelihood of a cure.

- Trees that are removed will be replaced at the owner's expense. Species diversity will be a planting objective to better protect the community's trees in the future.

Park Trees:

- The City shall begin to remove any ash trees in poor condition or trees with major defects in maintained areas of the parks.
- The City will continue to cooperate with the Minnesota Department of Agriculture and Minnesota Department of Natural Resources to establish EAB detection trees as needed in city parks and city-owned property.

Trees on Private Property:

- Property owners are urged to monitor for the EAB or contact the City of Northfield Public Works Department for concerns on infestation.
- It would be prudent for residents to establish a relationship with the City Forester or DNA registered 1st Detectors in the event that ash evaluation or removal is desired. The City of Northfield encourages citizens and tree firms to wait and treat ash trees until EAB is confirmed with 15 miles of the City as recommended by the Minnesota Department of Agriculture.

PROHIBITED TREES - Can Not Be Planted on City Property

COMMON NAME

LATIN NAME

Ash

Fraxinus; All varieties note: Mountain Ash (Sorbus) is permitted

Black Walnut

Juglans Nigra

Box Elder

Acer Negrundo

Common or European Buckthorn

Rhamnus Cathartica

Cottonwood

Populus Deltoides

Gingko-females (males are permitted)

Gingko Biloba

Glossy Buckthorn including all cultivars

Rhamnus Frangula

Mulberry

Morus Alba

Pin Oak

Quercus Palustris (Note: Northern Pin Oak - Quercus Ellipsoidalis - are permitted)

Poplars

Populus Species

Russian Olive

Elaeagnus

Silver Maple

Acer Saccharinum

Conifers - **NOT ALLOWED ON BOULEVARDS**

Fruit Trees - **NOT ALLOWED ON BOULEVARDS**

ACCEPTABLE TREES - May be planted on City Property

COMMON NAME

LATIN NAME

Aspen

Populus

Quaking Aspen

P.tremuloides

Bigtooth Aspen

P.grandidentata

Birch

Betula

Dakota Pinnacle Birch

N/A

Paper Birch

B.papyrifera

River Birch

B.nigra

Whitespire Birch

B.whitespire

Buckeye

Aesculus

Ohio Buckeye

A.glabra

Burning Bush

Euonymus

Cherry

Prunus

Sour Cherry

P.cerasus

Black Cherry

P.serotina

Choke Cherry

P.virginiana

Pin Cherry

P.pennsylvania

Coffeetree

Gymnocladus dioicus

Crabapple
Dogwood
Pagoda Dogwood
Eastern Redbud
Elm -Dutch Elm Resistant Only
Ginkgo - male only
Hackberry
Common Hackberry
HoneyLocust
Thornless Honeylocust
Ironwood/Hop-hornbeam
Japanese Tree Lilac
Linden
American Linden
Basswood
Magnolia
Maples
Freeman Maple
Norway Maple
Red Maple
Sugar Maple
Mountain Ash
Korean Maple
Showy Mountain Ash

Malus
Cornus
C.alternifolia
Cercis canadensis
Ulmus
Ginkgo biloba
Cerltis
C.occidentalis
Gleditssia
G.triakanthos var.inermis
Ostrya
S.reticulata
Tilia
T.americana
T.americana
Magnolia
Acer
Acer x freemanii
A.platanoides
A.rubrum
A.saccharum
Sorbus
S.alnifolia
S.decora

RESOURCES FOR PEST AND DISEASE MANAGEMENT:

Emerald Ash Borer

City of Northfield Website:

<http://www.ci.northfield.mn.us/cityservices/outsideyourhome/trees/emeraldashborer>

Minnesota Department of Natural Resources

<http://www.dnr.state.mn.us/invasives/terrestrialanimals/eab/index.html>

Minnesota Department of Agriculture

<http://www.mda.state.mn.us/plants/pestmanagement/eab.aspx>

Minnesota Extension Services

<http://www.extension.umn.edu/issues/eab/>

Oak Wilt

Minnesota Department of Natural Resources

http://www.dnr.state.mn.us/treecare/forest_health/oakwilt/index.html

Minnesota Extension Services

<http://www.extension.umn.edu/distribution/naturalresources/DD3174.html>

Dutch Elm Disease

Minnesota Extension Services

<http://www.extension.umn.edu/distribution/naturalresources/DD3765.html>

Minnesota Department of Agriculture

<http://www.mda.state.mn.us/en/plants/plantdiseases/dutchelm.aspx>