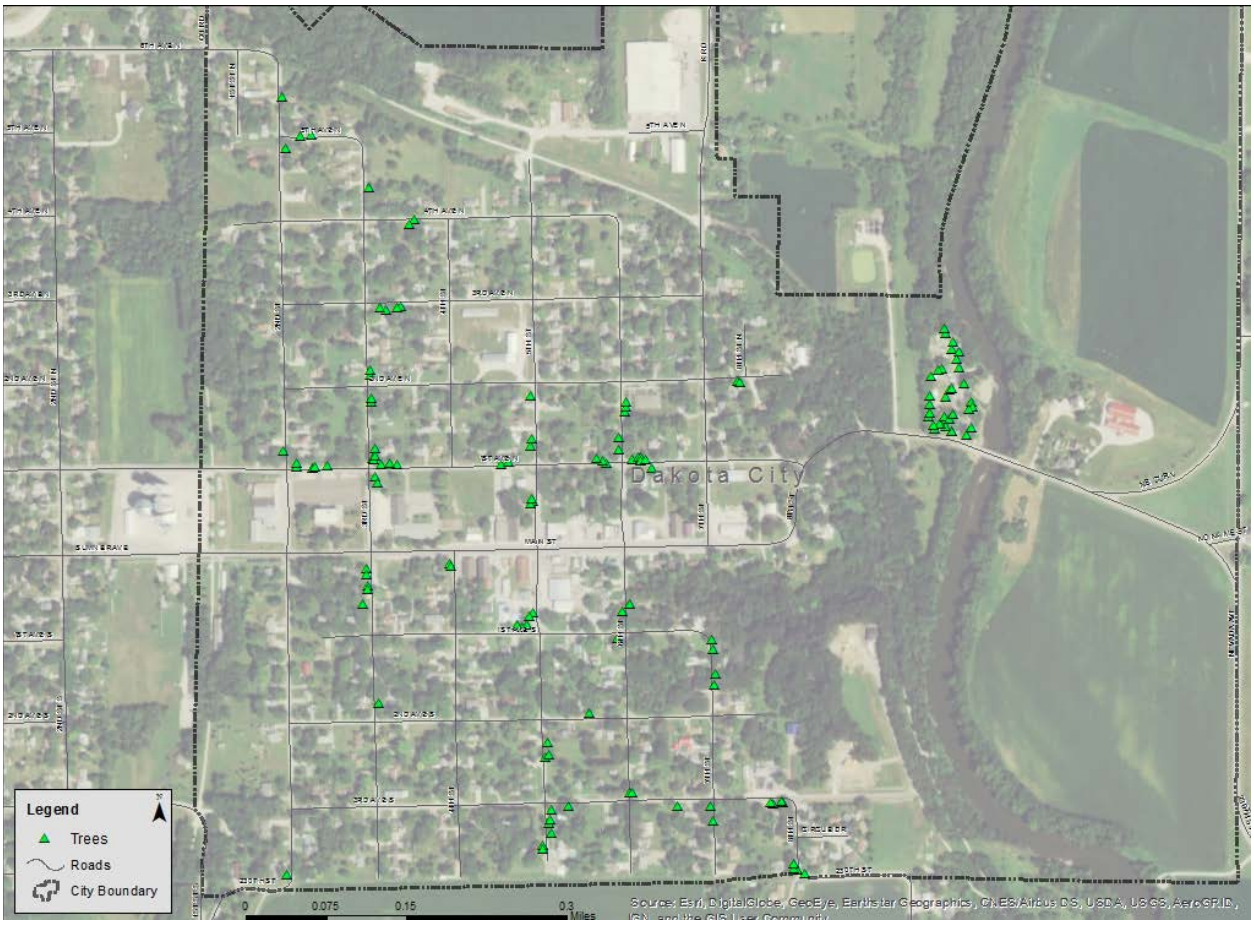
Dakota City, IA



2016 Urban Forest Management Plan
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In Partnership with the Iowa DNR

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Executive Summary

Overview

This plan was developed to assist the City of Dakota City with managing its urban forest, including budgeting and future planning. Trees can provide a multitude of benefits to the community, and sound management allows a community to best take advantage of these benefits. Management is especially important considering the serious threats posed by forest pests such as the emerald ash borer (EAB). EAB is an invasive insect imported from Eastern Asia on wood shipping crates that kills all species of ash trees (this does not include mountain ash). There is a strong possibility that 34.6% of Dakota City's city owned trees (ash) will die once EAB becomes established in the community, unless preventative treatment is used. With proper planning and management, the costs of removing dead and dying trees can be extended over years, mitigating public safety issues.

Inventory and Results

In 2016, a tree inventory was conducted using Global Positioning System (GPS) data collectors. The inventory was a complete inventory of street and park trees. Below are some key findings of the 133 trees inventoried.

- Dakota City's trees provide $29,237 of benefits annually, an average of $220 a tree
- There are over 20 species of trees
- The top three genera are: Ash 34.6%, Maple 19.5%, and Oak 7.5%
- 24% of trees are in need of some type of management
- 32 trees are recommended for removal

Recommendations

The core recommendations are detailed in the Recommendations Section. The Emerald Ash Borer Plan includes management recommendations as well. Below are some key recommendations.

- Of the 32 (31 ash) trees needing removal, 22 trees are over 24 inches in diameter at 4.5 ft. and must be addressed immediately *City ownership of the trees recommended for removal should be verified prior to any removal*
- 13 of the 46 ash trees should be carefully examined, as they have one or more symptoms that could be related to an EAB infestation
- All trees should be pruned on a routine schedule- one third of the city every other year
- Plant a diverse mix of trees that do not include: ash, maple, cottonwood, poplar, box elder, Chinese elm, evergreen, willow or black walnut
- Check ash trees with a visual survey yearly
- With the proposed budget it could take 12 years to remove ash – Suggestion: request a budget increase to $6,000 annually and apply for grants to plant replacement trees

Introduction

This plan was developed to assist Dakota City with the management, budgeting and future planning of their urban forest. Across the state, forestry budgets continue to decrease with more and more of that money spent on tree removal. With the anticipated arrival of Emerald Ash Borer (EAB), an invasive pest that kills native ash trees, it is time to prepare for the increased costs of tree removal and replacement planting. With proper planning and management of the current canopy in Dakota City these costs can be extended over years and public safety issues from dead and dying ash trees mitigated.

Trees are an important component of Dakota City's infrastructure and one of the greatest assets to the community. The benefits of trees are immense. Trees provide the community with improved air quality, stormwater runoff interception, energy conservation, lower traffic speeds, increased property values, reduced crime, improved mental health and create a desirable place to live, to name just a few benefits. It is essential that these benefits be maintained for the people of Dakota City and future generations through good urban forestry management.

Good urban forestry management involves setting goals and developing management strategies to achieve these goals. An essential part of developing management strategies is a comprehensive public tree inventory. The inventory supplies information that will be used for maintenance, removal schedules, tree planting and budgeting. Basing actions on this information will help meet Dakota City's urban forestry goals.

Inventory

In 2016, a tree inventory was conducted that included 100% of the city owned trees on both streets and parks. The tree data was collected using a handheld Global Positioning System (GPS) receiver. The data collector gives Geographic Information Systems (GIS) coordinates with an accuracy of 3 meters, which can be used in Arc GIS as an active GIS data layer. Because the inventory is a digital document the data can be updated with new information and become a working document.

The programming used to collect tree information on the data collectors was written to be compatible with a state-of-the-art software suite called i-Tree. i-Tree was developed by the USDA Forest Service to quantify the structure of community trees and the environmental services that trees provide. The i-Tree suite is a public domain which can be accessed for free.

To quantify the urban forest structure and benefits, specific data is collected for each tree. This data includes: location, land use, species, diameter at 4.5 ft., recommended maintenance, priority of that maintenance, leaf health, and wood condition. Additionally, signs and symptoms associated with EAB were noted for all ash trees. The signs and symptoms noted

were canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage.

Inventory Results

The data collected for the 133 city trees was entered into the USDA Forest service program STREETS, part of the i-Tree suite. The following are results from the i-Tree STREETS analysis.

Annual Benefits

Annual Energy Benefits

Trees conserve energy by shading buildings and blocking winds. Dakota City's trees reduce energy related costs by approximately $7,344.57 annually (Appendix A, Table 1). These savings are both in Electricity (35.11 MWh) and in Natural Gas (4,775.4 Therms).

Annual Stormwater Benefits

Dakota City's trees intercept about 449,527 gallons of rainfall or snow melt a year (Appendix A, Table 2). This interception provides $12,182 of benefits to the city.

Annual Air Quality Benefits

Air quality is a persistent public health issue in Iowa. The urban forest improves air quality by removing pollutants, lowering air temperature, and reducing energy consumption, which in turn reduces emissions from power plants, and emitting volatile organic matter (ozone). In Dakota City it is estimated that trees remove 485 lbs. of air pollution (ozone (O_3), particulate matter less than 10 microns (PM10), carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2)) per year with a net value of $1,386 (Appendix A, Table 3).

Annual Carbon Benefits

Carbon sequestration and storage reduce the amount of carbon in the atmosphere, mitigating climate change. In Dakota City trees sequester about 85,976 lbs. of carbon a year with an associated value of $645 (Appendix A, Table 4). In addition, the trees store 134,138 lbs. of carbon, with a yearly benefit of $1,006 (Appendix A, Table 5).

Annual Aesthetics Benefits

Social benefits of trees are hard to capture. The analysis does have a calculation for this area that includes: aesthetic value, property values, lowered rates of mental illness and crime, city livability and much more. Dakota City receives $7,318 in annual social benefits from trees (Appendix A, Table 6).

Financial Summary of all Benefits

According to the USDA Forest Service i-Tree analysis, Dakota City's trees provide $29,237 of benefits annually. Benefits of individual trees vary based on size, species, health and location, but on average each of the 133 trees in Dakota City provide approximately $220 annually (Appendix A, Table 7).

Forest Structure

Species Distribution

Dakota City has over 20 different tree species along city streets and parks (Appendix A, Figure 1). The distribution of the top 12 trees by genera is as follows:

Ash	46	34.6%
Maple	26	19.5%
Oak	10	7.5%
Walnut	9	6.8%
Apple (Crab)	8	6%
Hackberry	8	6%
Linden/Basswood	8	6%
Lilac	3	2.3%
Cottonwood	3	2.3%
Mulberry	3	2.3%
Catalpa	2	1.5%
Locust	2	1.5%
Others	5	3.4%

Age Class

Most of Dakota City's trees (60%) are > 18 inches in diameter at 4.5 ft. (Appendix A, Figure 2). For age, it is preferred that the highest amounts of trees are in the smallest size category (a downward slope) to prepare for natural mortality and to maintain canopy cover. Dakota City's size curve is on the larger side, indicating an older than average stand.

Condition: Wood and Foliage

Both wood condition and leaf condition are good indicators of the overall health of the urban forest. The foliage condition results for Dakota City indicate that 98.5% of the trees are in good health, with only 1.5% of the foliage in poor health, dead or dying (Appendix A, Figure 3 & Appendix B, Figure 3). Similarly, 81.2% of Dakota City's trees are in good health for wood condition (appendix A, Figure 4 & Appendix B, Figure 3). Wood condition that is in poor health, dead or dying is about 18.8% of the population. This 18.8% is an estimate of trees that need management follow up.

Management Needs

The following outlines the specific management needs of the street and park trees by number of trees and percent of canopy (Appendix B, Figure 3).

Crown Cleaning	28	21%
Crown Raising	0	0%
Tree Staking	0	0%
Tree Removal	32(31 ash)	23.3%
Crown Reduction	1	.75%
Treat	15	11.3%

Canopy Cover

The total canopy with both private and public trees is 32%, 158 acres. The canopy cover included in the Dakota City inventory includes approximately 4.4 acres (Appendix A, Figure 5).

Land Use and Location

The majority of Dakota City's city and park trees are in planting strips in single family residential neighborhoods (Appendix A, Figure 6 & Appendix A, Figure7). The following describes the land use and locations for the street and park trees.

Land Use	
Single family residential	66.17%
Park/vacant/other	30.08%
Industrial/Large commercial	0%
Small commercial	1.5%
Multifamily residential	2.26%

Location	
Planting strip	60%
Other maintained locations	40%
Cutout (surrounded by pavement)	0%
Front yard	0%

Recommendations

Risk Management

Hazardous trees can be a significant threat to both people and property. Trees that are dead or dying, or that have large issues such as trunk cracks longer than 18 inches should be removed. Broken branches and branches that interfere with motorist's vision of pedestrians, vehicles, traffic signs and signals, etc. should be removed.

Hazardous trees

Dakota City has 2 critical concern trees that need immediate removal. These trees can be seen on the Location of Trees with Recommended Maintenance map (Appendix B, Figure 4). It is recommended to start with the large diameter critical concern trees first. There is 1 tree over 24 inches in diameter at 4.5 ft. that should be addressed immediately. Please refer to the six year maintenance plan at the end of this section. After all of the critical concern trees are addressed, there should be follow up on the trees marked as needing maintenance. There are a total of 21 trees with these needs.

Poor tree species

After the removal of the critical concern trees, ash trees in poor health should be assessed for removal (Appendix B, Figure 3 & Appendix B, Figure 4). Of the 32 removals, 31 are ash trees. There are a total of 46 ash trees, and 13 of those have signs and symptoms that have been associated with EAB. In addition, there are 18 trees that are in poor health. *City ownership of the trees recommended for removal should be verified prior to any removal*

Pruning Cycle

Proper pruning can extend the life and good health of trees, as well as reduce public safety issues. In the Management Needs section of the Findings there are four main maintenance issues to be addressed: routine pruning, crown cleaning, crown raising, and crown reduction. Crown cleaning removes dead, diseased, and damaged limbs. Crown raising is the removal of lower branches that are 2 inches in diameter or larger in the case of providing clearance for pedestrians or vehicles. Crown reduction is removing individual limbs from structures or utility wires. It is recommended that all trees be pruned on a routine schedule every five to seven years. Please refer to the six year maintenance plan for further information.

Planting

Most of the planting over the next 5 years will replace the trees that are removed. It is recommended to plant 1.2 trees for every tree removed, since survival rates will not be 100%. Please refer to the six year maintenance plan at the end of this section. It is not essential that the new trees be planted in the same location of the trees being removed. However, maintaining the same number of trees helps ensure continuation of the benefits of the existing forest in Dakota City.

It is important to plant a diverse mix of species in the urban forest to maintain canopy health, since most insects and diseases target a genus (ash) or species (green ash) of trees. Current diversity recommendations advise that a genus (i.e. maple, oak) not make up more than 20% of the urban forest and a single species (i.e. silver maple, sugar maple, white oak, bur oak) not make up more than 10% of the total urban forest. Presently, the forest is heavily planted with ash (34.6%) (Appendix A, Figure 1). Maples at 19.5% should also not be planted until this percentage can be lowered. Ash trees have not been recommended since 2002, due to the threat of EAB. Other species to avoid because they are public nuisances include: fruit bearing trees, cottonwood, poplar, box elder, Chinese elm, evergreen, willow or black walnut, as

outlined in section 151.02 of the city ordinance (Appendix C). All trees planted must meet the restrictions in city ordinance 151.02 (Appendix C).

Continual Monitoring

Due to the threat of EAB, it is important to continuously check the health of ash trees. It is recommended that ash trees be checked with a visual survey every year for tree decline and for the following signs and symptoms: canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage.

Six Year Maintenance Plan with <u>No Additional Funding</u>

Year 1

Removal: 2 critical concern trees and 3 ash trees with poor health
Planting and Replacement: 7 trees to be planted in open locations
Young Tree Pruning & Maintenance:
Visual Survey for signs and symptoms of EAB

Year 2

Removal: 5 additional ash trees with poor health
*Or saving for ash tree treatment and/or future ash removal
Planting and Replacement: 7 trees in open locations from year one removals
Young Tree Pruning & Maintenance:
Routine trimming: Contract to trim 1/3 of the city trees
Visual Survey for signs and symptoms of EAB

Year 3

Removal: 5 ash in poor health
*Or saving for ash tree treatment and/or future ash removal
Planting and Replacement: 7 trees to be planted in open locations and locations from previous removals
Young Tree Pruning & Maintenance:
Visual Survey for signs and symptoms of EAB

Year 4

Removal: 5 ash in poor health
*Or saving for ash tree treatment and/or future ash removal
Planting and Replacement: 7 trees in open locations from previous removals
Routine trimming: Contract to trim 1/3 of the city trees
Young Tree Pruning & Maintenance:
Visual Survey for signs and symptoms of EAB

Year 5

Removal: 5 ash in poor health
*Or saving for ash tree treatment and/or future ash removal
Planting and Replacement: 7 trees to be planted in open locations and locations from previous removals
Young Tree Pruning & Maintenance:
Visual Survey for signs and symptoms of EAB

Year 6

Removal: 5 ash in poor health
*Or saving for ash tree treatment and/or future ash removal
Planting and Replacement: 7 trees in open locations from previous removals
Routine trimming: Contract to trim 1/3 of the city trees
Young Tree Pruning & Maintenance:
Visual Survey for signs and symptoms of EAB

*Reduction of ash over 6 years: Approximately 28 ash trees removed (approximately 61% of ash). It will take approximately 10 years to remove all ash with the current budget. EAB could potentially kill all ash within 4 to 15 years of its arrival.
** To remove all ash trees within 6 years, the budget would need to be increased to $6,500 a year. If the budget were increased to $10,000 a year all ash could be removed in 4 years.

Emerald Ash Borer Plan

Ash Tree Removal

Tree removal will be prioritized with dead, dying, hazardous trees to be removed first (Appendix B, Figure 4). Next will be all ash in poor condition and displaying signs and symptoms of EAB (Appendix B, Figure 2 & Appendix B, Figure 3). *City ownership of the tree recommended for removal should be verified prior to any removal*

Treatment of Ash Trees

Chemical treatment can be effective tool for communities to spread removal costs out over several years while allowing trees to continue to provide benefits. However, treatment is not recommended if EAB is more than 15 miles away from the community. For more information on the cost of treatment strategies visit http://extension.entm.purdue.edu/treecomputer/

EAB Quarantines

EAB is an extremely destructive plant pest and it is responsible for the death and decline of millions of ash trees. Ash in both forested and urban settings constitute a significant portion of the canopy cover in the United States. Current tools to detect, control, suppress and eradicate this pest are not as robust as the USDA would desire. In order to stay ahead of this hard to detect beetle, the USDA is attempting to contain the beetle before it spreads beyond its known positions by regulating articles.

A regulated article under the USDA's quarantine includes any of the following items:
• emerald ash borer
• firewood of all hardwood species (for example ash, oak, maple and hickory)
• nursery stock and green lumber of ash
• any other ash material, whether living, dead, cut or fallen, including logs, stumps, roots, branches, as well as composted and not composted chips of the genus ash (Mountain ash is not included)

In addition, any other article, product or means of conveyance not listed above may be designated as a regulated article if a USDA inspector determines that it presents a risk of spreading EAB once a quarantine is in effect for your county.

Wood Disposal

A very important aspect of planning is determining how wood infested with EAB will be handled, keeping in mind that quarantines will restrict its movement. Consider who will cut and haul the dead and dying trees? Is there an accessible, secured site big enough to store and sort the hundreds of trees and the associated brush and chips? How will wood be disposed of or utilized? Do you have equipment capable of handling the amount and size of ash trees your tree inventory has identified? Once your county is under quarantine for EAB, contact USDA-APHIS-PPQ at 515-251-4083 or visit the website http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/regulatory.shtml. Wood waste can be disposed of as you normally would if your county is not part of a quarantine.

Canopy Replacement

As budget permits, all removed trees will be replaced. All trees will meet the restrictions in city ordinance 151.02 (Appendix C). "No person shall plant in any street any fruit-bearing tree or any tree of the kinds commonly known as cottonwood, poplar, box elder, Chinese elm, evergreen, willow or black walnut." Also ash and maple should not be planted.

Postponed Work

While finances, staffing and equipment are focused on the management of ash, usual services may be delayed. Tree removal requests on genera other than ash will be prioritized by hazardous or emergency situations only.

Monitoring

It is recommended that ash trees be checked with a visual survey every year for tree death and for the following signs and symptoms: canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage.

Private Ash Trees

It is strongly recommended that private property owners start removing ash trees on their property upon arrival of EAB. City Code 151.06 states "If it is determined with reasonable certainty that any such condition exists (trees or shrubs in the City reported or suspected to be infected with or damaged by any disease or insect or disease pests) on private property and that the danger to other trees or to adjoining property or passing motorists or pedestrians is imminent, the Council shall notify by certified mail the owner, occupant or person in charge of such property to correct such condition by treatment or removal within fourteen (14) days of said notification. If such owner, occupant or person in charge of said property fails to comply

within 14 days of receipt of notice, the Council may cause the condition to be corrected and the cost assessed against the property."

Budget

Proposed Budget
Total $30,000 over 6 years ($5,000/year)

FY 2017 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Watering & Maintenance: $800

FY 2018 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Routine trimming: $600
Watering & Maintenance: $200

FY 2019 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Watering & Maintenance: $800

FY 2020 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Routine trimming: $600
Watering & Maintenance: $200

FY 2021 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Watering & Maintenance: $800

FY 2022 Budget
Removal: $3,500
*Or saving for ash tree treatment and/or future ash removal
Planting: $700
Routine trimming: $600
Watering & Maintenance: $200

*Reduction of ash over 6 years: approximately 28 ash trees removed (approximately 61% of ash). **It will take approximately 10 years to remove all ash with the current budget.**

Proposed Budget Increase

EAB could potentially kill all ash trees in Dakota City within 4 years of its arrival. To remove all ash trees within 6 years the budget would need to be increased to $6500 a year. If the budget were increased to $10,000 a year all ash could be removed within 4 years. Additionally, it is recommended that Dakota City apply for grants to fund replacement trees. Utility Company grants are usually between $500 and $10,000 for community-based, tree-planting projects that include parks, gateways, cemeteries, nature trails, libraries, nursing homes, and schools.

Another option being considered by many communities is treating a number of selected trees, either to maintain those trees in the landscape or to delay their removal – to spread out the costs and number of trees needing removed all at once. Trunk injection is administered every two years for the life of the tree. If treatment is discontinued, the tree dies. For instance, in this treatment scenario, the average ash diameter is 20 inches and at $15 per inch, about 16 of 32 trees could be treated per year (every other year treatment). This would be 16 trees at $4,800 selected for treatment, and Dakota City would still need to find $2,800 for removal. Alternatively, if all 32 treatable trees are treated the same year (and then every other year), it would cost approximately $9,600 those years for treatment and leave $0 for removal. These are alternatives to straight removal of ash trees. However, whether or not the treatment option is selected, there will be an increased cost of dealing with ash trees if EAB is found in Dakota City It is suggested to consider increasing the budget to plan for this.

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Appendix A: i-Tree Data

Table 1: Annual Energy Benefits

Annual Energy Benefits of Public Trees by Species									
Species	Total Electricity (MWh)	Electricity ($)	Total Natural Gas (Therms)	Natural Gas ($)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Green ash	14.11	1,071.30	1,889.89	1,852.10	2,923.39	(N/A)	33.83	39.80	64.96
Silver maple	6.07	460.76	805.25	789.15	1,249.91	(N/A)	12.03	17.02	78.12
Black walnut	2.73	207.26	356.58	349.45	556.70	(N/A)	6.77	7.58	61.86
Bur oak	3.09	234.28	414.19	405.91	640.19	(N/A)	6.02	8.72	80.02
Northern hackberry	2.62	198.75	375.36	367.85	566.60	(N/A)	6.02	7.71	70.83
Apple	0.40	30.51	66.75	65.42	95.93	(N/A)	6.02	1.31	11.99
Littleleaf linden	0.40	30.08	61.61	60.37	90.46	(N/A)	5.26	1.23	12.92
Norway maple	0.61	46.45	94.29	92.41	138.86	(N/A)	4.51	1.89	23.14
Lilac	0.60	45.45	94.87	92.97	138.42	(N/A)	2.26	1.88	46.14
Mulberry	0.30	22.45	48.25	47.29	69.74	(N/A)	2.26	0.95	23.25
Eastern cottonwood	1.01	76.73	139.33	136.54	213.27	(N/A)	2.26	2.90	71.09
Honeylocust	0.73	55.63	94.82	92.92	148.55	(N/A)	1.50	2.02	74.28
Red maple	0.01	0.61	1.47	1.44	2.06	(N/A)	1.50	0.03	1.03
Northern red oak	0.26	20.04	37.60	36.85	56.89	(N/A)	1.50	0.77	28.45
Catalpa	0.87	66.20	116.79	114.45	180.65	(N/A)	1.50	2.46	90.32
Boxelder	0.05	3.44	5.95	5.83	9.27	(N/A)	0.75	0.13	9.27
Black maple	0.28	21.58	39.90	39.10	60.68	(N/A)	0.75	0.83	60.68
White ash	0.03	2.50	4.23	4.15	6.65	(N/A)	0.75	0.09	6.65
Eastern redbud	0.00	0.25	0.62	0.61	0.87	(N/A)	0.75	0.01	0.87
Paper birch	0.09	7.18	13.73	13.45	20.64	(N/A)	0.75	0.28	20.64
Norway spruce	0.15	11.15	19.72	19.32	30.47	(N/A)	0.75	0.41	30.47
Eastern red cedar	0.05	3.71	7.93	7.77	11.47	(N/A)	0.75	0.16	11.47
Broadleaf Deciduous Mec	0.24	17.87	29.49	28.90	46.78	(N/A)	0.75	0.64	46.78
American basswood	0.40	30.47	56.79	55.65	86.12	(N/A)	0.75	1.17	86.12
Total	35.11	2,664.67	4,775.40	4,679.89	7,344.57	(N/A)	100.00	100.00	55.22

Table 2: Annual Stormwater Benefits

Annual Stormwater Benefits of Public Trees by Species						
Species	Total Rainfall Interception (Gal)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Green ash	182,608.42	4,948.69	(N/A)	33.83	40.62	109.97
Silver maple	95,446.49	2,586.60	(N/A)	12.03	21.23	161.66
Black walnut	29,068.22	787.75	(N/A)	6.77	6.47	87.53
Bur oak	47,347.29	1,283.11	(N/A)	6.02	10.53	160.39
Northern hackberry	28,119.37	762.04	(N/A)	6.02	6.26	95.25
Apple	1,862.68	50.48	(N/A)	6.02	0.41	6.31
Littleleaf linden	2,123.39	57.54	(N/A)	5.26	0.47	8.22
Norway maple	5,273.88	142.92	(N/A)	4.51	1.17	23.82
Lilac	3,522.10	95.45	(N/A)	2.26	0.78	31.82
Mulberry	1,507.18	40.84	(N/A)	2.26	0.34	13.61
Eastern cottonwood	12,420.29	336.59	(N/A)	2.26	2.76	112.20
Honeylocust	9,369.55	253.91	(N/A)	1.50	2.08	126.96
Red maple	23.35	0.63	(N/A)	1.50	0.01	0.32
Northern red oak	3,049.29	82.64	(N/A)	1.50	0.68	41.32
Catalpa	12,729.45	344.97	(N/A)	1.50	2.83	172.48
Boxelder	276.93	7.50	(N/A)	0.75	0.06	7.50
Black maple	2,866.98	77.70	(N/A)	0.75	0.64	77.70
White ash	163.34	4.43	(N/A)	0.75	0.04	4.43
Eastern redbud	7.45	0.20	(N/A)	0.75	0.00	0.20
Paper birch	607.86	16.47	(N/A)	0.75	0.14	16.47
Norway spruce	2,969.19	80.46	(N/A)	0.75	0.66	80.46
Eastern red cedar	659.21	17.86	(N/A)	0.75	0.15	17.86
Broadleaf Deciduous Mec	1,409.09	38.19	(N/A)	0.75	0.31	38.19
American basswood	6,096.40	165.21	(N/A)	0.75	1.36	165.21
Citywide total	449,527.40	12,182.19	(N/A)	100.00	100.00	91.60

Table 3: Annual Air Quality Benefits

Annual Air Quality Benefits of Public Trees by Species																	
Species	Deposition O3 (lb)	Deposition NO2 (lb)	Deposition PM10 (lb)	Deposition SO2 (lb)	Total Deposition ($)	Avoided NO2 (lb)	Avoided PM10 (lb)	Avoided VOC (lb)	Avoided SO2 (lb)	Total Avoided ($)	BVOC Emissions (lb)	BVOC Emissions ($)	Total (lb)	Total ($)	Standard Error	% of Total Trees	Avg. $/tree
Green ash	27.49	4.40	12.50	1.23	144.52	67.02	9.78	9.33	63.96	418.41	0.00	0.00	195.71	562.92	(N/A)	33.83	12.51
Silver maple	17.93	3.04	8.66	0.80	96.28	28.67	4.19	4.00	27.45	179.23	- 9.30	- 34.88	85.45	240.64	(N/A)	12.03	15.04
Black walnut	4.07	0.65	1.91	0.18	21.58	12.89	1.89	1.80	12.38	80.66	0.00	0.00	35.77	102.24	(N/A)	6.77	11.36
Bur oak	8.24	1.32	3.63	0.37	42.97	14.67	2.14	2.04	13.99	91.53	0.00	0.00	46.38	134.50	(N/A)	6.02	16.81
Northern hackberry	4.66	0.81	2.32	0.21	25.30	12.67	1.83	1.75	11.88	78.55	0.00	0.00	36.13	103.85	(N/A)	6.02	12.98
Apple	0.53	0.09	0.26	0.02	2.86	2.02	0.29	0.27	1.82	12.34	0.00	- 0.01	5.30	15.18	(N/A)	6.02	1.90
Littleleaf linden	0.15	0.03	0.12	0.01	0.94	1.96	0.28	0.27	1.80	12.05	- 0.11	- 0.40	4.50	12.59	(N/A)	5.26	1.80
Norway maple	0.99	0.17	0.50	0.04	5.40	3.02	0.43	0.41	2.78	18.58	- 0.24	- 0.90	8.11	23.08	(N/A)	4.51	3.85
Lilac	1.30	0.21	0.59	0.06	6.85	2.97	0.42	0.40	2.71	18.22	- 0.01	- 0.03	8.66	25.04	(N/A)	2.26	8.35
Mulberry	0.48	0.08	0.23	0.02	2.57	1.48	0.21	0.20	1.34	9.05	0.00	- 0.01	4.04	11.60	(N/A)	2.26	3.87
Eastern cottonwood	2.12	0.34	0.96	0.09	11.13	4.84	0.70	0.67	4.58	30.10	0.00	0.00	14.30	41.23	(N/A)	2.26	13.74
Honeylocust	1.88	0.31	0.84	0.09	9.88	3.44	0.50	0.48	3.32	21.57	- 1.52	- 5.70	9.34	25.75	(N/A)	1.50	12.87
Red maple	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.01	0.04	0.25	0.00	0.00	0.09	0.26	(N/A)	1.50	0.13
Northern red oak	0.67	0.12	0.32	0.03	3.61	1.27	0.18	0.18	1.20	7.90	- 0.97	- 3.65	3.00	7.86	(N/A)	1.50	3.93
Catalpa	2.38	0.38	1.05	0.11	12.41	4.14	0.60	0.58	3.95	25.86	0.00	0.00	13.19	38.26	(N/A)	1.50	19.13
Boxelder	0.01	0.00	0.01	0.00	0.06	0.21	0.03	0.03	0.21	1.33	- 0.01	- 0.04	0.49	1.36	(N/A)	0.75	1.36
Black maple	0.75	0.13	0.34	0.03	3.97	1.36	0.20	0.19	1.29	8.48	- 0.24	- 0.91	4.05	11.54	(N/A)	0.75	11.54
White ash	0.00	0.00	0.01	0.00	0.02	0.15	0.02	0.02	0.15	0.97	0.00	0.00	0.35	0.99	(N/A)	0.75	0.99
Eastern redbud	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.11	0.00	0.00	0.04	0.11	(N/A)	0.75	0.11
Paper birch	0.02	0.00	0.02	0.00	0.16	0.46	0.07	0.06	0.43	2.84	0.00	0.00	1.07	2.99	(N/A)	0.75	2.99
Norway spruce	0.35	0.07	0.28	0.04	2.26	0.70	0.10	0.10	0.67	4.35	- 1.38	- 5.16	0.92	1.45	(N/A)	0.75	1.45
Eastern red cedar	0.06	0.01	0.06	0.01	0.44	0.24	0.03	0.03	0.22	1.49	- 0.35	- 1.31	0.32	0.62	(N/A)	0.75	0.62
Broadleaf Deciduous Mec	0.22	0.04	0.12	0.01	1.21	1.10	0.16	0.16	1.07	6.93	- 0.06	- 0.22	2.81	7.92	(N/A)	0.75	7.92
American basswood	0.98	0.17	0.46	0.04	5.22	1.94	0.28	0.27	1.82	12.02	- 0.79	- 2.96	5.16	14.28	(N/A)	0.75	14.28
Citywide Total	75.29	12.35	35.18	3.40	399.64	167.29	24.38	23.25	159.05	1,042.78	- 14.98	- 56.18	485.20	1,386.24	(N/A)	100.00	10.42

Table 4: Annual Carbon Stored

Stored CO2 Benefits of Public Trees by Species						
Species	Total stored CO2 (lbs)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Green ash	924,496.18	6,933.72	(N/A)	33.83	42.99	154.08
Silver maple	428,189.08	3,211.42	(N/A)	12.03	19.91	200.71
Black walnut	136,615.68	1,024.62	(N/A)	6.77	6.35	113.85
Bur oak	281,811.29	2,113.58	(N/A)	6.02	13.10	264.20
Northern hackberry	72,163.86	541.23	(N/A)	6.02	3.36	67.65
Apple	8,955.46	67.17	(N/A)	6.02	0.42	8.40
Littleleaf linden	4,658.33	34.94	(N/A)	5.26	0.22	4.99
Norway maple	16,935.25	127.01	(N/A)	4.51	0.79	21.17
Lilac	20,228.14	151.71	(N/A)	2.26	0.94	50.57
Mulberry	7,828.41	58.71	(N/A)	2.26	0.36	19.57
Eastern cottonwood	72,897.35	546.73	(N/A)	2.26	3.39	182.24
Honeylocust	24,489.68	183.67	(N/A)	1.50	1.14	91.84
Red maple	33.68	0.25	(N/A)	1.50	0.00	0.13
Northern red oak	15,251.49	114.39	(N/A)	1.50	0.71	57.19
Catalpa	81,925.14	614.44	(N/A)	1.50	3.81	307.22
Boxelder	218.47	1.64	(N/A)	0.75	0.01	1.64
Black maple	7,945.29	59.59	(N/A)	0.75	0.37	59.59
White ash	185.46	1.39	(N/A)	0.75	0.01	1.39
Eastern redbud	13.78	0.10	(N/A)	0.75	0.00	0.10
Paper birch	1,034.53	7.76	(N/A)	0.75	0.05	7.76
Norway spruce	3,342.75	25.07	(N/A)	0.75	0.16	25.07
Eastern red cedar	277.12	2.08	(N/A)	0.75	0.01	2.08
Broadleaf Deciduous Mec	3,624.16	27.18	(N/A)	0.75	0.17	27.18
American basswood	37,615.93	282.12	(N/A)	0.75	1.75	282.12
Citywide total	2,150,736.50	16,130.52	(N/A)	100.00	100.00	121.28

Table 5: Annual Carbon Sequestered

Annual CO2 Benefits of Public Trees by Species													
Species	Sequestered (lb)	Sequestered ($)	Decomposition Release(lb)	Maintenance Release (lb)	Total Release ($)	Avoided (lb)	Avoided ($)	Net Total (lb)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg $/tr
Green ash	29,785.84	223.39	- 4,437.58	- 154.05	- 34.44	23,675.35	177.57	48,869.56	366.52	(N/A)	33.83	36.43	
Silver maple	28,838.45	216.29	- 2,055.31	- 70.98	- 15.95	10,182.63	76.37	36,894.79	276.71	(N/A)	12.03	27.51	
Black walnut	5,593.24	41.95	- 655.76	- 27.69	- 5.13	4,580.35	34.35	9,490.14	71.18	(N/A)	6.77	7.07	
Bur oak	5,687.45	42.66	- 1,352.69	- 36.08	- 10.42	5,177.56	38.83	9,476.24	71.07	(N/A)	6.02	7.06	
Northern hackberry	3,543.01	26.57	- 346.61	- 25.94	- 2.79	4,392.40	32.94	7,562.87	56.72	(N/A)	6.02	5.64	
Apple	329.68	2.47	- 43.12	- 7.61	- 0.38	674.30	5.06	953.26	7.15	(N/A)	6.02	0.71	
Littleleaf linden	1,071.95	8.04	- 24.15	- 6.44	- 0.23	664.85	4.99	1,706.22	12.80	(N/A)	5.26	1.27	
Norway maple	1,014.59	7.61	- 82.74	- 7.22	- 0.67	1,026.53	7.70	1,951.17	14.63	(N/A)	4.51	1.45	
Lilac	0.00	0.00	- 97.10	- 10.53	- 0.81	1,004.33	7.53	896.70	6.73	(N/A)	2.26	0.67	
Mulberry	630.27	4.73	- 37.58	- 4.49	- 0.32	496.12	3.72	1,084.32	8.13	(N/A)	2.26	0.81	
Eastern cottonwood	1,798.25	13.49	- 349.91	- 11.31	- 2.71	1,695.71	12.72	3,132.74	23.50	(N/A)	2.26	2.34	
Honeylocust	2,971.58	22.29	- 117.55	- 5.46	- 0.92	1,229.51	9.22	4,078.07	30.59	(N/A)	1.50	3.04	
Red maple	5.63	0.04	- 0.27	- 0.39	0.00	13.59	0.10	18.56	0.14	(N/A)	1.50	0.01	
Northern red oak	374.78	2.81	- 73.25	- 3.71	- 0.58	442.98	3.32	740.81	5.56	(N/A)	1.50	0.55	
Catalpa	1,438.45	10.79	- 393.24	- 10.14	- 3.03	1,462.97	10.97	2,498.04	18.74	(N/A)	1.50	1.86	
Boxelder	56.87	0.43	- 1.75	- 0.59	- 0.02	76.08	0.57	130.62	0.98	(N/A)	0.75	0.10	
Black maple	0.00	0.00	- 38.14	- 2.73	- 0.31	476.96	3.58	436.10	3.27	(N/A)	0.75	0.33	
White ash	65.36	0.49	- 1.48	- 0.59	- 0.02	55.24	0.41	118.53	0.89	(N/A)	0.75	0.09	
Eastern redbud	8.68	0.07	- 0.11	- 0.20	0.00	5.61	0.04	13.99	0.10	(N/A)	0.75	0.01	
Paper birch	208.80	1.57	- 4.97	- 1.17	- 0.05	158.75	1.19	361.41	2.71	(N/A)	0.75	0.27	
Norway spruce	187.38	1.41	- 16.05	- 2.73	- 0.14	246.38	1.85	414.99	3.11	(N/A)	0.75	0.31	
Eastern red cedar	39.86	0.30	- 1.33	- 1.17	- 0.02	81.94	0.61	119.30	0.89	(N/A)	0.75	0.09	
Broadleaf Deciduous Mec	385.95	2.89	- 17.40	- 1.95	- 0.15	395.01	2.96	761.61	5.71	(N/A)	0.75	0.57	
American basswood	1,940.28	14.55	- 180.56	- 5.07	- 1.39	673.42	5.05	2,428.07	18.21	(N/A)	0.75	1.81	
Citywide Total	85,976.32	644.82	- 10,328.62	- 398.19	- 80.45	58,888.58	441.66	134,138.09	1,006.04	(N/A)	100.00	100.00	

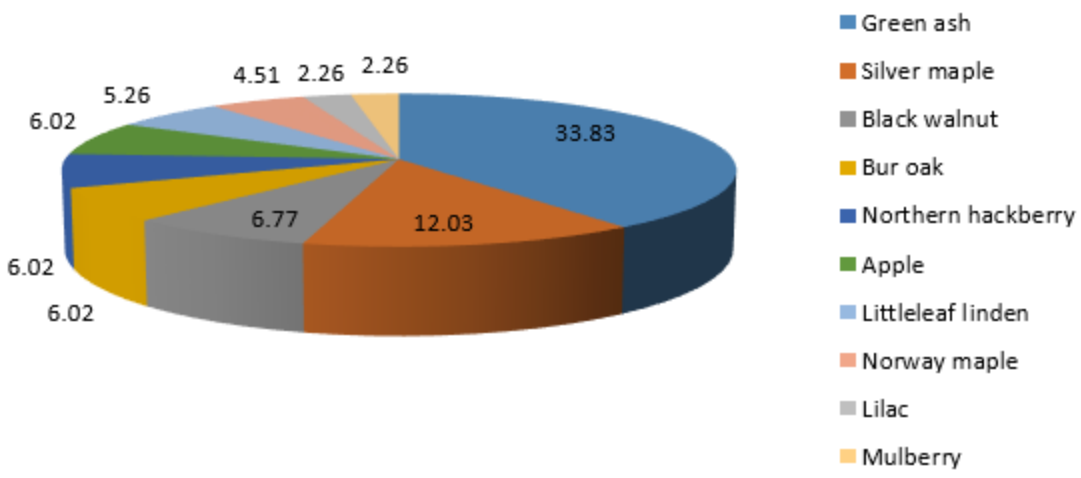
Table 6: Annual Social and Aesthetic Benefits

Annual Aesthetic/Other Benefit of Public Trees by Species					
Species	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Green ash	2,282.64	(N/A)	33.83	31.19	50.73
Silver maple	2,085.59	(N/A)	12.03	28.50	130.35
Black walnut	467.46	(N/A)	6.77	6.39	51.94
Bur oak	380.09	(N/A)	6.02	5.19	47.51
Northern hackberry	449.61	(N/A)	6.02	6.14	56.20
Apple	17.02	(N/A)	6.02	0.23	2.13
Littleleaf linden	156.37	(N/A)	5.26	2.14	22.34
Norway maple	112.41	(N/A)	4.51	1.54	18.74
Lilac	0.01	(N/A)	2.26	0.00	0.00
Mulberry	37.26	(N/A)	2.26	0.51	12.42
Eastern cottonwood	143.95	(N/A)	2.26	1.97	47.98
Honeylocust	777.80	(N/A)	1.50	10.63	388.90
Red maple	0.07	(N/A)	1.50	0.00	0.04
Northern red oak	25.38	(N/A)	1.50	0.35	12.69
Catalpa	95.17	(N/A)	1.50	1.30	47.59
Boxelder	19.09	(N/A)	0.75	0.26	19.09
Black maple	0.00	(N/A)	0.75	0.00	0.00
White ash	12.76	(N/A)	0.75	0.17	12.76
Eastern redbud	0.03	(N/A)	0.75	0.00	0.03
Paper birch	28.56	(N/A)	0.75	0.39	28.56
Norway spruce	47.08	(N/A)	0.75	0.64	47.08
Eastern red cedar	21.34	(N/A)	0.75	0.29	21.34
Broadleaf Deciduous Mec	39.16	(N/A)	0.75	0.54	39.16
American basswood	119.43	(N/A)	0.75	1.63	119.43
Citywide Total	7,318.28	(N/A)	100.00	100.00	55.02

Table 7: Summary of Benefits in Dollars

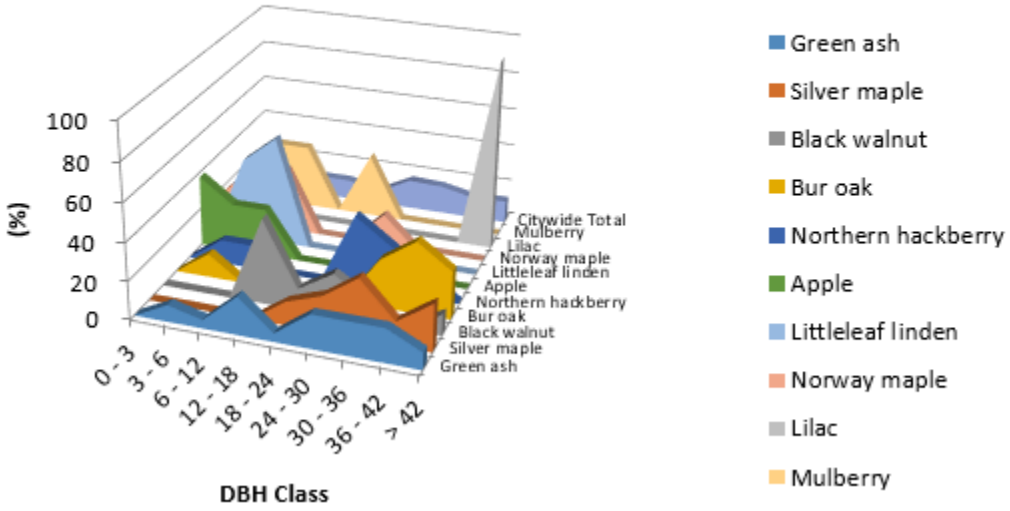
Average Annual Benefits of Public Trees by Species ($/tree)

Species	Energy	CO2	Air Quality	Stormwater	Aesthetic/Other	Total	Standard Error
Green ash	64.96	8.14	12.51	109.97	50.73	246.31	(N/A)
Silver maple	78.12	17.29	15.04	161.66	130.35	402.47	(N/A)
Black walnut	61.86	7.91	11.36	87.53	51.94	220.59	(N/A)
Bur oak	80.02	8.88	16.81	160.39	47.51	313.62	(N/A)
Northern hackberry	70.83	7.09	12.98	95.25	56.20	242.35	(N/A)
Apple	11.99	0.89	1.90	6.31	2.13	23.22	(N/A)
Littleleaf linden	12.92	1.83	1.80	8.22	22.34	47.11	(N/A)
Norway maple	23.14	2.44	3.85	23.82	18.74	71.98	(N/A)
Lilac	46.14	2.24	8.35	31.82	0.00	88.55	(N/A)
Mulberry	23.25	2.71	3.87	13.61	12.42	55.86	(N/A)
Eastern cottonwood	71.09	7.83	13.74	112.20	47.98	252.84	(N/A)
Honeylocust	74.28	15.29	12.87	126.96	388.90	618.30	(N/A)
Red maple	1.03	0.07	0.13	0.32	0.04	1.58	(N/A)
Northern red oak	28.45	2.78	3.93	41.32	12.69	89.16	(N/A)
Catalpa	90.32	9.37	19.13	172.48	47.59	338.89	(N/A)
Boxelder	9.27	0.98	1.36	7.50	19.09	38.20	(N/A)
Black maple	60.68	3.27	11.54	77.70	0.00	153.19	(N/A)
White ash	6.65	0.89	0.99	4.43	12.76	25.71	(N/A)
Eastern redbud	0.87	0.10	0.11	0.20	0.03	1.31	(N/A)
Paper birch	20.64	2.71	2.99	16.47	28.56	71.37	(N/A)
Norway spruce	30.47	3.11	1.45	80.46	47.08	162.58	(N/A)
Eastern red cedar	11.47	0.89	0.62	17.86	21.34	52.19	(N/A)
Broadleaf Deciduous Mec	46.78	5.71	7.92	38.19	39.16	137.75	(N/A)
American basswood	86.12	18.21	14.28	165.21	119.43	403.25	(N/A)
Citywide Total	55.22	7.56	10.42	91.60	55.02	219.83	(N/A)



Species Distribution of Public Trees f	
12/27/2016	
Species	Percent
Green ash	33.83
Silver maple	12.03
Black walnut	6.77
Bur oak	6.02
Northern hackberry	6.02
Apple	6.02
Littleleaf linden	5.26
Norway maple	4.51
Lilac	2.26
Mulberry	2.26
Other Species	15.04

Figure 1: Species Distribution



Relative Age Distribution of Top 10 Public Tree Species (%)									
12/27/2016									
Species	0 - 3	3 - 6	6 - 12	12 - 18	18 - 24	24 - 30	30 - 36	36 - 42	> 42
Green ash	0.00	8.89	4.44	20.00	4.44	17.78	17.78	17.78	8.89
Silver maple	0.00	0.00	0.00	0.00	12.50	18.75	31.25	12.50	25.00
Black walnut	0.00	0.00	0.00	44.44	11.11	22.22	11.11	0.00	11.11
Bur oak	0.00	12.50	0.00	0.00	0.00	0.00	25.00	37.50	25.00
Northern hackberry	0.00	12.50	12.50	0.00	0.00	37.50	25.00	12.50	0.00
Apple	37.50	25.00	25.00	0.00	0.00	12.50	0.00	0.00	0.00
Littleleaf linden	0.00	42.86	57.14	0.00	0.00	0.00	0.00	0.00	0.00
Norway maple	16.67	33.33	33.33	0.00	0.00	16.67	0.00	0.00	0.00
Lilac	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Mulberry	0.00	33.33	33.33	0.00	33.33	0.00	0.00	0.00	0.00
Citywide Total	6.02	12.03	10.53	10.53	6.77	15.79	15.04	11.28	12.03

Figure 2: Relative Age Class

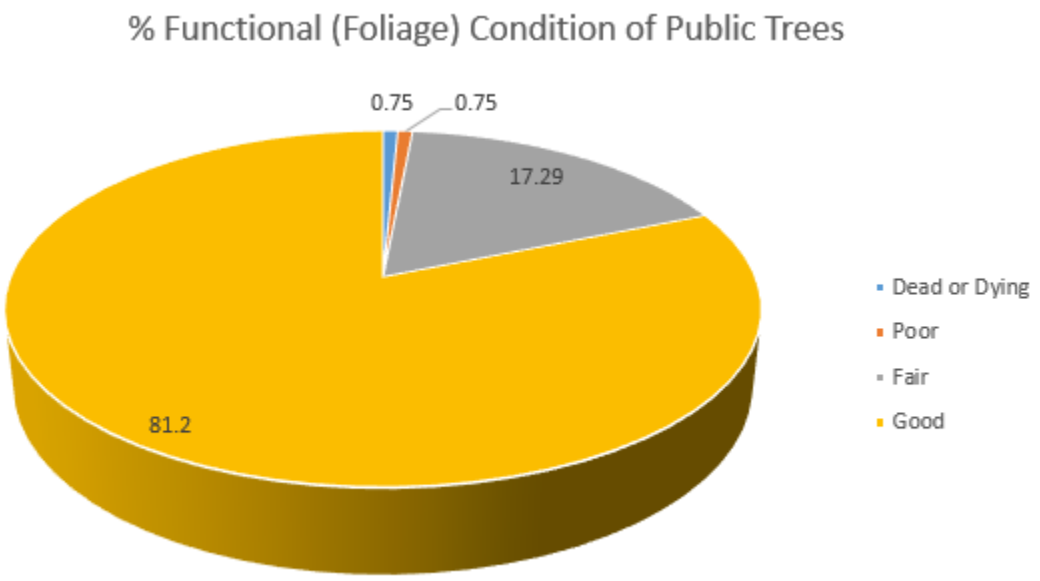


Figure 3: Foliage Condition

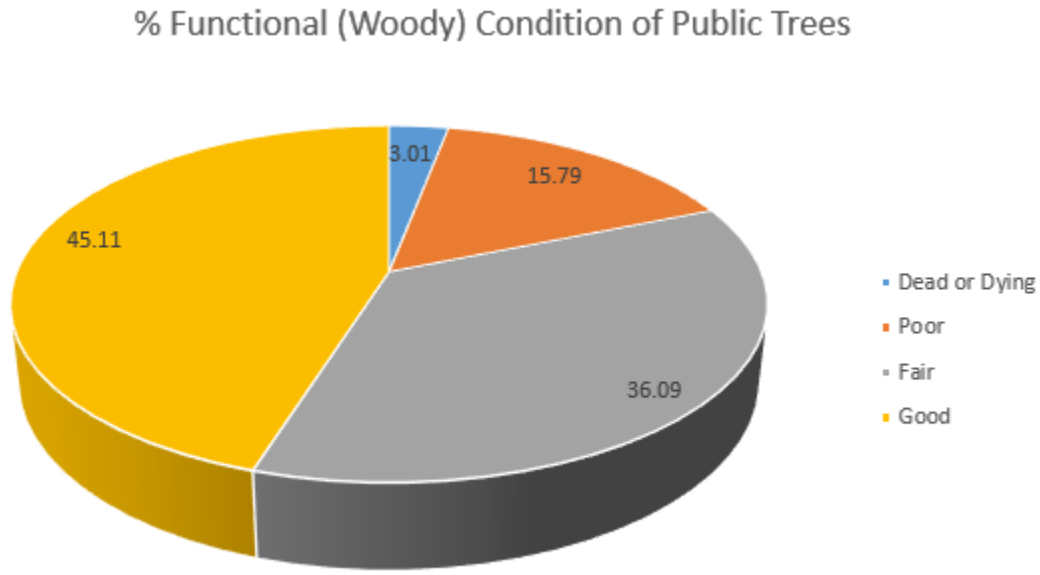
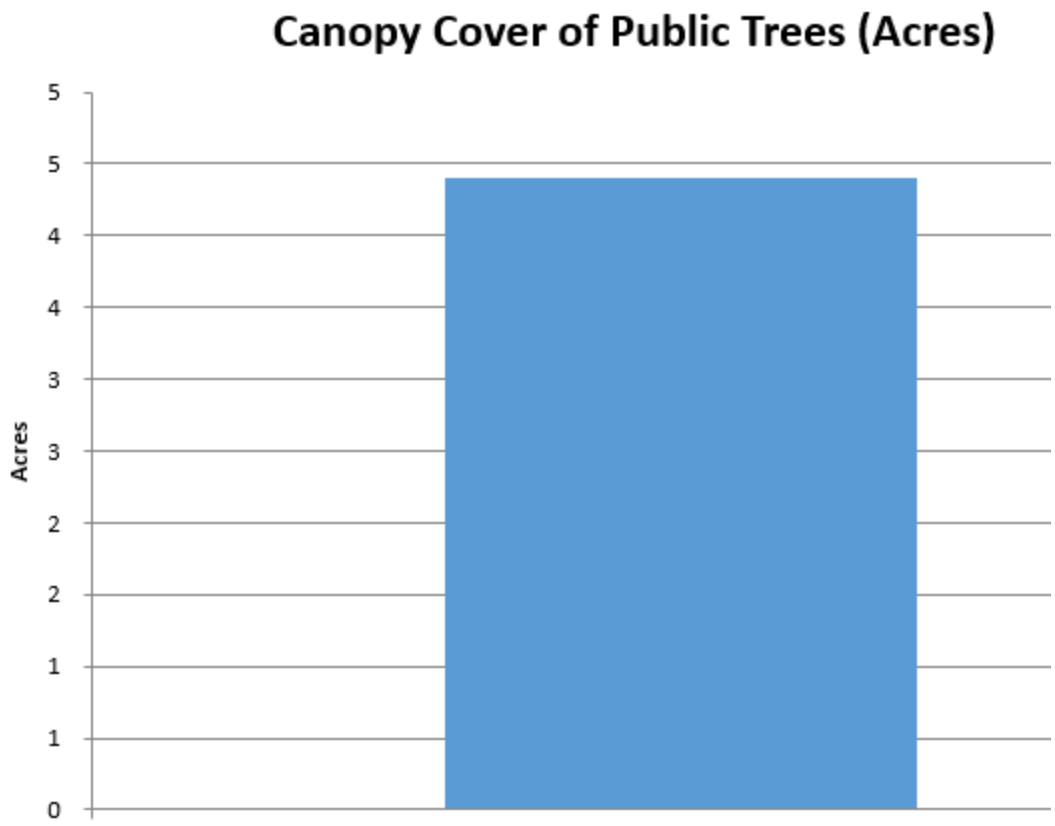


Figure 4: Wood Condition



Canopy Cover of Public Trees (Acres)		
Zone	Acres	% of Total Canopy
1	4.40	100.00
Citywide Total	4.40	100.00

Figure 5: Canopy Cover in Acres

Citywide	Single family residential	88	(N/A)	66.17	66.17
	Multi-family residential	3	(N/A)	2.26	2.26
	Industrial/Large commercial	0	(N/A)	0.00	0.00
	Park/vacant/other	40	(N/A)	30.08	30.08
	Small Commercial	2	(N/A)	1.50	1.50
	Total	133	(N/A)	100.00	100.00

Figure 6: Land Use of city/park trees

Citywide	Front yard	0	(N/A)	0.00	0.00
	Planting strip	93	(N/A)	60.00	60.00
	Cutout	0	(N/A)	0.00	0.00
	Median	0	(N/A)	0.00	0.00
	Other maintained locations	40	(N/A)	30.00	30.00
	Other un-maintained locations	0	(N/A)	0.00	0.00
	Backyard	0	(N/A)	0.00	0.00
	Total	133	(N/A)	100.00	100.00

Figure 7: Location of city/park trees

Appendix B: ArcGIS Mapping

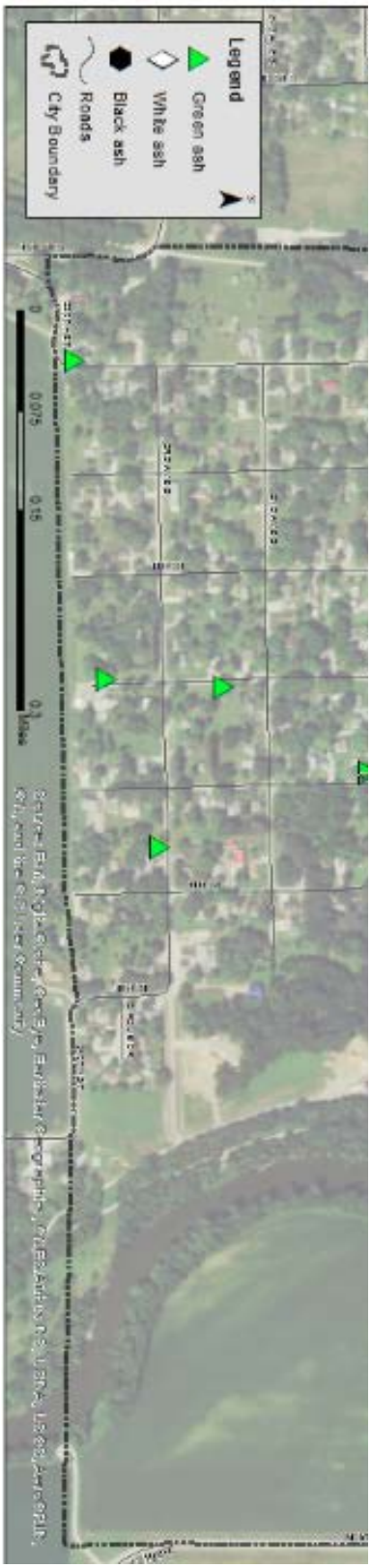


Figure 1: Location of Ash Trees

Figure 2: Location of EAB symptoms

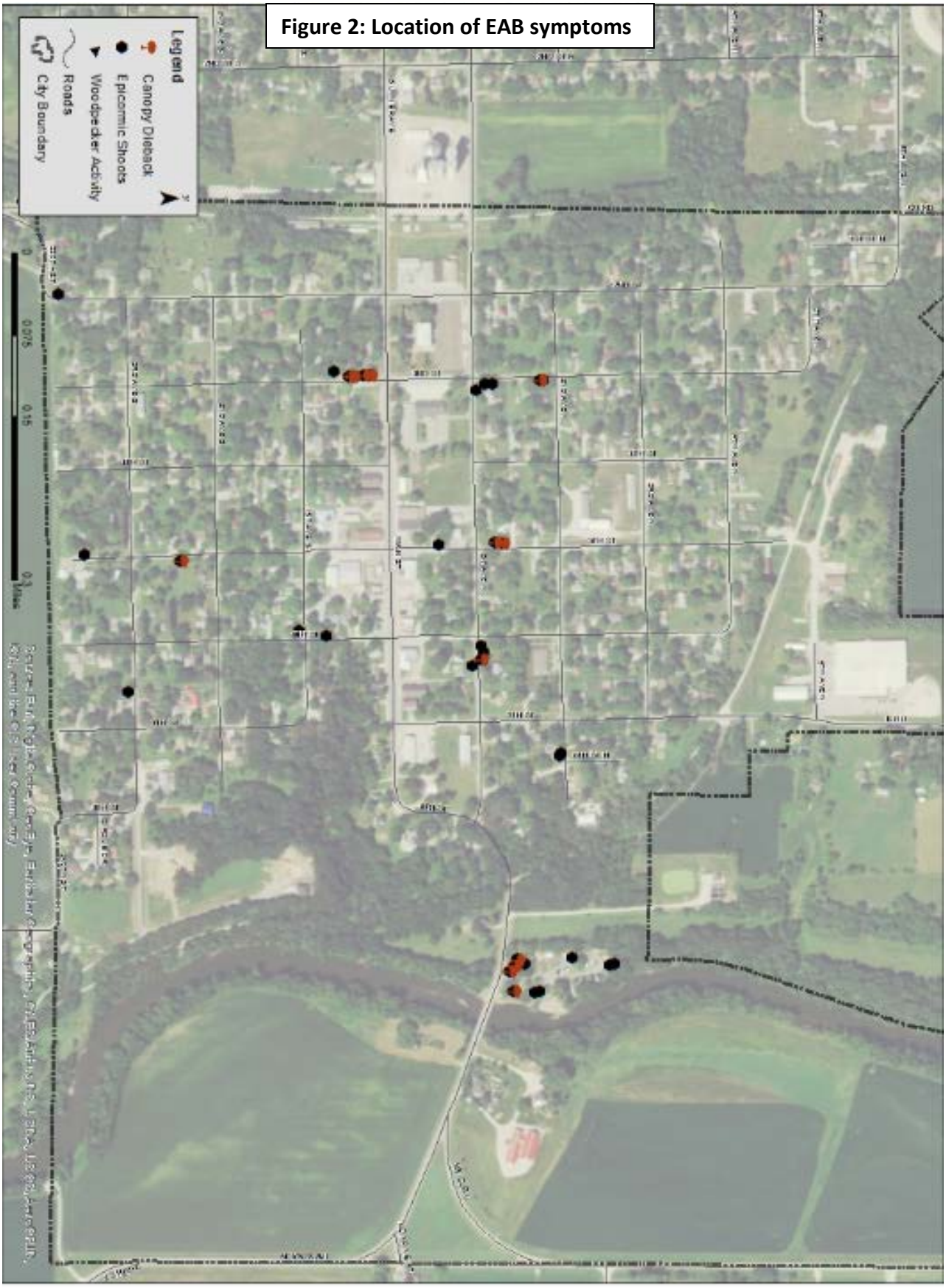


Figure 3: Location of Ash with Canopy Dieback

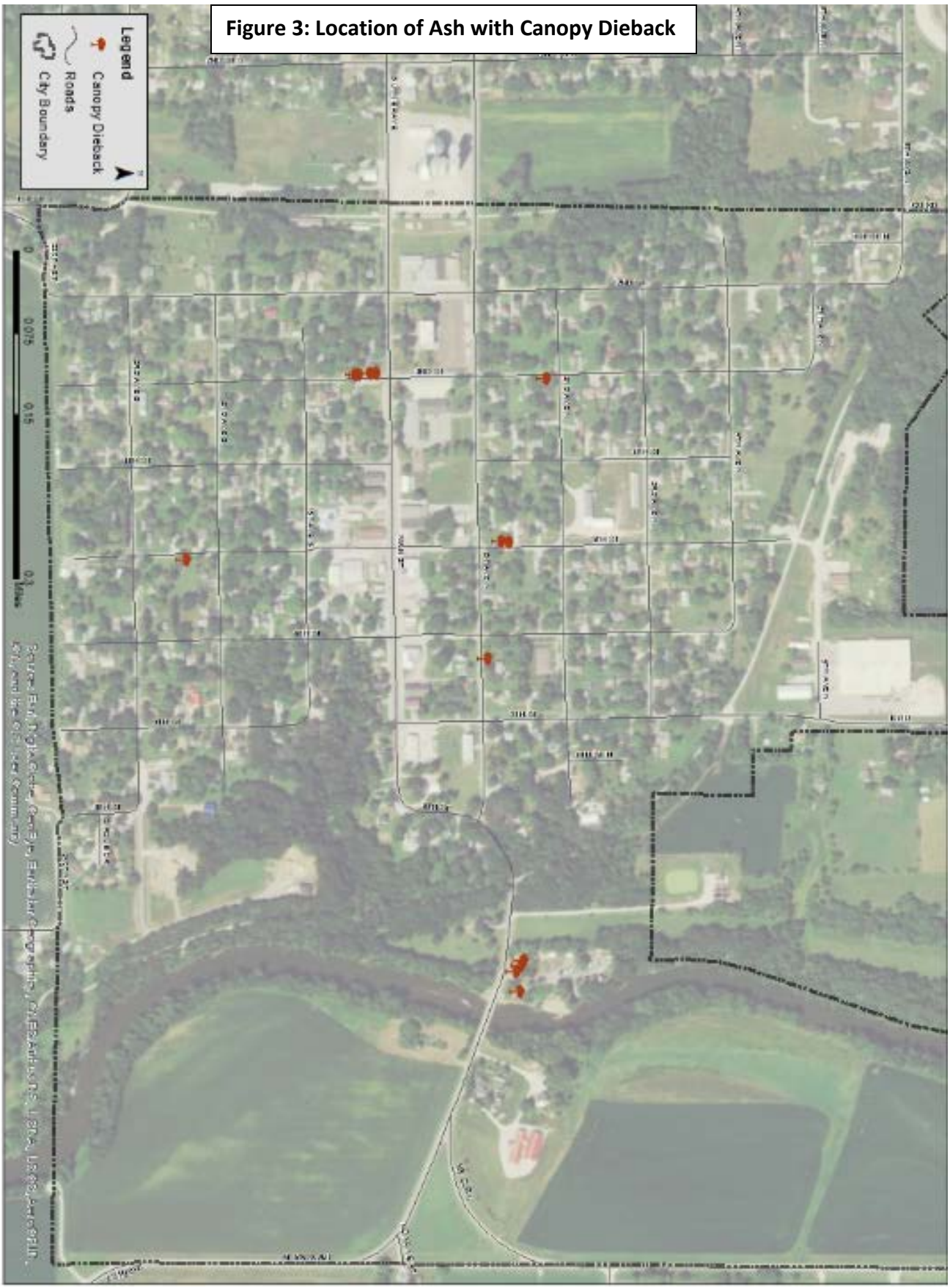


Figure 4: Location of Ash with Epicormic Shoots

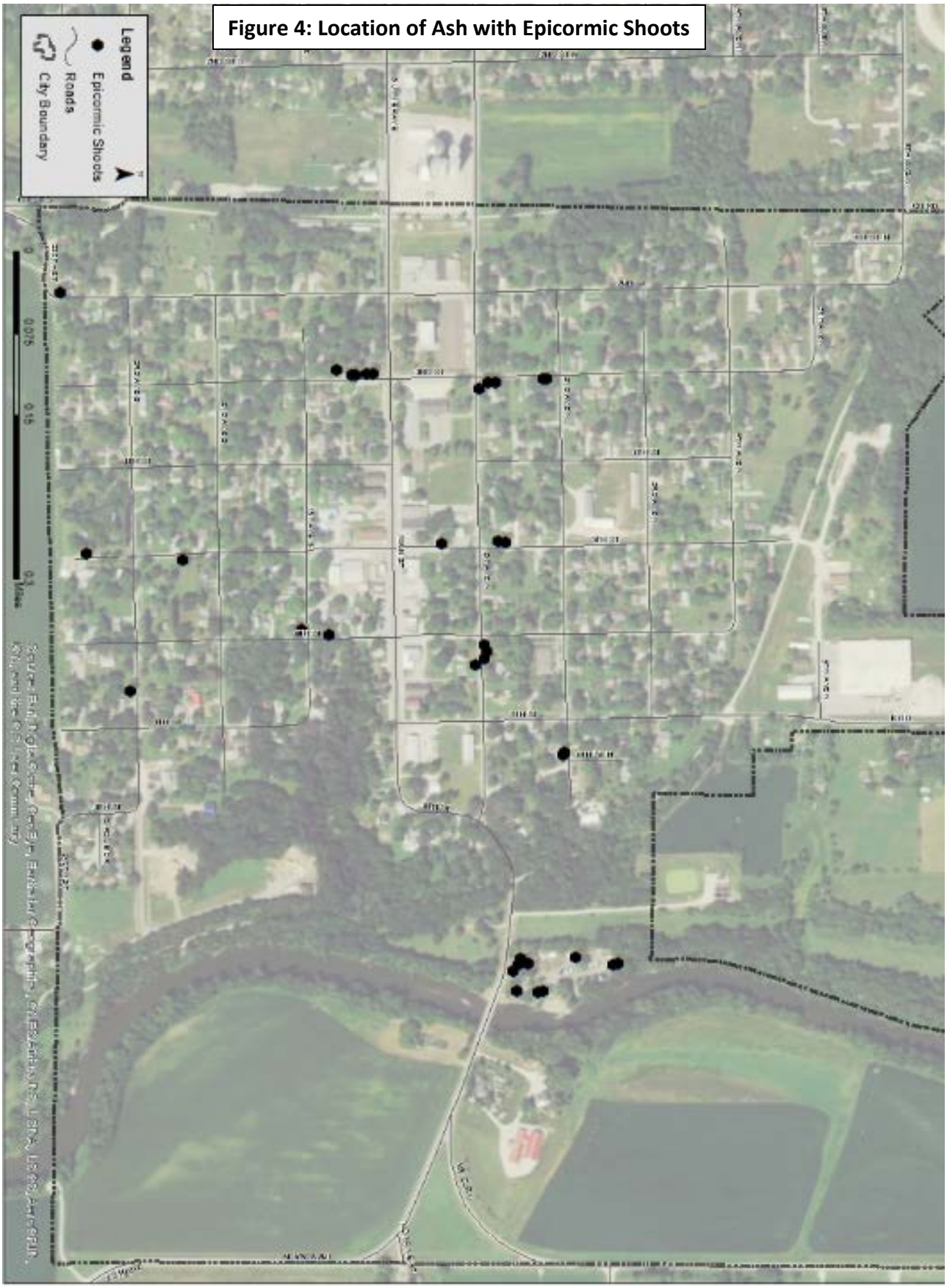


Figure 5: Location of Treatable Ash in Good Condition

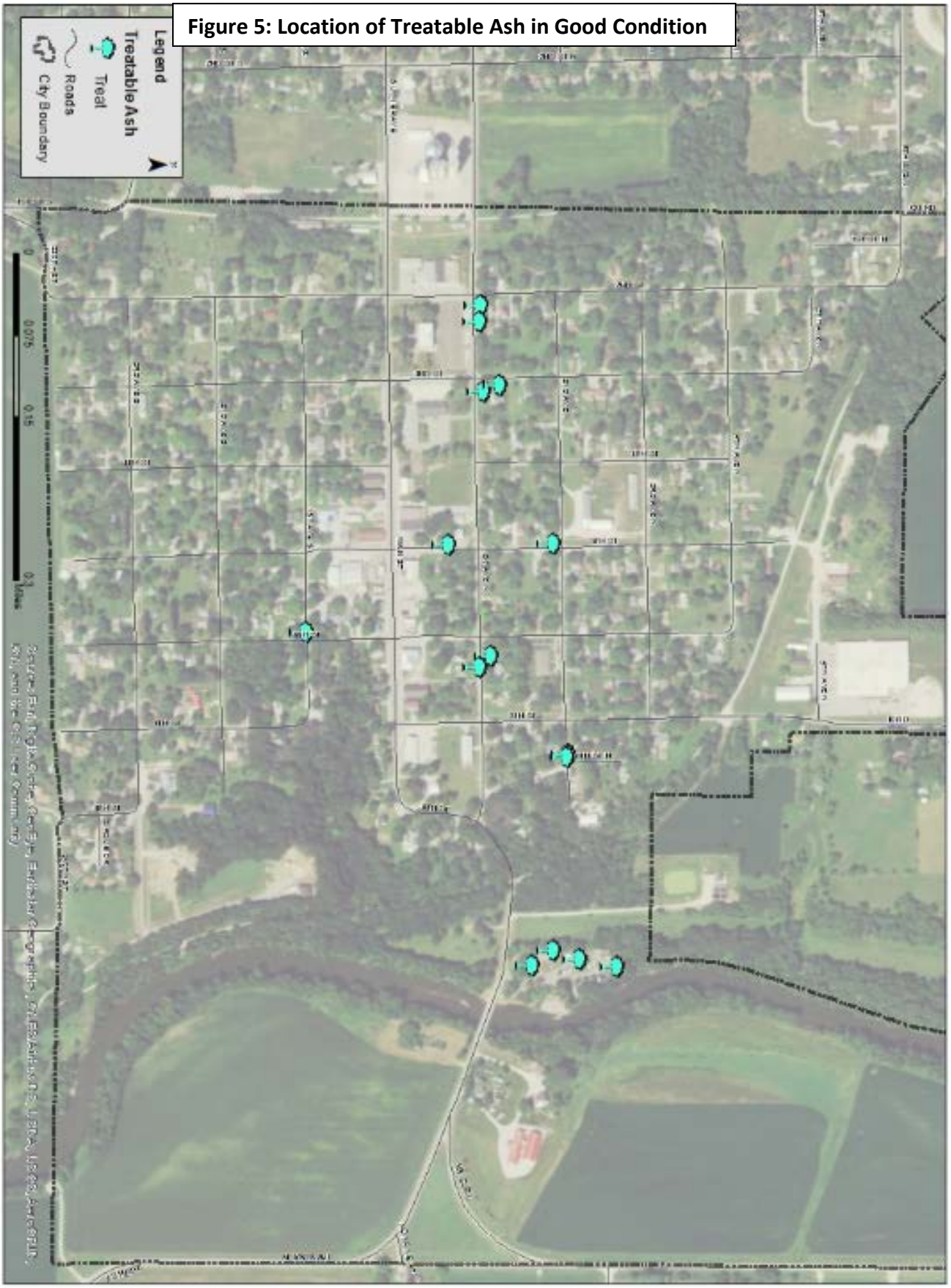


Figure 6: Location of Trees with Recommended Maintenance

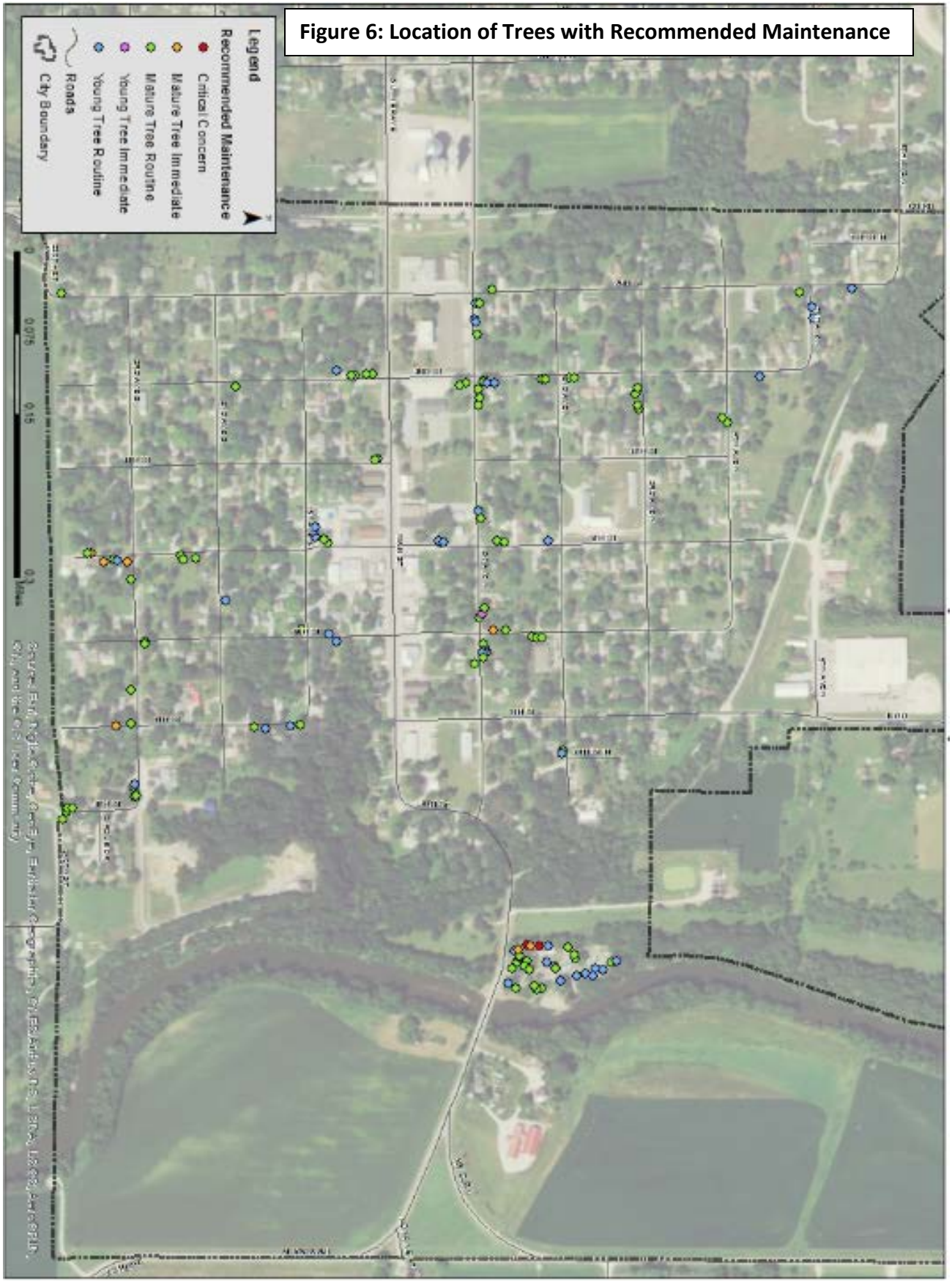
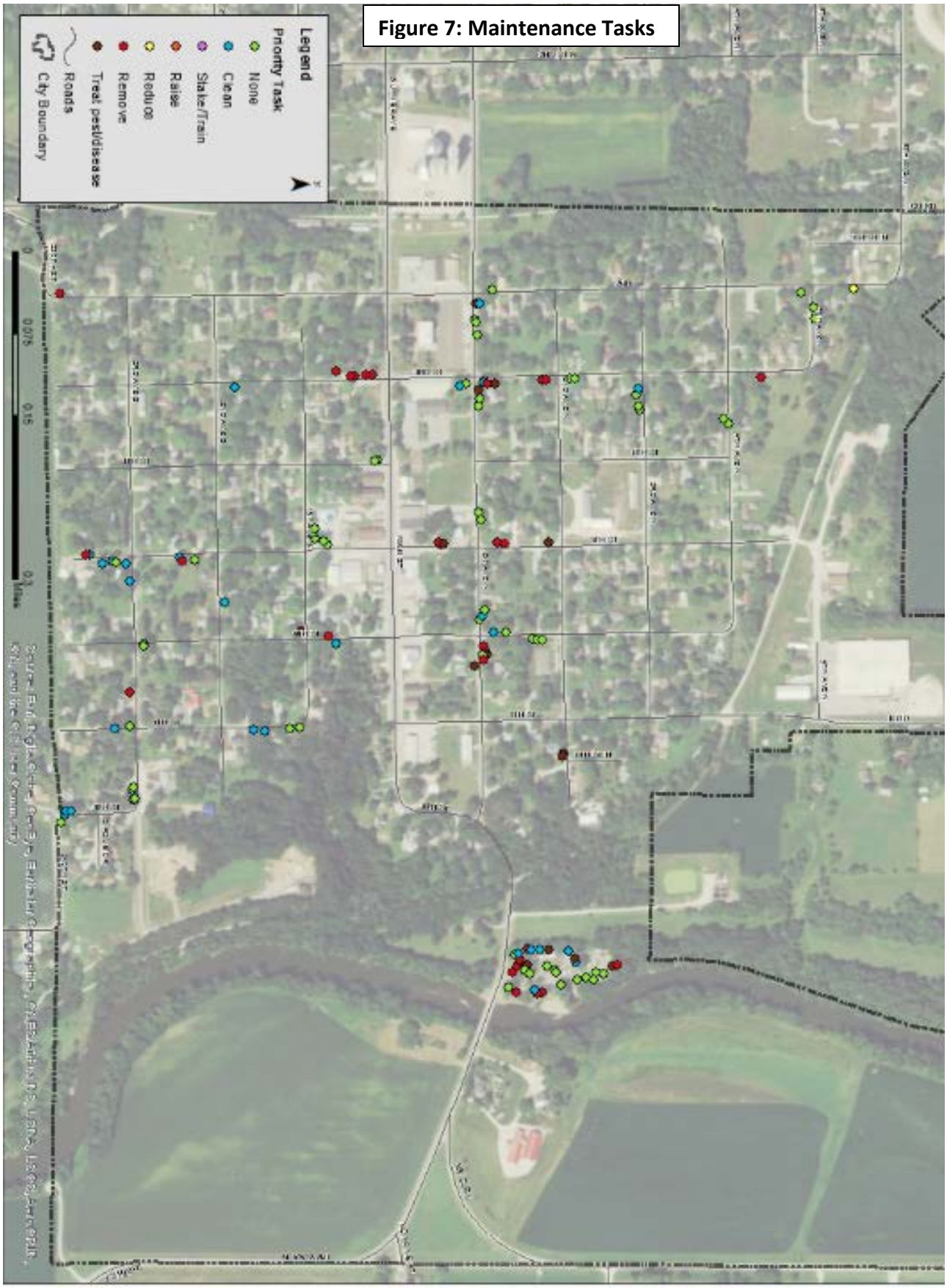


Figure 7: Maintenance Tasks



Appendix C: Dakota City Tree Ordinances

11. Permit Fee. A permit fee of ten dollars ($10.00) shall be payable at the time of filing the application with the City. A separate permit shall be required for each excavation.

12. Permit Issued. Upon approval of the application, filing of bond and insurance certificate, and payment of any required fees, a permit shall be issued.

135.10 MAINTENANCE OF PARKING OR TERRACE. It shall be the responsibility of the abutting property owner to maintain all property outside the lot and property lines and inside the curb lines upon the public streets, except that the abutting property owner shall not be required to remove diseased trees or dead wood on the publicly owned property or right-of-way. Maintenance includes timely mowing, trimming trees and shrubs and picking up litter.

(Code of Iowa, Sec. 364.12[2c])

135.11 FAILURE TO MAINTAIN PARKING OR TERRACE. If the abutting property owner does not perform an action required under the above section within a reasonable time, the City may perform the required action and assess the cost against the abutting property for collection in the same manner as a property tax.

(Code of Iowa, Sec. 364.12[2e])

135.12 DUMPING OF SNOW. It is unlawful for any person to throw, push, or place or cause to be thrown, pushed or placed, any ice or snow from private property, sidewalks, or driveways onto the traveled way of a street or alley so as to obstruct gutters, or impede the passage of vehicles upon the street or alley or to create a hazardous condition therein; except where, in the cleaning of large commercial drives in the business district it is absolutely necessary to move the snow onto the street or alley temporarily, such accumulation shall be removed promptly by the property owner or agent. Arrangements for the prompt removal of such accumulations shall be made prior to moving the snow.

(Code of Iowa, Sec. 364.12 [2])

135.13 DRIVEWAY CULVERTS. The property owner shall, at the owner's expense, install any culvert deemed necessary under any driveway or any other access to the owner's property, and before installing a culvert, permission must first be obtained from the City. In the event repairs are needed at any time with respect to culverts, it shall be the responsibility of the property owner to make such repairs, and, in the event the owner fails to do so, the City shall have the right to make the repairs. If the property owner fails to reimburse the City for the cost of said repairs, the cost shall be certified to the County Treasurer and specially assessed against the property as by law provided.

CHAPTER 151

TREES

151.01 Definition
151.02 Planting Restrictions
151.03 Duty to Trim Trees
151.04 Trimming Trees to be Supervised
151.05 Disease Control
151.06 Inspection and Removal

151.01 DEFINITION. For use in this chapter, "parking" means that part of the street, avenue or highway in the City not covered by sidewalk and lying between the lot line and the curb line; or, on unpaved streets, that part of the street, avenue or highway lying between the lot line and that portion of the street usually traveled by vehicular traffic.

151.02 PLANTING RESTRICTIONS. No tree shall be planted in any parking or street except in accordance with the following:

1. Alignment. All trees planted in any street shall be planted in the parking midway between the outer line of the sidewalk and the curb. In the event a curb line is not established, trees shall be planted on a line ten (10) feet from the property line.

2. Spacing. Trees shall not be planted on any parking which is less than nine (9) feet in width, or contains less than eighty-one (81) square feet of exposed soil surface per tree. Trees shall not be planted closer than twenty (20) feet from street intersections (property lines extended) and ten (10) feet from driveways. If it is at all possible trees should be planted inside the property lines and not between the sidewalk and the curb.

3. Prohibited Trees. No person shall plant in any street any fruit-bearing tree or any tree of the kinds commonly known as cottonwood, poplar, box elder, Chinese elm, evergreen, willow or black walnut.

151.03 DUTY TO TRIM TREES. The owner or agent of the abutting property shall keep the trees on, or overhanging the street, trimmed so that all branches will be at least fifteen (15) feet above the surface of the street and eight (8) feet above the sidewalks. If the abutting property owner fails to trim the trees, the City may serve notice on the abutting property owner requiring that such action be taken within five (5) days. If such action is not taken within that time, the City may perform the required action and assess the costs against the abutting property for collection in the same manner as a property tax.

(Code of Iowa, Sec. 364.12[2c, d & e])

151.04 TRIMMING TREES TO BE SUPERVISED. Except as allowed in Section 151.03, it is unlawful for any person to trim or cut any tree in a street or public place unless the work is done under the supervision of the City.

151.05 DISEASE CONTROL. Any dead, diseased or damaged tree or shrub which may harbor serious insect or disease pests or disease injurious to other trees is hereby declared to be a nuisance.

151.06 INSPECTION AND REMOVAL. The Council shall inspect or cause to be inspected any trees or shrubs in the City reported or suspected to be dead, diseased or damaged, and such trees and shrubs shall be subject to the following:

1. City Property. If it is determined that any such condition exists on any public property, including the strip between the curb and the lot line of private property, the Council may cause such condition to be corrected by treatment or removal. The Council may also order the removal of any trees on the streets of the City which interfere with the making of improvements or with travel thereon.

2. Private Property. If it is determined with reasonable certainty that any such condition exists on private property and that danger to other trees or to adjoining property or passing motorists or pedestrians is imminent, the Council shall notify by certified mail the owner, occupant or person in charge of such property to correct such condition by treatment or removal within fourteen (14) days of said notification. If such owner, occupant or person in charge of said property fails to comply within fourteen (14) days of receipt of notice, the Council may cause the condition to be corrected and the cost assessed against the property.

(Code of Iowa, Sec. 364.12[3b & h])

[The next page is 645]

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If you need accommodations because of disability to access the services of this Agency, please contact the Director at 515-725-8200.