



City of Des Moines Urban Tree Planting 2022 Initial Project Design Document

Table of Contents

INSTRUCTIONS.....	2
PROTOCOL REQUIREMENTS	2
PROJECT OVERVIEW	8
LOCATION (Section 1.3).....	8
OWNERSHIP OR ELIGIBILITY TO RECEIVE POTENTIAL CREDITS (Section 1.7).....	9
PROJECT DURATION (Section 1.3, 2.2)	9
ATTESTATION OF PLANTING AND PLANTING AFFIRMATION (Section 3)	9
ADDITIONALITY (Section 4).....	9
PLANTING DESIGN AND CARBON QUANTIFICATION DOCUMENTATION (1.2, 10, Appendix A).....	10
CO-BENEFITS QUANTIFICATION DOCUMENTATION (Section 12 and Appendix A)	11
ATTESTATION OF NO DOUBLE COUNTING OF CREDITS AND NO NET HARM (Section 5).....	11
SOCIAL IMPACTS (Section 11).....	11
MONITORING AND REPORTING (Section 7)	12
PROJECT OPERATOR SIGNATURE.....	13
PERFORMANCE STANDARD BASELINE METHODOLOGY (Section 4)	15
QUANTIFYING CARBON DIOXIDE STORAGE AND CO-BENEFITS FOR URBAN TREE PLANTING PROJECTS (Appendix A) .	19

INSTRUCTIONS

Project Operators must complete and submit this Initial Credit Project Design Document (PDD) to request credits after the last tree in a project has been planted. City Forest Credits then reviews this PDD as part of the validation process along with all other required project documents. An approved third-party verifier then conducts verification. An amendment to the Project Design Document will need to be submitted for future verification at years 4, 6, 14, and 26.

The Protocol Requirements below are a list of eligibility requirements for informational purposes which are also found in the CFC Tree Planting Protocol Version 10, dated February 7, 2022.

Project Operators will enter data and supporting attachments starting on page 8 under Project Overview where you find “[Enter text here]” as thoroughly as possible and provide numbered attachments for maps and other documentation (ex: 1 – Regional Map).

PROTOCOL REQUIREMENTS

Project Operator (Section 1.1)

Identify a Project Operator for the project. A Project requires one Project Operator, which can be an entity organized and licensed under the laws of its jurisdiction or a governmental body. This is the entity who takes legal responsibility for the project and its reporting.

Commit to 26-year Project Duration in the Project Implementation Agreement (Section 1.3, 2.2)

Sign the Project Implementation Agreement. This is the 26-year agreement between the Project Operator and City Forest Credits (the “Registry”) for an urban forest carbon project.

Project Location (Section 1.3)

Project must be located in or along the boundary of one of the following:

- A. “Urban Area” per Census Bureau maps; see <https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-urban-areas.html>
- B. The boundary of any incorporated city or town created under the law of its state;
- C. The boundary of any unincorporated city, town, or unincorporated urban area created or designated under the law of its state;
- D. The boundary of any regional metropolitan planning agency or council established by legislative action or public charter;
- E. The boundary of land owned, designated, and used by a municipal or quasi-municipal entity for source water or watershed protection;
- F. A transportation, power transmission, or utility right of way, provided the right of way begins, ends, or passes through some portion of above criteria.

Ownership or Eligibility to Receive Potential Credits (Section 1.7)

The Project Operator must demonstrate ownership of property and eligibility to receive potential credits by meeting at least one of the following:

- A. Own the land, the trees, and potential credits upon which the Project trees are located; or

- B. Own an easement or equivalent property interest for a public right of way within which Project trees are located, own the Project trees and credits within that easement, and accept ownership of those Project trees by assuming responsibility for maintenance and liability for them; or
- C. Have a written and signed agreement from the landowner granting ownership to the Project Operator of any credits for carbon storage or other benefits delivered by Project trees on that landowner's land. If Project trees are on private property, this agreement must be recorded in the property records of the county in which the land containing Project trees is located.

Defining the Project Area (Section 1.5)

Project Operators may include more than one planting site in a project. The initial planting of trees for all properties in a project must occur within a 36-month period or less. Project Operators may include multiple properties under one project.

Additionality (Section 4)

Project Operators must demonstrate compliance with the following additionality requirements:

- A Legal Requirements Test that declares city trees planted due to an enacted law or ordinance not eligible (Section 1.8);
- Either 1) a project-specific baseline or 2) the current version of the Registry's performance standard baseline developed in adherence with the WRI GHG Protocol (CFC Standard);
- Sign and comply with a Project Implementation Agreement with the Registry that requires a 26-year Project Duration.

Project Operators must also sign an Attestation of Additionality stating that its 26-year Project Duration commitment is additional to and longer than any commitment it makes to non-carbon project tree plantings.

Planting Designs and Quantification for Credits (Section 1.2, 10, Appendix A)

All Projects must use one of three different methods for quantifying CO₂. The quantification method used depends on the planting design. The Registry has developed spreadsheets and methods for Project Operators. The quantification methods include:

- Single Tree Quantification Method: trees planted in a dispersed or scattered design that are planted at least 10 feet apart (i.e. street trees). This method requires tracking of individual trees and tree survival for sampling and quantification.
- Clustered Quantification Method: trees planted at least 10 feet apart but are relatively contiguous and designed to create canopy over an area (i.e. park-like settings). This method requires tracking change in canopy, not individual tree survival.
- Area Reforestation Quantification Method: tree planting areas greater than 5 acres and where many trees are planted closer than 10 feet. Higher tree mortality is expected and the goals are to create canopy and a forest ecosystem. Project Operators have several quantification models to choose from, all of which produce a carbon index on a per-acre basis.

Attestation of No Net Harm and No Double Counting (Section 5)

Project Operators must sign an attestation that no project shall cause net harm and no project shall seek credits on trees, properties, or projects that have already received credits.

Social Impacts (Section 11)

Project Operators will describe how the Project impacts contribute towards achievement of the global UN Sustainable Development Goals (SDGs). The Registry will supply a template to evaluate how the Project aligns with the SDGs.

Validation and Verification by Third-Party Verifiers (Sections 12 & 13)

Project compliance and quantification must be verified by a third-party verifier known as a Validation and Verification Body approved by the Registry. Protocol Appendix B provides more detail.

Issuance of Ex Ante Carbon Forward Removal Credits to Project Operator (Section 6)

The forecasted amount of CO₂ stored during the project duration is the value from which the Registry issues ex ante Carbon Forward Removal Credits™. To ensure performance of the credits, the Registry issues credits at five times during the 26-year Project Duration:

- 10% of projected credits after planting
- 30% of projected credits at Year 4
- 30% of projected credits at Year 6
- 10% of projected credits at Year 14
- Remaining credits issued based on quantification of CO₂e at Year 26

Credits for Reversal Pool Account (Section 6.3)

The Registry will issue 95% of Project credits earned and requested and will hold 5% in the Registry's Reversal Pool Account.

Understand Reversals (Section 8)

If the Project Area loses credited carbon stock, the Project Operator must return or compensate for those credits if the tree loss is due to intentional acts or gross negligence of Project Operator. If tree loss is due to fire, pests, or other acts of god (i.e., not due to the Project Operator's intentional acts or gross negligence), the Registry covers the reversed credits from its Reversal Pool Account of credits held back from all projects.

Commit to Monitoring and Reporting (Section 7)

Project Operators must submit an annual monitoring report to the Registry every year for the Project Duration. The reports must be in writing, and the Project Operator must attest to the accuracy of the reports.

Tree Sampling, Measurement, and Imaging Requirements (Appendix A)

To ensure performance of the credits, Project Operators must commit to the following at Years 4, 6, 14, and 26 based on the appropriate quantification method.

- 1) Single Tree
 - a. Initial Credit: Use the carbon quantification tool which contains a worksheet called "Data Collection" for use in tracking each tree. In that file or another tree inventory system, document the GPS coordinates for each tree planted.

- b. Years 4 and 6: Project Operators must generate a random sample of project tree sites using the Single Tree Quantification Tool. Project Operators must visit those sampled tree sites and collect data on whether the sample contains a live tree, standing dead tree, or no tree. Provide geocoded photos or imaging of a minimum sample of 20% of the trees. The tracking file includes a column where each tree is assigned a unique serial number to help with tracking each coordinate and tree picture or image.
 - i. Based on this data, the number and species of project trees is adjusted and a new CO2 projected amount by Year 26 is generated.
- c. Year 14: Project Operators must follow the same process as stated above for Years 4 and 6, except they must also measure DBH on the sample of trees. The DBH will be used to ensure growth curve consistent with the projected CO2 storage at Year 26.
 - i. If the actual growth curves of project trees are less than was projected, the number of credits issued at Year 14 will be adjusted downward.
- d. Year 26: Project Operators must generate a random sample of project trees and measure DBH on the sample of trees. The DBH will be used to calculate CO2 storage at that time. Project Operators must also submit geocoded photos of the sampled trees.
 - i. Credits may be issued based on the actual CO2 storage at Year 26, minus credits already issued.

2) Clustered

- a. Initial Credit: Use the carbon quantification tool and input data. In addition, Project Operators must provide maps of the site, with boundaries, as well as a map showing the site within a larger context of land area, such as within a neighborhood, city, or region. Project Operators must document the planting through photos or imaging. Select points and take geo-coded photos that when taken together capture the newly planted trees in the project area. If site is rectilinear, take a photo at each of the corners. If the site is large, take photos at points along the perimeter looking into the project area. If necessary to capture the trees, take photos facing each of the cardinal directions while standing in the middle of the project area. If site is nonrectilinear, identify critical points along property boundaries and take photographs at each point facing in towards the middle of the site. Next, take photographs from the middle of the project area facing out at each cardinal direction.
- b. Year 4: Project Operators provide images of the Project Area from any telemetry, imaging, remote sensing, i-Tree Canopy, or UAV service, such as Google Earth and estimate the area in tree canopy cover (acres). Imaging from Google Earth with leaf-on may be used. Project Operators will calculate the percent of canopy cover from the Google Earth imaging. Projects can use i-Tree Canopy and point sampling to calculate canopy cover. Using i-Tree Canopy, continue adding points until the standard error of the estimate for both the tree and non-tree cover is less than 5%. i-Tree Canopy will supply you with the standard errors. If tree canopy cover is determined using another approach, such as image classification, a short description of the approach should be provided, as well as the QA/QC measures that were used. A tree cover classification accuracy assessment should be conducted, as with randomly placed points, and the percentage tree cover classification accuracy reported.

- i. If the canopy coverage equals or exceeds 2.8% (400 trees per acre with an average canopy area of 3.14 square feet per tree (2-foot diameter of canopy) is 2.8% of an acre), then the credits projected in the Clustered Quantification Tool may be issued. If canopy coverage is below 2.8%, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 2.8%.
 - c. Year 6: Project Operators must follow the same process as stated above for Year 4.
 - i. If the canopy coverage equals or exceeds 11.5% (400 trees per acre with an average canopy area of 12.56 square feet per tree (4-foot diameter of canopy) is 11.5% of an acre), then the credits projected in the Clustered Parks Quantification Tool may be issued. If canopy coverage is below 11.5%, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 11.5%.
 - d. Year 14: Project Operators must follow the same process as stated above for Years 4 and 6.
 - i. If the canopy coverage equals or exceeds 46% (400 trees per acre with an average canopy area of 50 square feet per tree (8-foot diameter of canopy) is 46% of an acre), then the credits projected in the Clustered Quantification Tool may be issued. If canopy coverage is below 46%, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 46%.
 - e. Year 26: Project Operators must follow the same process as stated above for Years 4, 6, and 14.
 - i. If the canopy coverage equals 100% of the Project Area at project outset, the credits projected in the Clustered Quantification Tool may be issued. If canopy coverage is below 100% of the Project Area, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 100%.

3) Area Reforestation

- a. Initial Credit: Project Operators must use local data or the GTR tables to demonstrate projected carbon storage by Year 26. In addition, Project Operators must provide maps of the site, with boundaries, as well as a map showing the site within a larger context of land area, such as within a neighborhood, city, or region. Project Operators must document the planting through photos or imaging. Select points and take geo-coded photos that when taken together capture the newly planted trees in the project area. If site is rectilinear, take a photo at each of the corners. If the site is large, take photos at points along the perimeter looking into the project area. If necessary to capture the trees, take photos facing each of the cardinal directions while standing in the middle of the project area. If site is nonrectilinear, identify critical points along property boundaries and take photographs at each point facing in towards the middle of the site. Next, take photographs from the middle of the project area facing out at each cardinal direction.
- b. Year 4: Project Operators must either conduct a physical tree count using plots or use imaging to determine canopy coverage at Year 4.

- i. If the canopy coverage equals or exceeds 2.8% (400 trees per acre with an average canopy area of 3.14 square feet per tree (2-foot diameter of canopy) is 2.8% of an acre), then the credits projected in the Quantification Tool may be issued. If canopy coverage is below 2.8%.
- c. Year 6: Project Operators must either conduct a physical tree count using plots or use imaging to determine canopy coverage at Year 6.
 - i. If the canopy coverage equals or exceeds 11.5% (400 trees per acre with an average canopy area of 12.56 square feet per tree (4-foot diameter of canopy) is 11.5% of an acre), then the credits projected in the Quantification Tool may be issued. If canopy coverage is below 11.5%, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 11.5%.
- d. Year 14: Project Operators must either conduct a physical tree count using plots or use imaging to determine canopy coverage at Year 6.
 - i. If the canopy coverage equals or exceeds 46% (400 trees per acre with an average canopy area of 50 square feet per tree (8-foot diameter of canopy) is 46% of an acre), then the credits projected in the Quantification Tool may be issued. If canopy coverage is below 46%, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 46%.
- e. Year 26: Project Operators must either conduct a physical tree count using plots or use imaging to determine canopy coverage at Year 26.
 - i. If the canopy coverage equals 100% of the Project Area at project outset, the credits projected in the Clustered Parks Quantification Tool may be issued. If canopy coverage is below 100% of the Project Area, then the number of credits issued is reduced by the same percentage as the canopy coverage falls below 100%.

PROJECT OVERVIEW

Project Name: City of Des Moines Urban Tree Planting 2022

Project Number: 037

Project Type: Planting Project (under the Tree Planting Protocol – version 10, dated February 7, 2022)

Project Start Date: 11/3/22

Project Location: Des Moines, IA

Project Operator Name: Trees Forever

Project Operator Contact Information:

Megan Schneider, Director of Programs Des Moines, mschneider@treesforever.org, 515-776-0335

Kiley Miller, CEO, kmiller@treesforever.org, 319-537-1550

Project Description

Describe overall project goals as summarized in application (2 paragraphs max)

This project includes 1,727 trees that were planted throughout the City of Des Moines from April 9, 2022 to November 3, 2022. Tree planting locations are a mix of street tree plantings on city-owned rights-of-way and city-owned parks, but with the major focus on street tree plantings. The main species planted include oak (red, bur, swamp white), London planetree, American elm, northern hackberry, Kentucky coffeetree, honeylocust, crabapple, redbud, and Japanese tree lilac.

Trees Forever plants trees on behalf of the City of Des Moines and works closely with the City on all aspects of the planting including identifying sites to plant, communication with area citizens, and general promotion of the work. The main project goals are to increase tree equity across the city by targeting trees to under-resourced neighborhoods, work with Trees Forever's Growing Futures teen employees and area volunteers to plant trees, and to complete major street corridor plantings.

Throughout 2022, Trees Forever will plant and care for trees through the Growing Futures program, a youth-centered worker program, to address critical social, economic, and environmental needs in Des Moines. Growing Futures uses a thoughtfully designed and hands-on approach to give Iowa's young people needed workplace skills and open doors for them to green careers all while planting trees.

LOCATION (Section 1.3)

Project Location

Describe where the Project is located and how it meets the location criteria.

Des Moines, IA is considered an urban area as identified by the Census Bureau Map. The urban cluster code for Des Moines is 23743.

Project Maps

Provide 1) a detailed map of the Project Area and 2) a regional-scale map that shows the Project Area within the context of relevant urban/town boundaries. Include numbered title/filename of attachments (Ex: 1 - Project Area Map)

Filenames:

- 1 Des Moines 2022 Project Area Map
- 2 Des Moines 2022 Regional Area Map
- 3 Des Moines 2022 Shapefiles

OWNERSHIP OR ELIGIBILITY TO RECEIVE POTENTIAL CREDITS (Section 1.7)

Project Operator must demonstrate ownership of potential credits or eligibility to receive potential credits. If the Project Operator is not the same as the landowner of the Project Area, provide agreement(s) between Project Operator and landowner authorizing Project Operator to execute this project. Include relevant documentation including numbered title/filename as an attachment.

Name of landowner of Project Area and explanation:

All tree plantings occurred on City of Des Moines owned property – along city streets and within city parks. A signed Agreement from Owner to Transfer Credits is on file at City Forest Credits.

Filename: 4 Des Moines 2022 Agreement to Transfer Credits

PROJECT DURATION (Section 1.3, 2.2)

Project Operator commits to the 26-year project duration requirement through a signed Project Implementation Agreement with City Forest Credits.

Project Operator has committed to the 26-year project duration and signed a Project Implementation Agreement with City Forest Credits.

ATTESTATION OF PLANTING AND PLANTING AFFIRMATION (Section 3)

Complete and attach the following attestations: 1) Attestation of Planting, with supporting documentary evidence of planting such as invoices and event photos, 2) Attestation of Planting Affirmation, signed by a participating organization attesting to the tree planting. Provide any additional notes as relevant.

Project Operator has signed the Attestation of Planting and provided supporting documentary evidence of planting. A participating organization in the tree planting has signed the Planting Affirmation.

Filenames:

- 5 Des Moines 2022 Attestation of Planting
- 6 Des Moines 2022 Attestation of Planting Affirmation

ADDITIONALITY (Section 4)

Complete and attach the Attestation of Additionality.

Additionality is demonstrated by Project Operators per the Protocol in the following ways and in the Attestation of Additionality.

- Project trees are not required by law or ordinance to be planted (Protocol Section 1.8). See Attestation of Planting.
- The Project did not plant trees on sites that were forested and then cleared of trees within the prior ten years (Protocol Section 1.9)
- Project trees are additional based on a project specific baseline or the Performance Standard Baseline attached to this PDD.
- Project Operator has signed a Project Implementation Agreement with City Forest Credits for 26 years.
- The 26-year Project Duration commitment is additional to and longer than any commitment our organization makes to non-carbon project tree plantings.
- Project Operator has signed the Attestation of Additionality.

Filename: 7 Des Moines 202 Planting Attestation of Additionality, 12 Performance Standard Baseline Methodology

PLANTING DESIGN AND CARBON QUANTIFICATION DOCUMENTATION (1.2, 10, Appendix A)

Describe the planting design and appropriate quantification method for the project – Single Tree, Clustered, or Area Reforestation. Include the project’s climate zone and data collection. Outline the estimated total number of credits to be issued to the project over 26 years as well as the amount to be issued upon successful validation and verification in Year 1. Attach the quantification tool and provide the data you have collected for Project Trees.

Total number of trees planted	1727
Project area (acres), if applicable	N/A
Total number of trees per acre, if applicable	N/A
Credits attributed to the project (tCO ₂ e)	4,958
Credits after mortality deduction (default is 20%)	3,966
Contribution to Registry Reversal Pool Account (5%) (tCO ₂ e)	198
Total credits to be issued to the Project Operator (tCO₂e)	3768
Total credits requested to be issued in Year 1 (10% of above)	376

GHG Assertion:

Project Operator asserts that the Project results in GHG emissions mitigation of 3,768 tons CO₂e over the 26-year Project Duration. Project Operator will sample trees, quantify tons CO₂e, and submit documentation for verification and credit issuance at Year 4, 6, 14, and 26 per the Tree Protocol and Single Tree Quantification Methodology for the Midwest climate zone.

Project Operator asserts that the Project results in the GHG emissions mitigation of 376 tons CO₂e after initial tree planting.

Inventory has been extracted from the City of Des Moines TreeKeeper tool.

Filename: 8 Des Moines 2022 Midwest Single Tree Initial Credit Tool

CO-BENEFITS QUANTIFICATION DOCUMENTATION (Section 12 and Appendix A)

Summarize co-benefit quantification and provide supporting documentation. CFC will provide a Co-Benefits Quantification spreadsheet to Project Operators for calculating rainfall interception, reduction of certain air compounds, and energy savings.

Ecosystem Services	Resource Units Totals	Total \$
Rainfall Interception (m3/yr)	9,378.28	\$67,139.69
Air Quality (t/yr)		
O3	0.1238	\$413.66
NOx	0.0200	\$66.84
PM10	0.0648	\$184.05
Net VOCs	0.0820	\$677.70
Air Quality Total	0.2906	\$1,342.24
Energy (kWh/yr & kBtu/yr)		
Cooling - Electricity	284,758.16	\$21,613.14
Heating - Natural Gas	4,134,587.89	\$40,249.11
Energy Total (\$/yr)		\$61,862.25
Grand Total (\$/yr)		\$130,344.18

The co-benefits quantification was calculated using the Midwest Single Tree Initial Credit Tool supplied by City Forest Credits. See attached. The project will provide \$130,371.24 in ecosystem services every year after the trees reach 25 years old.

Filename: 8 Des Moines 2022 Midwest Single Tree Initial Credit Tool

ATTESTATION OF NO DOUBLE COUNTING OF CREDITS AND NO NET HARM (Section 5)

Complete and attach the following attestation: Attestation of No Double Counting of Credits and Attestation of No Net Harm. Provide any additional notes as relevant.

Project Operator has signed the Attestation of No Double Counting of Credits and No Net Harm.

Filename: 10 Des Moines 2022 Planting Attestation of No Double Counting and No Net Harm

SOCIAL IMPACTS (Section 11)

Project Operators shall use the Carbon Project Social Impact template to evaluate the UN Sustainable Development Goals (SDGs) to determine how a Project provides social impacts that contribute towards achievement of the global goals. CFC will provide the template. Summarize the three to five main SDGs from this Project.

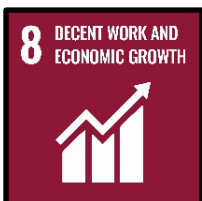


Trees Forever plants trees in low canopy areas and open spaces, with a focus on broad leaf species, which have better capacity to sequester air pollutants. Planting trees in open spaces provides shade and protection from UV exposure as well as helping to reduce urban heat effects. Biodiversity is taken into consideration when selecting species that are best suited for the Des Moines urban environment. Trees are planted around schools and along busy streets to help slow traffic, as buffers along the regional trail system, and near streets to help with stormwater runoff. As part of the planting planning process, Trees Forever identifies areas with high tree inequity, particularly in formerly redlined neighborhoods, and focuses on incorporating these areas into the overall annual plan.

Trees Forever encourages nature experiences through educational tree tags that link individual trees with a City of Des Moines hosted database in order to learn more about benefits of trees and individual species. TreeKeepers, volunteers trained in tree planting and care, are engaged through plantings and community engagement events focused on continuing education



Trees Forever intends to reduce inequalities through engaging in community partnerships, planting trees in low-income areas (particularly previously redlined areas of the city), and organizing plantings around schools, affordable housing development, and in areas with low tree canopy. Staff engage residents and community leaders with project design when possible, including the implementation of tree corridors for walking between facilities like the grocery store, gym, library, and hospital. A three-session TreeKeeper course for community volunteers is offered twice a year. Participants learn to plant, prune, and care for trees in the community, and are relied upon as skilled volunteers for subsequent plantings and community engagement events.



A series of community meeting held in conjunction with the Riverbend Neighborhood in Des Moines. Residents were engaged in the creation of a neighborhood planting map, and a plan for tree care that included volunteer watering by community members. Trees Forever prioritizes hiring students from local high schools for the Growing Futures employment program and works with local contractors for additional watering needs.

Filename: 11 Des Moines 2022 CFC Carbon Project Social Impacts

MONITORING AND REPORTING (Section 7)

Throughout the Project Duration, the Project Operator must report on tree conditions across the Project Area. Project Operator is required to submit an annual monitoring report on the anniversary of the date of the first Verification Report. For example, if the verification report is dated January 31, 2022, the first monitoring report will be due by January 31, 2023 and each January 31st thereafter for the duration of the project.

At Years 4, 6, 14, and 26, sampling, measurement of trees or canopy coverage, and/or quantification of CO₂e will be submitted for request of credit issuance in lieu of a monitoring report that year.

Monitoring Reports

Project Operators must submit reports in writing and must attest to the accuracy of the reports. The reports must contain any changes in eligibility status of the Project Operator and any significant tree loss. The following questions are contained in CFC's annual monitoring report template:

1. Has the contact information for the Project Operator changed? If so, provide new information.
2. Have there been changes in land ownership of the Project Area?
3. Have there been any changes in the Project Design?
4. Have there been any changes in the implementation or management of the Project?
5. Have there been any significant changes to the site (such as flooding or human changes)?
6. Have there been any significant tree or canopy losses estimated to be greater than 8% of Project Trees or 8% of canopy?
7. Any other significant elements to report?

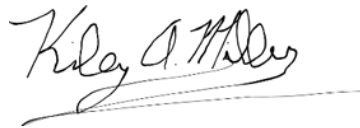
Monitoring Plans

Confirm and describe your plans for annual monitoring of this project and specifics on how sampling, measurement, and imaging (see Protocol Requirements and Appendix A) will be conducted based on your project's quantification method.

All trees planted enter into a two-year watering cycle that helps ensure establishment of the young trees and long-term survival. Watering is completed throughout the summer months by Growing Futures teen employees. Trees Forever will submit monitoring reports containing the required information using the template provided by City Forest Credits. Monitoring will take place through imaging and can be easily tracked utilizing the unique tree ID number that the tree inventory system – TreeKeeper – produces. The unique ID number will correspond with the geo-coded image.

PROJECT OPERATOR SIGNATURE

Signed on November 22nd in 2022, by Kiley Miller, CEO, for Trees Forever.



Signature

Kiley Miller

Printed Name

319-537-1550

Phone

kmiller@treesforever.org

Email

ATTACHMENTS

- 1 – Des Moines 2022 Project Area Map
- 2 – Des Moines 2022 Regional Area Map
- 3 – Des Moines 2022 shapefile
- 4 – Des Moines 2022 Agreement to Transfer Credits
- 5 – Des Moines 2022 Attestation of Planting
- 6 – Des Moines 2022 Attestation of Planting Affirmation
- 7 – Des Moines 2022 Attestation of Additionality
- 8 – Des Moines 2022 Midwest Single Tree Initial Credits Tool
- 9 – Des Moines 2022 Tree Planting Data
- 10 – Des Moines 2022 Attestation of No Double Counting and No Net Harm
- 11 – Des Moines 2022 Social Impacts
- 12 – Performance Standard Baseline Methodology
- 13 – Quantifying Carbon Dioxide Storage and Co-Benefits for Urban Tree Planting Projects

Attachment 12

PERFORMANCE STANDARD BASELINE METHODOLOGY (Section 4)

There is a second additionality methodology set out in the WRI GHG Protocol guidelines – the Performance Standard methodology. This Performance Standard essentially allows the project developer, or in our case, the developers of the protocol, to create a performance standard baseline using the data from similar activities over geographic and temporal ranges.

The common perception, particularly in the United States, is that projects must meet a project specific test. Project-specific additionality is easy to grasp conceptually. The 2014 Climate Action Reserve urban forest protocol essentially uses project-specific requirements and methods.

However, the WRI GHG Protocol clearly states that either a project-specific test or a performance standard baseline is acceptable.¹ One key reason for this is that regional or national data can give a more accurate picture of existing activity than a narrow focus on one project or organization.

Narrowing the lens of additionality to one project or one tree-planting entity can give excellent data on that project or entity, which data can also be compared to other projects or entities (common practice). But plucking one project or entity out of its regional or national context ignores all comparable regional or national data. And that regional or national data may give a more accurate standard than data from one project or entity.

By analogy: one pixel on a screen may be dark. If all you look at is the dark pixel, you see darkness. But the rest of screen may consist of white pixels and be white. Similarly, one active tree-planting organization does not mean its trees are additional on a regional basis. If the region is losing trees, the baseline of activity may be negative regardless of what one active project or entity is doing. Here is the methodology described in the WRI GHG Protocol to determine a Performance Standard baseline, together with the application of each factor to urban forestry:

Table 2.1 Performance Standard Factors

WRI Performance Standard Factor	As Applied to Urban Forestry
Describe the project activity	Increase in urban trees
Identify the types of candidates	Cities and towns, quasi-governmental entities like utilities, watersheds, and educational institutions, and private property owners
Set the geographic scope (a national scope is explicitly approved as the starting point)	Could use national data for urban forestry, or regional data
Set the temporal scope (start with 5-7 years and justify longer or shorter)	Use 4-7 years for urban forestry
Identify a list of multiple baseline candidates	Many urban areas, which could be blended mathematically to produce a performance standard baseline

¹ WRI GHG Protocol, Chapter 2.14 at 16 and Chapter 3.2 at 19.

The Performance Standard methodology approves of the use of data from many different baseline candidates. In the case of urban forestry, those baseline candidates are other urban areas.²

As stated above, the project activity defined is obtaining an increase in urban trees. The best data to show the increase in urban trees via urban forest project activities is national or regional data on tree canopy in urban areas. National or regional data will give a more comprehensive picture of the relevant activity (increase in urban trees) than data from one city, in the same way that a satellite photo of a city shows a more accurate picture of tree canopy in a city than an aerial photo of one neighborhood. Tree canopy data measures the tree cover in urban areas, so it includes multiple baseline candidates such as city governments and private property owners. Tree canopy data, over time, would show the increase or decrease in tree cover.

Data on Tree Canopy Change over Time in Urban Areas

The CFC quantitative team determined that there were data on urban tree canopy cover with a temporal range of four to six years available from four geographic regions. The data are set forth below:

Table 2.2 Changes in Urban Tree Canopy (UTC) by Region (from Nowak and Greenfield, 2012, see footnote 7)

City	Abs Change UTC (%)	Relative Change UTC (%)	Ann. Rate (ha UTC/yr)	Ann. Rate (m ² UTC/cap/yr)	Data Years
EAST					
Baltimore, MD	-1.9	-6.3	-100	-1.5	(2001–2005)
Boston, MA	-0.9	-3.2	-20	-0.3	(2003–2008)
New York, NY	-1.2	-5.5	-180	-0.2	(2004–2009)
Pittsburgh, PA	-0.3	-0.8	-10	-0.3	(2004–2008)
Syracuse, NY	1.0	4.0	10	0.7	(2003–2009)
Mean changes	-0.7	-2.4	-60.0	-0.3	
Std Error	0.5	1.9	35.4	0.3	
SOUTH					
Atlanta, GA	-1.8	-3.4	-150	-3.1	(2005–2009)
Houston, TX	-3.0	-9.8	890	-4.3	(2004–2009)
Miami, FL	-1.7	-7.1	-30	-0.8	(2003–2009)
Nashville, TN	-1.2	-2.4	-300	-5.3	(2003–2008)
New Orleans, LA	-9.6	-29.2	1120	-24.6	(2005–2009)
Mean changes	-3.5	-10.4	-160.0	-7.6	
Std Error	1.6	4.9	60.5	4.3	
MIDWEST					
Chicago, IL	-0.5	-2.7	-70	-0.2	(2005–2009)
Detroit, MI	-0.7	-3.0	-60	-0.7	(2005–2009)
Kansas City, MO	-1.2	-4.2	-160	-3.5	(2003–2009)

² See Nowak, et al. "Tree and Impervious Cover Change in U.S. Cities," Urban Forestry and Urban Greening, 11 (2012), 21-30

City	Abs Change UTC (%)	Relative Change UTC (%)	Ann. Rate (ha UTC/yr)	Ann. Rate (m2 UTC/cap/yr)	Data Years
Minneapolis, MN	-1.1	-3.1	-30	-0.8	(2003–2008)
Mean changes	-0.9	-3.3	-80.0	-1.3	
Std Error	0.2	0.3	28.0	0.7	
WEST					
Albuquerque, NM	-2.7	-6.6	-420	-8.3	(2006–2009)
Denver, CO	-0.3	-3.1	-30	-0.5	(2005–2009)
Los Angeles, CA	-0.9	-4.2	-270	-0.7	(2005–2009)
Portland, OR	-0.6	-1.9	-50	-0.9	(2005–2009)
Spokane, WA	-0.6	-2.5	-20	-1.0	(2002–2007)
Tacoma, WA	-1.4	-5.8	-50	-2.6	(2001–2005)
Mean changes	-1.1	-4.0	-140.0	-2.3	
Std Error	0.4	0.8	67.8	1.2	

These data have been updated by Nowak and Greenfield.³ The 2012 data show that urban tree canopy is experiencing negative growth in all four regions. The 2018 data document continued loss of urban tree cover.

Table 3 of the 2018 article shows data for all states, with a national loss of urban and community tree cover of 175,000 acres per year during the study years of 2009-2014.

To put this loss in perspective, the total land area of urban and community tree cover loss during the study years totals 1,367 square miles – equal to the combined land area of New York City, Atlanta, Philadelphia, Miami, Boston, Cleveland, Pittsburgh, St. Louis, Portland, OR, San Francisco, Seattle, and Boise.

Even though there may be individual tree planting activities that increase the number of urban trees within small geographic locations, the performance of activities to increase tree cover shows a negative baseline. The Drafting Group did not use negative baselines for the Tree Planting Protocol, but determined to use baselines of zero.

Deployment of the Performance Standard baseline methodology for a City Forest Planting Protocol is supported by conclusions that make sense and are anchored in the real world:

- With the data showing that tree loss exceeds gains from planting, new plantings are justified as additional to that decreasing canopy baseline. In fact, the negative baseline would justify as additional any trees that are protected from removal.
- Because almost no urban trees are planted now with carbon as a decisive factor, urban tree planting done to sequester carbon is additional;
- Almost no urban trees are currently planted with a contractual commitment for monitoring. Maintenance of trees is universally an intention, one that is frequently reached when budgets are cut, as in the Covid-19 era. The 25-year commitment required by this Protocol is entirely additional to any practice in place in the U.S. and will result in substantial additional trees surviving to maturity;

³ Nowak et al. 2018. “Declining Urban and Community Tree Cover in the United States,” *Urban Forestry and Urban Greening*, 32, 32-55

- Because the urban forest is a public resource, and because public funding falls far short of maintaining tree cover and stocking, carbon revenues will result in additional trees planted or in maintenance that will result in additional trees surviving to maturity;
- Because virtually all new large-scale urban tree planting is conducted by governmental entities or non-profits, or by private property developers complying with governmental regulations (which would not be eligible for carbon credits under our protocol), and because any carbon revenues will defray only a portion of the costs of tree planting, there is little danger of unjust enrichment to developers of city forest carbon projects.

Last, The WRI GHG Protocol recognizes explicitly that the principles underlying carbon protocols need to be adapted to different types of projects. The WRI Protocol further approves of balancing the stringency of requirements with the need to encourage participation in desirable carbon projects:

Setting the stringency of additionality rules involves a balancing act. Additionality criteria that are too lenient and grant recognition for “non-additional” GHG reductions will undermine the GHG program’s effectiveness. On the other hand, making the criteria for additionality too stringent could unnecessarily limit the number of recognized GHG reductions, in some cases excluding project activities that are truly additional and highly desirable. In practice, no approach to additionality can completely avoid these kinds of errors. Generally, reducing one type of error will result in an increase of the other. Ultimately, there is no technically correct level of stringency for additionality rules. GHG programs may decide based on their policy objectives that it is better to avoid one type of error than the other.⁴

The policy considerations weigh heavily in favor of “highly desirable” planting projects to reverse tree loss for the public resource of city forests.

⁴ WRI GHG Protocol, Chapter 3.1 at 19.

Attachment 13

QUANTIFYING CARBON DIOXIDE STORAGE AND CO-BENEFITS FOR URBAN TREE PLANTING PROJECTS (Appendix A)

Introduction

Ecoservices provided by trees to human beneficiaries are classified according to their spatial scale as global and local (Costanza 2008) (citations for Part Two are listed in References). Removal of carbon dioxide (CO₂) from the atmosphere by urban forests is global because the atmosphere is so well-mixed it does not matter where the trees are located. The effects of urban forests on building energy use is a local-scale service because it depends on the proximity of trees to buildings.

To quantify these and other ecoservices City Forest Credits (CFC) has relied on peer-reviewed research that has combined measurements and modeling of urban tree biomass, and effects of trees on building energy use, rainfall interception, and air quality. CFC has used the most current science available on urban tree growth in its estimates of CO₂ storage (McPherson et al., 2016a). CFC's quantification tools provide estimates of co-benefits after 25 years in Resource Units (i.e., kWh of electricity saved) and dollars per year. Values for co-benefits are first-order approximations extracted from the i-Tree Streets (i-Tree Eco) datasets for each of the 16 U.S. reference cities/climate zones (<https://www.itreetools.org/tools/i-tree-eco>) (Maco and McPherson, 2003). Modeling approaches and error estimates associated with quantification of CO₂ storage and co-benefits have been documented in numerous publications (see References below) and are summarized here.

Carbon Dioxide Storage

Project Operators must use one of three different methods for quantifying carbon dioxide (CO₂) storage in urban forest carbon projects. Selection of the quantification method depends on the planting project design:

- Single Tree Method - trees planted in a dispersed or scattered design and that are planted at least 10 feet apart (i.e. street trees). This method requires tracking of individual trees and tree survival for sampling and quantification.
- Clustered Method - to trees planted at least 10 feet apart but are relatively contiguous and designed to create canopy over an area (i.e park-like settings). This method requires tracking change in canopy, not individual tree survival
- Area Reforestation Method – tree planting areas greater than 5 acres and where many trees are planted closer than 10 feet. Higher tree mortality is expected and the goals are to create canopy and a forest ecosystem. Project Operators have several quantification models to choose from, all of which produce a carbon index on a per-acre basis.

In all cases, the estimated amount of CO₂ stored 26-years after planting is calculated. The forecasted amount of CO₂ stored during this time is the value from which the Registry issues ex ante Carbon Forward Removal Credits.TM

To ensure performance of the credits, the Registry issues Carbon Forward Removal Credits at five times during the 26-year Project Duration:

- 10% after planting
- 30% in Year 4, after sampling and mortality check or imaging and calculating canopy

- 30% in Year 6, after sampling and mortality check or imaging and calculating canopy
- 10% in Year 14, after measuring sampled trees or imaging and calculating canopy and
- “True-up” credits at the end of the initial Project Duration in Year 26, when CO₂e is quantified from tree measurement and final credits are issued for CO₂e stored minus credits already issued.

The mortality checks at Years 4 and 6 correspond to national mortality data that shows increased survival rates after three years and six years.

The Registry will issue 95% of Project Credits earned and will hold 5% of total credits in the Registry’s Reversal Pool Account. This 5% Reversal Pool Account deduction is applied in all three quantification methods before calculation of any crediting, with these funds going into a program-wide pool to insure against unavoidable reversals due to catastrophic loss of trees.

All ex ante Carbon Forward Removal Credits convert to ex post City Forest Carbon+ Credits at Year 26 and are marked in the registry of credits.

Scientific Basis for Carbon Dioxide Quantification

Estimates of stored (amount accumulated over many years) and sequestered CO₂ (i.e., net amount stored by tree growth over one year) are based on the U.S. Forest Service’s recently published technical manual and the extensive Urban Tree Database (UTD), which catalogs urban trees with their projected growth tailored to specific geographic regions (McPherson et al. 2016a, b). The products are a culmination of 14 years of work, analyzing more than 14,000 trees across the United States. Whereas prior growth models typically featured only a few species specific to a given city or region, the newly released database features 171 distinct species across 16 U.S. climate zones. The trees studied also spanned a range of ages with data collected from a consistent set of measurements. Advances in statistical modeling have given the projected growth dimensions a level of accuracy never before seen. Moving beyond just calculating a tree’s diameter or age to determine expected growth, the research incorporates 365 sets of tree growth equations to project growth.

Users select their climate zone from the 16 U.S. climate zones (Fig. 1). Calculations of CO₂ stored are for a representative species for each tree-type that was one of the predominant street tree species per reference city (Peper et al., 2001). The “Reference city” refers to the city selected for intensive study within each climate zone (McPherson, 2010). About 20 of the most abundant species were selected for sampling in each reference city. The sample was stratified into nine diameter at breast height (DBH) classes (0 to 7.6, 7.6 to 15.2, 15.2 to 30.5, 30.5 to 45.7, 45.7 to 61.0, 61.0 to 76.2, 76.2 to 91.4, 91.4 to 106.7, and >106.7 cm). Typically 10 to 15 trees per DBH class were randomly chosen. Data were collected for 16 to 74 trees in total from each species. Measurements included: species name, age, DBH [to the nearest 0.1 cm (0.39 in)], tree height [to the nearest 0.5 m (1.64 ft.)], crown height [to the nearest 0.5 m (1.64 ft.)], and crown diameter in two directions [parallel and perpendicular to nearest street to the nearest 0.5 m (1.64 ft.)]. Tree age was determined from local residents, the city’s urban forester, street and home construction dates, historical planting records, and aerial and historical photos.

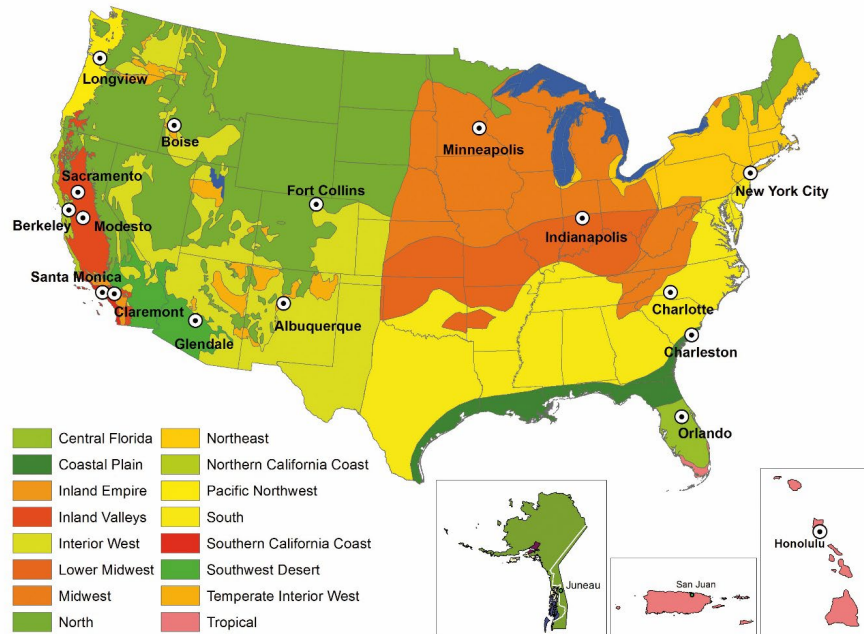


Figure 1. Climate zones of the United States and Puerto Rico were aggregated from 45 Sunset climate zones into 16 zones. Each zone has a reference city where tree data were collected. Sacramento, California was added as a second reference city (with Modesto) to the Inland Valleys zone. Zones for Alaska, Puerto Rico and Hawaii are shown in the insets (map courtesy of Pacific Southwest Research Station).

Species Assignment by Tree-Type

Representative species for each tree-type in the South climate zone (reference city is Charlotte, NC) are shown in Table 1. They were chosen because extensive measurements were taken on them to generate growth equations, and their mature size and form was deemed typical of other trees in that tree-type. Representative species were not available for some tree-types because none were measured. In that case, a species of similar mature size and form from the same climate zone was selected, or one from another climate zone was selected. For example, no Broadleaf Evergreen Large (BEL) species was measured in the South reference city. Because of its large mature size, *Quercus nigra* was selected to represent the BEL tree-type, although it is deciduous for a short time. *Pinus contorta*, which was measured in the PNW climate zone, was selected for the CES tree-type, because no CES species was measured in the South.

Table 1. Nine tree-types and abbreviations. Representative species assigned to each tree-type in the South climate zone are listed. The biomass equations (species, urban general broadleaf [UGB], urban general conifer [UGC]) and dry weight density (kg/m³) used to calculate biomass are listed for each tree-type.

Tree-Type	Tree-Type Abbreviation	Species Assigned	DW Density	Biomass Equations
Brdlf Decid Large (>50 ft)	BDL	<i>Quercus phellos</i>	600	<i>Quercus macrocarpa</i> ¹ .
Brdlf Decid Med (30-50 ft)	BDM	<i>Pyrus calleryana</i>	600	UGB ² .
Brdlf Decid Small (<30 ft)	BDS	<i>Cornus florida</i>	545	UGB ² .
Brdlf Evgrn Large (>50 ft)	BEL	<i>Quercus nigra</i>	797	UGB ² .

Brdlf Evgrn Med (30-50 ft)	BEM	<i>Magnolia grandiflora</i>	523	UGB ² .
Brdlf Evgrn Small (<30 ft)	BES	<i>Ilex opaca</i>	580	UGB ² .
Conif Evgrn Large (>50 ft)	CEL	<i>Pinus taeda</i>	389	UGC ² .
Conif Evgrn Med (30-50 ft)	CEM	<i>Juniperus virginiana</i>	393	UGC ² .
Conif Evgrn Small (<30 ft)	CES	<i>Pinus contorta</i>	397	UGC ² .
¹ from Lefsky, M., & McHale, M., 2008.				
² from Aguaron, E., & McPherson, E. G., 2012				

Calculating Biomass and Carbon Dioxide Stored

To estimate CO₂ stored, the biomass for each tree-type was calculated using urban-based allometric equations because open-growing city trees partition carbon differently than forest trees (McPherson et al., 2017a). Input variables included climate zone, species, and DBH. To project tree size at 25-years after planting, we used DBH obtained from UTD growth curves for each representative species.

Biomass equations were compiled for 26 open-grown urban trees species from literature sources (Aguaron and McPherson, 2012). General equations (Urban Gen Broadleaf and Urban Gen Conifer) were developed from the 26 urban-based equations that were species specific (McPherson et al., 2016a). These equations were used if the species of interest could not be matched taxonomically or through wood form to one of the urban species with a biomass equation. Hence, urban general equations were an alternative to applying species-specific equations because many species did not have an equation.

These allometric equations yielded aboveground wood volume. Species-specific dry weight (DW) density factors (Table 1) were used to convert green volume into dry weight (7a). The urban general equations required looking up a dry weight density factor (in Jenkins et al. 2004 first, but if not available then the Global Wood Density Database). The amount of belowground biomass in roots of urban trees is not well researched. This work assumed that root biomass was 28% of total tree biomass (Cairns et al., 1997; Husch et al., 2003; Wenger, 1984). Wood volume (dry weight) was converted to C by multiplying by the constant 0.50 (Leith, 1975), and C was converted to CO₂ by multiplying by 3.667.

Error Estimates and Limitations

The lack of biometric data from the field remains a serious limitation to our ability to calibrate biomass equations and assign error estimates for urban trees. Differences between modeled and actual tree growth adds uncertainty to CO₂ sequestration estimates. Species assignment errors result from matching species planted with the tree-type used for biomass and growth calculations. The magnitude of this error depends on the goodness of fit in terms of matching size and growth rate. In previous urban studies the prediction bias for estimates of CO₂ storage ranged from -9% to +15%, with inaccuracies as much as 51% RMSE (Timilsina et al., 2014). Hence, a conservative estimate of error of ± 20% can be applied to estimates of total CO₂ stored as an indicator of precision.

Co-Benefit: Energy Savings

Trees and forests can offer energy savings in two important ways. In warmer climates or hotter months, trees can reduce air conditioning bills by keeping buildings cooler through reducing regional air temperatures and offering shade. In colder climates or cooler months, trees can confer savings on the fuel needed to heat buildings by reducing the amount of cold winds that can strip away heat.

Energy conservation by trees is important because building energy use is a major contributor to greenhouse gas emissions. Oil or gas furnaces and most forms of electricity generation produce CO₂ and other pollutants as by-products. Reducing the amount of energy consumed by buildings in urban areas is one of the most effective methods of combatting climate change. Energy consumption is also a costly burden on many low-income families, especially during mid-summer or mid-winter. Furthermore, electricity consumption during mid-summer can sometimes over-extend local power grids leading to rolling brownouts and other problems.

Energy savings are calculated through numerical models and simulations built from observational data on proximity of trees to buildings, tree shapes, tree sizes, building age classes, and meteorological data from McPherson et al. (2017) and McPherson and Simpson (2003). The main parameters affecting the overall amount of energy savings are crown shape, building proximity, azimuth, local climate, and season. Shading effects are based on the distribution of street trees with respect to buildings recorded from aerial photographs for each reference city ([McPherson and Simpson, 2003](#)). If a sampled tree was located within 18 m of a conditioned building, information on its distance and compass bearing relative to a building, building age class (which influences energy use) and types of heating and cooling equipment were collected and used as inputs to calculate effects of shade on annual heating and cooling energy effects. Because these distributions were unique to each city, energy values are considered first-order approximations.

In addition to localized shade effects, which were assumed to accrue only to trees within 18 m of a building, lowered air temperatures and windspeeds from increased neighborhood tree cover (referred to as climate effects) can produce a net decrease in demand for winter heating and summer cooling (reduced wind speeds by themselves may increase or decrease cooling demand, depending on the circumstances). Climate effects on energy use, air temperature, and wind speed, as a function of neighborhood canopy cover, were estimated from published values for each reference city. The percentages of canopy cover increase were calculated for 20-year-old large, medium, and small trees, based on their crown projection areas and effective lot size (actual lot size plus a portion of adjacent street and other rights-of-way) of 10,000 ft² (929 m²), and one tree on average was assumed per lot. Climate effects were estimated by simulating effects of wind and air-temperature reductions on building energy use.

In the case of urban Tree Preservation Projects, trees may not be close enough to buildings to provide shading effects, but they may influence neighborhood climate. Because these effects are highly site-specific, we conservatively apply an 80% reduction to the energy effects of trees for Preservation Projects.

Energy savings are calculated as a real-dollar amount. This is calculated by applying overall reductions in oil and gas usage or electricity usage to the regional cost of oil and gas or electricity for residential customers. Colder regions tend to see larger savings in heating and warmer regions tend to see larger savings in cooling.

Error Estimates and Limitations

Formulaic errors occur in modeling of energy effects. For example, relations between different levels of tree canopy cover and summertime air temperatures are not well-researched. Another source of error stems from differences between the airport climate data (i.e., Los Angeles International Airport) used to model energy effects and the actual climate of the study area (i.e., Los Angeles urban area). Because of

the uncertainty associated with modeling effects of trees on building energy use, energy estimates may be accurate within ± 25 percent ([Hildebrandt & Sarkovich, 1998](#)).

Co-Benefit: Rainfall Interception

Forest canopies normally intercept 10-40% of rainfall before it hits the ground, thereby reducing stormwater runoff. The large amount of water that a tree crown can capture during a rainfall event makes tree planting a best management practice for urban stormwater control.

City Forest Credits uses a numerical interception model to calculate the amount of annual rainfall intercepted by trees, as well as throughfall and stem flow ([Xiao et al., 2000](#)). This model uses species-specific leaf surface areas and other parameters from the Urban Tree Database. For example, deciduous trees in climate zones with longer “in-leaf” seasons will tend to intercept more rainfall than similar species in colder areas shorter foliage periods. Model results were compared to observed patterns of rainfall interception and found to be accurate. This method quantifies only the amount of rainfall intercepted by the tree crown, and does not incorporate surface and subsurface effects on overland flow.

The rainfall interception benefit was priced by estimating costs of controlling stormwater runoff. Water quality and/or flood control costs were calculated per unit volume of runoff controlled and this price was multiplied by the amount of rainfall intercepted annually.

Error Estimates and Limitations

Estimates of rainfall interception are sensitive to uncertainties regarding rainfall patterns, tree leaf area and surface storage capacities. Rainfall amount, intensity and duration can vary considerably within a climate zone, a factor not considered by the model. Although tree leaf area estimates were derived from extensive measurements on over 14,000 street trees across the U.S. ([McPherson et al., 2016a](#)), actual leaf area may differ because of differences in tree health and management. Leaf surface storage capacity, the depth of water that foliage can capture, was recently found to vary threefold among 20 tree species ([Xiao & McPherson, 2016](#)). A shortcoming is that this model used the same value (1 mm) for all species. Given these limitations, interception estimates may have uncertainty as great as ± 20 percent.

Co-Benefit: Air Quality

The uptake of air pollutants by urban forests can lower concentrations and affect human health ([Derkzen et al., 2015](#); [Nowak et al., 2014](#)). However, pollutant concentrations can be increased if the tree canopy restricts polluted air from mixing with the surrounding atmosphere ([Vos et al., 2013](#)). Urban forests are capable of improving air quality by lowering pollutant concentrations enough to significantly affect human health. Generally, trees are able to reduce ozone, nitric oxides, and particulate matter. Some trees can reduce net volatile organic compounds (VOCs), but others can increase them through natural processes. Regardless of the net VOC production, urban forests usually confer a net positive benefit to air quality. Urban forests reduce pollutants through dry deposition on surfaces and uptake of pollutants into leaf stomata.

A numerical model calculated hourly pollutant dry deposition per tree at the regional scale using deposition velocities, hourly meteorological data and pollutant concentrations from local monitoring stations ([Scott et al., 1998](#)). The monetary value of tree effects on air quality reflects the value that society places on clean air, as indicated by willingness to pay for pollutant reductions. The monetary value of air quality effects were derived from models that calculated the marginal damage control costs

of different pollutants to meet air quality standards (Wang and Santini 1995). Higher costs were associated with higher pollutant concentrations and larger populations exposed to these contaminants.

Error Estimates and Limitations

Pollutant deposition estimates are sensitive to uncertainties associated with canopy resistance, resuspension rates and the spatial distribution of air pollutants and trees. For example, deposition to urban forests during warm periods may be underestimated if the stomata of well-watered trees remain open. In the model, hourly meteorological data from a single station for each climate zone may not be spatially representative of conditions in local atmospheric surface layers. Estimates of air pollutant uptake may be accurate within ± 25 percent.

Conclusions

Our estimates of carbon dioxide storage and co-benefits reflect an incomplete understanding of the processes by which ecoservices are generated and valued (Schulp et al., 2014). Our choice of co-benefits to quantify was limited to those for which numerical models were available. There are many important benefits produced by trees that are not quantified and monetized. These include effects of urban forests on local economies, wildlife, biodiversity and human health and well-being. For instance, effects of urban trees on increased property values have proven to be substantial (Anderson & Cordell, 1988). Previous analyses modeled these “other” benefits of trees by applying the contribution to residential sales prices of a large front yard tree (0.88%) (McPherson et al., 2005). We have not incorporated this benefit because property values are highly variable. It is likely that co-benefits reported here are conservative estimates of the actual ecoservices resulting from local tree planting projects.

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Attachments

[Agreement to Transfer Potential Credits](#)

[Project Area Map](#)

[Regional Area Map](#)

[Attestation of Planting](#)

[Attestation of Planting Affirmation](#)

[Attestation of No Double Counting and No Net Harm](#)

[Attestation of Additionality](#)

[Carbon Quantification Initial Credit Tool](#)

[Tree Planting Data](#)

[Social Impacts](#)

Agreement to Transfer Potential Credits



Roll Call Number

23-0169

Agenda Item Number

31

Date February 6, 2023

APPROVAL OF FIRST AMENDMENT TO AGREEMENT TO TRANSFER AND DEVELOP POTENTIAL CARBON AND ENVIRONMENTAL CREDITS WITH TREES FOREVER, INC.

WHEREAS, on November 23, 2021, the City Manager approved an Agreement to Transfer and Develop Potential Carbon and Environmental Credits ("Agreement") between the City of Des Moines and Trees Forever, Inc., an Iowa non-profit corporation ("Project Operator")...

WHEREAS, the Carbon+ Credit provider, City Forest Credits, is requiring an amendment to the Agreement in order to provide said Credits to the Project Operator for 2022 and for better compliance with its Carbon+ Credit program; and

WHEREAS, the City Forester and the Project Operator have negotiated a First Amendment to the Agreement, in form on file in the City Clerk's office, which First Amendment specifies the transfer of Carbon+ Credits from the Growing Futures project or any similar project involving trees approved by both City and Project Operator through 2030...

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Des Moines, Iowa:

- 1. That approval of the Agreement to Transfer and Develop Potential Carbon and Environmental Credits by the Mayor is hereby ratified, and the First Amendment to the Agreement is hereby approved.
2. That the Mayor is hereby authorized and directed to execute the First Amendment to the Agreement on behalf of the City, and the City Manager is authorized and directed to approve and execute any additional minor amendments to said Agreement and to submit any substantive amendments to said Agreement to City Council for consideration and approval.
3. That the City Forester is hereby authorized and directed to administer the Agreement, as amended, on behalf of the City.

(Council Communication No. 23-071)

Moved by Gatto to adopt.

APPROVED AS TO FORM:

Second by Boesen.

/s/ Glenna K. Frank
Glenna K. Frank, Assistant City Attorney

Table with 5 columns: COUNCIL ACTION, YEAS, NAYS, PASS, ABSENT. Rows include COWNIE, BOESEN, GATO, MANDELBAUM, SHEUMAKER, VOSS, WESTERGAARD, and TOTAL.

I, LAURA BAUMGARTNER, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

Handwritten signature of J. M. Gamba, Mayor

Handwritten signature of Laura Baumgartner, City Clerk

FIRST AMENDMENT TO AGREEMENT TO TRANSFER AND
DEVELOP POTENTIAL CARBON AND ENVIRONMENTAL CREDITS
BY AND BETWEEN
THE CITY OF DES MOINES, IOWA AND
TREES FOREVER, INC.

This FIRST AMENDMENT TO AGREEMENT TO TRANSFER AND DEVELOP POTENTIAL CARBON AND ENVIRONMENTAL CREDITS is made and entered into and is effective on this th 6th day of February 2023 by and between the City of Des Moines (“CITY”) and Trees Forever, Inc., an Iowa non-profit organization (“Project Operator”), to said Agreement, by and between the CITY and Project Operator dated November 23, 2021 (“the Agreement”).

WHEREAS, on November 23, 2021, the City Manager approved the Agreement pursuant to which the Project Operator develops potential carbon and environmental credits (“Carbon+ Credits”), with title and rights to all Carbon+ Credits granted by CITY to Project Operator for the duration of the Agreement; and

WHEREAS, the CITY and the CORPORATION have negotiated this First Amendment to the Agreement to explicitly list 2022 as a credit year and to extend the Agreement term to 2047, with retention of all other existing terms of the Agreement.

NOW, THEREFORE, for and in consideration of the mutual undertakings of the parties hereto, it is agreed as follows:

1. Section 2, “Rights Granted”, is hereby amended by deleting the first sentence thereof and replacing it with the following, with all other text of said Section remaining as originally stated:

City grants Project Operator the title and rights to any and all Carbon+ Credits developed from the Tree Project or any similar project involving trees approved by both City and Project Operator through 2030, and during the term of this agreement, including rights to register with CFC, and develop and sell the Carbon+ Credits, subject to the termination requirements in section 8 herein.

2. Section 9, “Term of Agreement and Option to Renew”, is hereby deleted in its entirety and replaced with the following text:

9. Term of Agreement and Option to Renew


This Agreement shall remain in force from the Effective Date of this Agreement until November 1, 2056. Project Operator may, at the City’s sole discretion, renew this Agreement for a renewal term of 25 years if it delivers written notice of renewal to City at least 90 days prior to expiration of this Agreement. Said notice shall be completed in accordance with paragraph 11 herein.

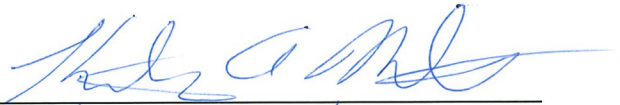
3. Except as modified above, all other terms of the Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties to this FIRST AMENDMENT have hereunto set their hands on this day and year as first above written.

City of Des Moines, Iowa

Trees Forever, Inc.


By: T. M. Franklin Cowrie
Its: Mayor


By: Kiley A. Miller
Its: Pres. & CFO

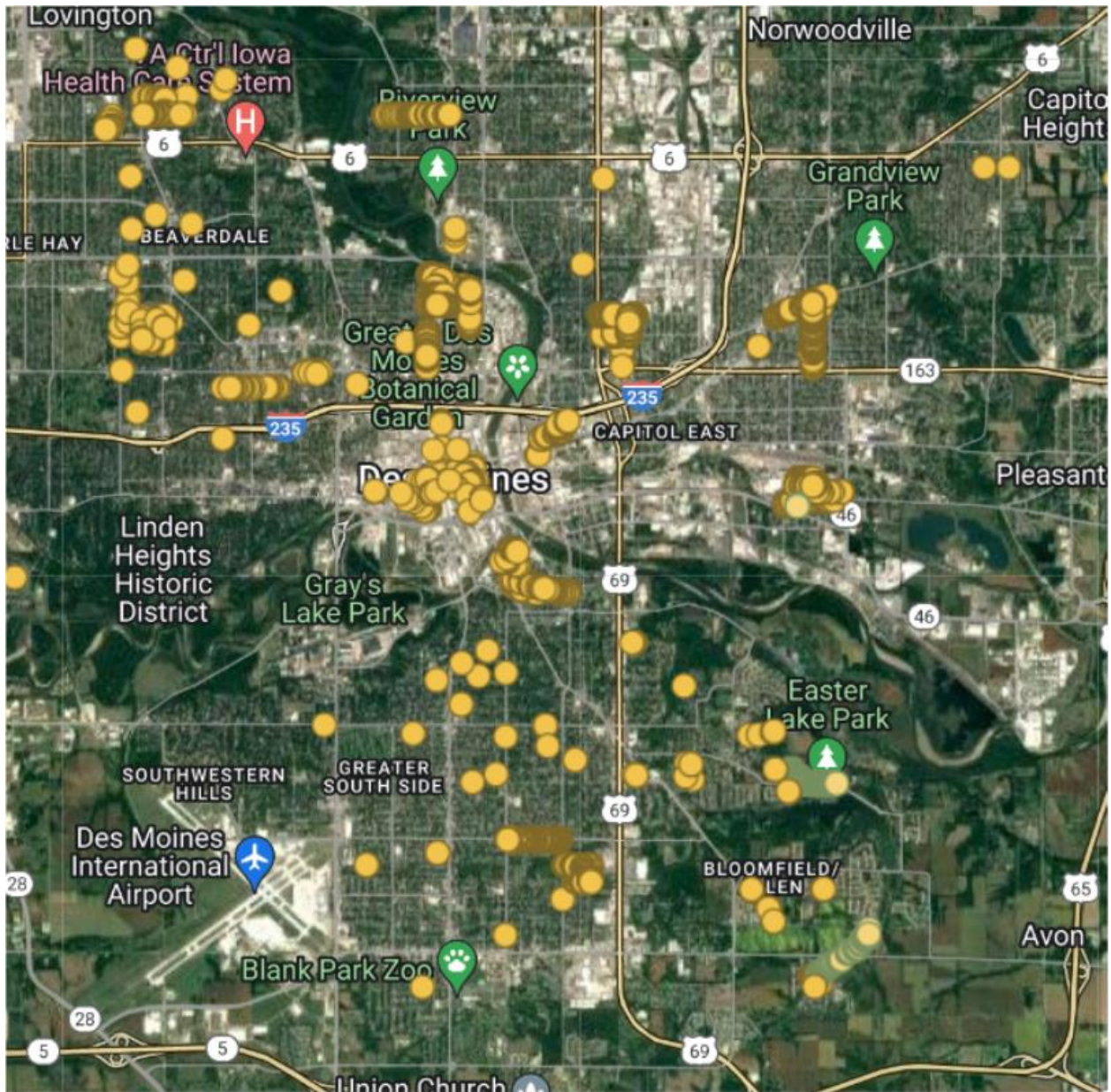
Approved As To Form:

/s/ Glenna K. Frank
Glenna K. Frank, Assistant City Attorney

Project Area Map

Des Moines 2022 Project Area Map

Project Name: City of Des Moines Urban Tree Planting 2022



LEGEND:


● Denotes individual tree planted in 2022

Regional Area Map

Des Moines 2022 Regional Area Map

Des Moines, Iowa



 Des Moines City Boundary

Attestation of Planting



City of Des Moines Urban Tree Planting 2022 Project Operator Attestation of Planting

I, the undersigned Project Operator for the Planting Project named City of Des Moines Urban Tree Planting 2022 located in Des Moines, IA and submitted to City Forest Credits by application dated August 22, 2022 attest to the following in order to confirm the planting of trees under this Project:

- Trees planted were not required by any law or ordinance to be planted;
- Trees were planted under this project on the following date (s): April 9, 2022 through November 3, 2022.
- The organizations or groups that participated in the planting event(s) are listed in the attached documents;
- Planting events are shown in photos attached, which can include photos of tree stock and planting activities;
- The number of trees planted by species are, to a reasonable certainty, 17 trees planted.

These planting numbers are confirmed by one or more of the following supporting and attached documents:

1. Invoices for trees planted, or
2. Invoices or a statement from the party who funded the tree purchase or supplied the trees attesting to the number of trees purchased, or
3. Any reporting to the owner or public body regarding the planting, invoices, costs, or other data re the planting, or
4. Any other reliable estimate of trees planted that is approved by the Registry

Signed on November 21st in 2022, by Kiley Miller, CEO, for Trees Forever.

Signature

Kiley Miller
Printed Name

319-537-1550
Phone

Kmiller@treesforever.org
Email

Exhibit A

Invoices:

Filename: Invoices for Trees Planted_Trees Forever 2022

Organizations/Groups that participated in the planting events:

6th Ave. Corridor
Accenture
American Equity
American Forests
Boy Scouts of Iowa
Coca-Cola
Des Moines Outdoor Leadership Club
Drake Environmental Action League
Employee and Family Resources
Girl Scouts of Greater Iowa
Hy-Vee
IMT Insurance
Kemin
Microsoft
Mid American Energy
Orange Theory Fitness
Plymouth Congregational Church
Principal Financial
Roosevelt High School Environmental Club
Rotary Club
Tree DM
University of Iowa Tippie College of Business
Wells Fargo
West Des Moines Rotary Club

Photos of planting events:



125 trees planted along Three Lakes Trail in collaboration with Des Moines Parks and Recreation



A wet, muddy Earth Day planting with 119 trees planted with the help of Hy-Vee, Tippie College of Business, Coca-Cola, and Employee and Family Resource volunteers.



Growing Futures crews take time to re-mulch, weed, and do general site maintenance.



The spring 2022 Growing Futures crew at Mulch Mountain.

Exhibit B – Invoices

The following documents represent the majority of invoices for trees planted as part of this project. All invoices are on file with Trees Forever.



INV_TREEFODSM01
3/13/2022

INVOICE

FROM:

Sandridge Nursery, LLC
c/o Eric Goodhue
7530 SE 52nd St.
Carlisle, IA 50047
(515) 724-9599

TO:

Trees Forever
c/o Kacie Ballard/Leslie Berckes
1515 Linden Street
Des Moines, IA 50309
(515) 661-8334

#	Item Description	Size	Qty	Unit Cost	Total
Deposit for 2022 Growing Season					
1	1,176 Trees Guarantees for delivery in 2022; 50% Deposit	1.5" BR	1176	\$95.00	\$55,860.00

Tax Rate (if applicable)	0%	\$0.00
--------------------------	----	--------

TOTAL	1176	\$55,860.00
--------------	-------------	--------------------

Terms: NET 10

THANK YOU FOR THE BUSINESS!



INV_TREFODSM02
4/10/2022

INVOICE

FROM:

Sandridge Nursery, LLC c/o Eric Goodhue 7530 SE 52nd St. Carlisle, IA 50047 (515) 724-9599
--

TO:

Trees Forever c/o Kacie Ballard/Leslie Berckes 1515 Linden Street Des Moines, IA 50309 (515) 661-8334

#	Item Description	Size	Qty	Unit Cost	Total
Delivered on Saturday, 4/9 on Cottage Grove Road					
1	Remaining Credit	--	--	--	(\$55,860.00)
2	Celtis occidentalis - Hackberry	1.5" BR	12	\$95.00	\$1,140.00
3	Quercus macrocarpa - Bur Oak	1.5" BR	10	\$95.00	\$950.00
4	Quercus rubra - Red Oak	1.5" BR	11	\$95.00	\$1,045.00

Tax Rate (if applicable)	0%	\$0.00
--------------------------	----	--------

TOTAL TREES DELIVERED ON THIS INVOICE	33
TOTAL TREES DELIVERED TO DATE	33
TOTAL	(\$52,725.00)

Terms: NET 10

THANK YOU FOR THE BUSINESS!



INV_TREFODSM03
4/17/2022

INVOICE

FROM:

Sandridge Nursery, LLC c/o Eric Goodhue 7530 SE 52nd St. Carlisle, IA 50047 (515) 724-9599
--

TO:

Trees Forever c/o Kacie Ballard/Leslie Berckes 1515 Linden Street Des Moines, IA 50309 (515) 661-8334

#	Item Description	Size	Qty	Unit Cost	Total
Delivered on Saturday, 4/16 on Hutton and Idaho St., and Cleveland Ave.					
1	Remaining Credit	--	--	--	(\$52,725.00)
2	Quercus macrocarpa - Bur Oak	1.5" BR	16	\$95.00	\$1,520.00
3	Quercus rubra - Red Oak	1.5" BR	21	\$95.00	\$1,995.00
4	Ulmus x 'Morton' - Accolade Elm	1.25" BR	13	\$80.00	\$1,040.00

Tax Rate (if applicable)	0%	\$0.00
--------------------------	----	--------

TOTAL TREES DELIVERED ON THIS INVOICE	50
TOTAL TREES DELIVERED TO DATE	83
TOTAL	(\$48,170.00)

Terms: NET 10

THANK YOU FOR THE BUSINESS!



1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE

INVOICE # SI-20887
INVOICE DATE 03/11/2022
SHIPMENT DATE 04/21/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
University Ave & 23rd St
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring 2022 trees	COD	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
1	#15	Carpinus caroliniana <i>American Hornbeam</i>	150.00	\$150.00
3	#15	Carpinus caroliniana 'JFS-KW6' (Native Flame American Hornbeam) <i>Native Flame American Hornbeam</i>	180.00	\$540.00
7	#15	Malus hybrida 'Pink Spires' <i>Flowering Crabapple</i>	138.00	\$966.00
3	#15	Platanus acerifolia 'Bloodgood' <i>London Planetree</i>	138.00	\$414.00

Thank you for your order!

TERMS: NOTICE - This is a Contract. By signing this invoice, you hereby agree to be bound by the terms of the Contract. On this date, the undersigned hereby purchases the listed goods for and on behalf of the Customer and agrees to pay the stated price, and affirms that the undersigned is authorized to do so on behalf of the Customer. All sales are final; returns shall not be accepted without prior authorization, which DMF Gardens may withhold for any reason. A 15% restocking fee shall apply to all returns which are accepted. All discrepancies, shortages, damage to goods, or other errors must be reported within 5 days of receipt of the goods or Customer shall be deemed to have waived all objections. All sales are FOB Des Moines, unless otherwise stated on this invoice. DMF Gardens does not warranty or guarantee any goods unless specifically expressed in writing. Customer agrees to pay a minimum FINANCE CHARGE of \$1.00 or 1.75% per month (21% APR), whichever is larger, and all collection costs, including reasonable attorney fees, on overdue accounts. Payments shall be first applied to outstanding finance charges, then to the oldest balance due on the account. Terms are net 30 days for customers with approved credit.

SUBTOTAL	\$2,070.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$60.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$2,130.00

PLEASE PAY FROM THIS INVOICE

(A statement will NOT be sent unless your account is past due)

Received in
good condition _____

Suppliers of quality aquatics, grasses, perennials, shrubs, trees, & conifers

**INVOICE**

1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE # SI-20916
INVOICE DATE 03/11/2022
SHIPMENT DATE 04/22/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
McKinley Ave & South Union St
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring 2022 trees	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
5	#15 single	Cercis canadensis <i>Eastern Redbud</i>	138.00	\$690.00
1	#15 single	Cercis canadensis 'Ace of Hearts' <i>Eastern Redbud</i>	138.00	\$138.00
1	#15 single	Cercis canadensis 'Forest Pansy' <i>Eastern Redbud</i>	144.00	\$144.00
1	#15	Crataegus crusgalli 'Crusader' (Cockspur Hawthorn) <i>Cockspur Hawthorn</i>	138.00	\$138.00
15	#15	Crataegus viridis 'Winter King' <i>Hawthorn</i>	138.00	\$2,070.00
5	#15 single	Eucommia ulmoides <i>Hardy Rubber Tree</i>	138.00	\$690.00
18	#15	Liquidamber styraciflua 'Happdell' (Happidaze Sweetgum) <i>Happidaze Sweetgum</i>	138.00	\$2,484.00
3	#15	Maackia amurensis 'JFS-Schichtel1' (Maacnificent Maackia) <i>Maacnificent Maackia</i>	150.00	\$450.00
22	#15	Malus hybrida 'Pink Spires' <i>Flowering Crabapple</i>	138.00	\$3,036.00
5	#15	Nyssa sylvatica 'Wildfire' <i>Black Gum</i>	138.00	\$690.00
22	#15	Platanus acerifolia 'Bloodgood' <i>London Planetree</i>	138.00	\$3,036.00
21	#15 single	Syringa reticulata 'Ivory Silk' <i>Japanese Tree Lilac</i>	138.00	\$2,898.00

Thank you for your order!



INVOICE

1720 East Washington Avenue
 Des Moines, IA 50316
 P: (515) 266-2488 F: (515) 262-8907
 sales@dmfgardens.com

INVOICE # SI-20916
 INVOICE DATE 03/11/2022
 SHIPMENT DATE 04/22/2022
 DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
 80 W 8th Ave
 Marion IA 52302

SHIP TO:

Trees Forever
 McKinley Ave & South Union St
 Des Moines IA

SALESPERSON	PO NUMBER	PAYMENT METHOD
Antony	Spring 2022 trees	N30

TERMS: NOTICE - This is a Contract. By signing this invoice, you hereby agree to be bound by the terms of the Contract. On this date, the undersigned hereby purchases the listed goods for and on behalf of the Customer and agrees to pay the stated price, and affirms that the undersigned is authorized to do so on behalf of the Customer. All sales are final; returns shall not be accepted without prior authorization, which DMF Gardens may withhold for any reason. A 15% restocking fee shall apply to all returns which are accepted. All discrepancies, shortages, damage to goods, or other errors must be reported within 5 days of receipt of the goods or Customer shall be deemed to have waived all objections. All sales are FOB Des Moines, unless otherwise stated on this Invoice. DMF Gardens does not warranty or guarantee any goods unless specifically expressed in writing. Customer agrees to pay a minimum FINANCE CHARGE of \$1.00 or 1.75% per month (21% APR), whichever is larger, and all collection costs, including reasonable attorney fees, on overdue accounts. Payments shall be first applied to outstanding finance charges, then to the oldest balance due on the account. Terms are net 30 days for customers with approved credit.

SUBTOTAL	\$16,464.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$240.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$16,704.00

PLEASE PAY FROM THIS INVOICE

(A statement will NOT be sent unless your account is past due)

Received in
 good condition

Suppliers of quality aquatics, grasses, perennials, shrubs, trees, & conifers



1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE

INVOICE # SI-20715
INVOICE DATE 03/11/2022
SHIPMENT DATE 04/27/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
Scott Ave & MLK Jr Pkwy
Des Moines IA 5156618334 - Kacie

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring 2022 trees	COD	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
15	#15	Diospyros virginiana <i>Persimmon</i>	138.00	\$2,070.00
10	#15 single	Eucommia ulmoides <i>Hardy Rubber Tree</i>	138.00	\$1,380.00
15	#15	Nyssa sylvatica 'Wildfire' <i>Black Gum</i>	138.00	\$2,070.00
5	#15	Parrotia persica 'Vanessa' <i>Persian Ironwood</i>	138.00	\$690.00
16	#15	Platanus occidentalis <i>American Sycamore</i>	138.00	\$2,208.00

Thank you for your order!

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SUBTOTAL	\$8,418.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$120.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$8,538.00

PLEASE PAY FROM THIS INVOICE

(A statement will NOT be sent unless your account is past due)

Received in
good condition

Suppliers of quality aquatics, grasses, perennials, shrubs, trees, & conifers

**INVOICE**

1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE # SI-21160
INVOICE DATE 03/11/2022
SHIPMENT DATE 05/17/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
Fleming Ave
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring 2022 trees	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
7	#15 single	Betula nigra <i>River Birch</i>	138.00	\$966.00
6	#15	Carya ovata <i>Shagbark Hickory</i>	138.00	\$828.00
5	#15	Quercus acutissima <i>Sawtooth Oak</i>	130.00	\$650.00

Thank you for your order!

TERMS: NOTICE - This is a Contract. By signing this invoice, you hereby agree to be bound by the terms of the Contract. On this date, the undersigned hereby purchases the listed goods for and on behalf of the Customer and agrees to pay the stated price, and affirms that the undersigned is authorized to do so on behalf of the Customer. All sales are final; returns shall not be accepted without prior authorization, which DMF Gardens may withhold for any reason. A 15% restocking fee shall apply to all returns which are accepted. All discrepancies, shortages, damage to goods, or other errors must be reported within 5 days of receipt of the goods or Customer shall be deemed to have waived all objections. All sales are FOB Des Moines, unless otherwise stated on this invoice. DMF Gardens does not warranty or guarantee any goods unless specifically expressed in writing. Customer agrees to pay a minimum FINANCE CHARGE of \$1.00 or 1.75% per month (21% APR), whichever is larger, and all collection costs, including reasonable attorney fees, on overdue accounts. Payments shall be first applied to outstanding finance charges, then to the oldest balance due on the account. Terms are net 30 days for customers with approved credit.

SUBTOTAL	\$2,444.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$60.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$2,504.00

PLEASE PAY FROM THIS INVOICE

(A statement will NOT be sent unless your account is past due)

Received in
good condition

Suppliers of quality aquatics, grasses, perennials, shrubs, trees, & conifers



INV_TREEFODSM05
6/5/2022

INVOICE

FROM:

Sandridge Nursery, LLC
c/o Eric Goodhue
7530 SE 52nd St.
Carlisle, IA 50047
(515) 724-9599

TO:

Trees Forever
c/o Kacie Ballard/Andrew Hirst
1515 Linden Street
Des Moines, IA 50309
(515) 661-8334

#	Item Description	Size	Qty	Unit Cost	Total
	Remaining Credit	--	--	--	(\$22,010.00)
Delivered on Saturday, 5/21 to the Franklin Neighborhood					
1	Carpinus caroliniana - American Hornbeam	1.5" BR	2	\$95.00	\$190.00
2	Celtis occidentalis - Hackberry	1.5" BR	5	\$95.00	\$475.00
3	Cercis canadensis - Eastern Redbud	1.5" BR	6	\$95.00	\$570.00
4	Crataegus virdis 'Winter King' - Winter King Hawthorn	1.5" BR	7	\$95.00	\$665.00
5	Quercus macrocarpa - Bur Oak	1.5" BR	18	\$95.00	\$1,710.00
6	Quercus rubra - Red Oak	1.5" BR	20	\$95.00	\$1,900.00
Delivered on Saturday, 6/4 to South Park area.					
7	Quercus macrocarpa - Bur Oak	1.5" BR	13	\$95.00	\$1,235.00
8	Quercus rubra - Red Oak	1.5" BR	29	\$95.00	\$2,755.00
9	Quercus shumardii - Shumard Oak	1.5" BR	3	\$95.00	\$285.00
MUST PLANTS at various addresses					
10	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.25" BR	1	\$80.00	\$80.00
11	Cercis canadensis - Eastern Redbud	1.5" BR	2	\$95.00	\$190.00
12	Quercus macrocarpa - Bur Oak	1.5" BR	6	\$95.00	\$570.00
13	Quercus rubra - Red Oak	1.5" BR	11	\$95.00	\$1,045.00
14	Planting - Single Tree @ Address	--	3	\$30.00	\$90.00
15	Planting - Multiple Trees @ Address	--	16	\$25.00	\$400.00
Tax Rate (if applicable)				0%	\$0.00
TOTAL TREES DELIVERED ON THIS INVOICE			121		
TOTAL TREES DELIVERED TO DATE			489		
TOTAL				(\$9,850.00)	

Terms: NET 10

THANK YOU FOR THE BUSINESS!



MAY 3 1 2022

INVOICE

1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE # SI-21868
INVOICE DATE 05/18/2022
SHIPMENT DATE 05/23/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
Madison Ave
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring trees	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
16	#15	Liriodendron tulipifera <i>Tulip Tree</i>	138.00	\$2,208.00
4	#15	Malus hybrida 'Dolgo' <i>Flowering/Fruiting Crabapple</i>	138.00	\$552.00
6	#15	Malus hybrida 'Indian Magic' <i>Flowering Crabapple</i>	138.00	\$828.00
16	#15	Parrotia persica 'Vanessa' <i>Persian Ironwood</i>	138.00	\$2,208.00
4	#15	Platanus occidentalis <i>American Sycamore</i>	138.00	\$552.00

Thank you for your order!

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SUBTOTAL	\$6,348.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$160.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$6,508.00

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(A statement will NOT be sent unless your account is past due)

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good condition

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INVOICE

1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE # SI-22028
INVOICE DATE 05/18/2022
SHIPMENT DATE 05/25/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
515 16th St
Des Moines IA 50309

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Spring trees	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
3	#15 single	Betula nigra <i>River Birch</i>	138.00	\$414.00
5	#15 single	Cercis canadensis <i>Eastern Redbud</i>	138.00	\$690.00
3	#15	Eucommia ulmoides <i>Hardy Rubber Tree</i>	138.00	\$414.00
2	#15	Liquidambar styraciflua 'Happdell' (Happidaze Sweetgum) <i>Happidaze Sweetgum</i>	138.00	\$276.00
11	#15	Liriodendron tulipifera <i>Tulip Tree</i>	138.00	\$1,518.00
2	#15	Malus hybrida 'Pink Spires' <i>Flowering Crabapple</i>	138.00	\$276.00
5	#15	Malus hybrida 'Sutyzam' (Sugar Tyme Flowering Crabapple) <i>Sugar Tyme Flowering Crabapple</i>	138.00	\$690.00
5	#15	Quercus hybrida 'Jillian' <i>Oak</i>	138.00	\$690.00
4	#15	Tilia tomentosa 'Sterling' <i>Silver Linden</i>	138.00	\$552.00

Thank you for your order!

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SUBTOTAL	\$5,520.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$60.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$5,580.00

PLEASE PAY FROM THIS INVOICE

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good condition

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1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE

INVOICE # SI-22573
INVOICE DATE 05/18/2022
SHIPMENT DATE 06/08/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
Easton Blvd
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Easton Blvd	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
9	#15 single	Betula nigra <i>River Birch</i>	138.00	\$1,242.00
7	#15	Gleditsia triacanthos 'Suncole' (Sunburst Honeylocust) <i>Sunburst Honeylocust</i>	138.00	\$966.00
7	#15	Tilia cordata 'Greenspire' <i>Littleleaf Linden</i>	138.00	\$966.00
1	#15	Ulmus hybrida 'Frontier' <i>Elm</i>	138.00	\$138.00
10	#15	Ulmus hybrida 'New Horizon' <i>Elm</i>	138.00	\$1,380.00

Thank you for your order!

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SUBTOTAL	\$4,692.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$80.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$4,772.00

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INVOICE

1720 East Washington Avenue
 Des Moines, IA 50316
 P: (515) 266-2488 F: (515) 262-8907
 sales@dmfgardens.com

INVOICE # SI-22626
 INVOICE DATE 05/18/2022
 SHIPMENT DATE 06/09/2022
 DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
 80 W 8th Ave
 Marion IA 52302

SHIP TO:

Trees Forever
 Easton Blvd
 Des Moines IA

SALESPERSON	PO NUMBER	PAYMENT METHOD
Antony	Easton Blvd	N30

QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
6	#15 single	Cercis canadensis <i>Eastern Redbud</i>	138.00	\$828.00
2	#15	Eucommia ulmoides <i>Hardy Rubber Tree</i>	138.00	\$276.00
4	#15	Malus hybrida 'Pink Spires' <i>Flowering Crabapple</i>	138.00	\$552.00
2	#15	Tilia cordata 'Greenspire' <i>Littleleaf Linden</i>	138.00	\$276.00
1	#15	Ulmus americana 'Valley Forge' <i>American Elm</i>	138.00	\$138.00
6	#15	Ulmus hybrida 'Frontier' <i>Elm</i>	138.00	\$828.00

Thank you for your order!

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SUBTOTAL	\$2,898.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$80.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$2,978.00

PLEASE PAY FROM THIS INVOICE

(A statement will NOT be sent unless your account is past due)

Received in
 good condition

Suppliers of quality aquatics, grasses, perennials, shrubs, trees, & conifers



INV_TREEFODSM07
9/24/2022

INVOICE

FROM:

Sandridge Nursery, LLC
c/o Eric Goodhue
7530 SE 52nd St.
Carlisle, IA 50047
(515) 724-9599

TO:

Trees Forever
c/o Andrew Hirst
1515 Linden Street
Des Moines, IA 50309
(515) 240-3262

#	Item Description	Size	Qty	Unit Cost	Total
	Remaining Credit	--	--	--	(\$3,860.00)
Delivered on Thursday, 9/22 to Franklin/8th/Hickman Streets					
1	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.5" BR	1	\$95.00	\$95.00
2	Cercis canadensis - Eastern Redbud	1.5" BR	1	\$95.00	\$95.00
3	Gleditsia triacanthos 'Skycole' - Skyline Honeylocust	1.25" BR	7	\$80.00	\$560.00
4	Liriodendron tulipifera - Tulip Tree	1.5" BR	5	\$95.00	\$475.00
5	Platanus acerfolia - London Planetree	1.5" BR	7	\$95.00	\$665.00
6	Quercus coccinea - Scarlet Oak	1.25" BR	3	\$80.00	\$240.00
7	Quercus coccinea - Scarlet Oak	1.5" BR	3	\$95.00	\$285.00
8	Quercus macrocarpa - Bur Oak	1.5" BR	7	\$95.00	\$665.00
Delivered on Saturday, 9/24 to 9th Street					
9	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.5" BR	3	\$95.00	\$285.00
10	Malus 'Spring Snow' - Spring Snow Crabapple	1.5" BR	3	\$95.00	\$285.00
11	Ostrya virginiana - American Hophornbeam	1.25" BR	4	\$80.00	\$320.00
12	Platanus acerfolia - London Planetree	1.5" BR	11	\$95.00	\$1,045.00
13	Quercus macrocarpa - Bur Oak	1.5" BR	10	\$95.00	\$950.00
14	Quercus rubra - Red Oak	1.5" BR	8	\$95.00	\$760.00
15	Ulmus americana 'New Harmony' - New Harmony Elm	1.5" BR	10	\$95.00	\$950.00

Tax Rate (if applicable)	0%	\$0.00
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TREES DELIVERED ON THIS INVOICE	83
TOTAL TREES DELIVERED FOR FALL 2022	147
TOTAL	\$3,815.00

Terms: NET 10

THANK YOU FOR THE BUSINESS!



INVOICE

1720 East Washington Avenue
 Des Moines, IA 50316
 P: (515) 266-2488 F: (515) 262-8907
 sales@dmfgardens.com

INVOICE # SI-24621
 INVOICE DATE 09/09/2022
 SHIPMENT DATE 09/15/2022
 DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
 80 W 8th Ave
 Marion IA 52302

SHIP TO:

Trees Forever
 E Washington Ave
 Des Moines IA 50316

SALESPERSON	PO NUMBER	PAYMENT METHOD
Antony		N30

QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
6	#15 single	Amelanchier grandiflora 'Autumn Brilliance' <i>Serviceberry</i>	152.00	\$912.00
5	#15	Celtis occidentalis <i>Hackberry</i>	152.00	\$760.00
9	#15 single	Cercis canadensis <i>Eastern Redbud</i>	152.00	\$1,368.00
7	#10	Crataegus mordenensis 'Toba' <i>Hawthorn</i>	160.00	\$1,120.00
3	#15	Gymnocladus dioicus <i>Kentucky Coffee Tree</i>	152.00	\$456.00
5	#15	Malus hybrida 'Adirondack' <i>Flowering Crabapple</i>	152.00	\$760.00
1	#15	Ostrya virginiana <i>American Hophornbeam</i>	162.00	\$162.00
1	#15	Quercus alba <i>White Oak</i>	152.00	\$152.00

Thank you for your order!

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SUBTOTAL	\$5,690.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$80.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$5,770.00

PLEASE PAY FROM THIS INVOICE

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Received in
 good condition _____

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INV_TREEFODSM06
9/17/2022

INVOICE

FROM:

Sandridge Nursery, LLC c/o Eric Goodhue 7530 SE 52nd St. Carlisle, IA 50047 (515) 724-9599
--

TO:

Trees Forever c/o Andrew Hirst 1515 Linden Street Des Moines, IA 50309 (515) 240-3262

#	Item Description	Size	Qty	Unit Cost	Total
	Remaining Credit	--	--	--	(\$9,850.00)
Delivered on Saturday, 9/17 to Jefferson/Washington Streets					
1	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.5" BR	8	\$95.00	\$760.00
2	Celtis occidentalis - Hackberry	1.25" BR	3	\$80.00	\$240.00
3	Celtis occidentalis - Hackberry	1.5" BR	1	\$95.00	\$95.00
4	Cercis canadensis - Eastern Redbud	1.5" BR	9	\$95.00	\$855.00
5	Gleditsia triacanthos 'Skycole' - Skyline Honeylocust	1.25" BR	3	\$80.00	\$240.00
6	Liriodendron tulipifera - Tulip Tree	1.5" BR	3	\$95.00	\$285.00
7	Platanus acerfolia - London Planetree	1.5" BR	5	\$95.00	\$475.00
8	Quercus macrocarpa - Bur Oak	1.5" BR	10	\$95.00	\$950.00
9	Quercus rubra - Red Oak	1.5" BR	11	\$95.00	\$1,045.00
10	Syringa reticulata 'Ivory Silk' - Ivory Silk Japanese Tree Lilac	1.5" BR	5	\$95.00	\$475.00
11	Ulmus parvifolia - Frontier Elm	1.5" BR	6	\$95.00	\$570.00

Tax Rate (if applicable)	0%	\$0.00
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TOTAL TREES DELIVERED ON THIS INVOICE	64
TOTAL TREES DELIVERED FOR FALL 2022	64
TOTAL	(\$3,860.00)

Terms: NET 10

THANK YOU FOR THE BUSINESS!



INV_TREEFODSM08
10/2/2022

INVOICE

FROM:

Sandridge Nursery, LLC
c/o Eric Goodhue
7530 SE 52nd St.
Carlisle, IA 50047
(515) 724-9599

TO:

Trees Forever
c/o Andrew Hirst
1515 Linden Street
Des Moines, IA 50309
(515) 240-3262

#	Item Description	Size	Qty	Unit Cost	Total
Delivered on Saturday, 10/1 to Madison Ave					
1	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.5" BR	19	\$95.00	\$1,805.00
2	Liriodendron tulipifera - Tulip Tree	1.5" BR	7	\$95.00	\$665.00
3	Malus 'Jewelcole' - Red Jewel Crabapple	1.5" BR	18	\$95.00	\$1,710.00
4	Platanus acerfolia 'Bloodgood' - London Planetree	1.5" BR	12	\$95.00	\$1,140.00
5	Quercus coccinea - Scarlet Oak	1.5" BR	3	\$95.00	\$285.00
6	Quercus macrocarpa - Bur Oak	1.5" BR	11	\$95.00	\$1,045.00
7	Syringa reticulata 'Ivory Silk' - Ivory Silk Japanese Lilac	1.5" BR	20	\$95.00	\$1,900.00
8	Ulmus x 'Morton' - Accolade Elm	1.5" BR	4	\$95.00	\$380.00

Tax Rate (if applicable)	0%	\$0.00
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TREES DELIVERED ON THIS INVOICE	94
TOTAL TREES DELIVERED FOR FALL 2022	241
TOTAL	\$8,930.00

Terms: NET 10

THANK YOU FOR THE BUSINESS!



INV_TREEFODSM09
10/10/2022

INVOICE

FROM:

Sandridge Nursery, LLC
c/o Eric Goodhue
7530 SE 52nd St.
Carlisle, IA 50047
(515) 724-9599

TO:

Trees Forever
c/o Andrew Hirst
1515 Linden Street
Des Moines, IA 50309
(515) 240-3262

#	Item Description	Size	Qty	Unit Cost	Total
Delivered on Saturday, 10/8 to Columbus Park					
1	Amelanchier x grandiflora 'Autumn Brilliance' - Autumn Brilliance Serviceberry	1.5" BR	18	\$95.00	\$1,710.00
2	Celtis occidentalis - Hackberry	1.25" BR	5	\$80.00	\$400.00
3	Cercis canadensis - Eastern Redbud	1.5" BR	18	\$95.00	\$1,710.00
4	Liriodendron tulipifera - Tulip Tree	1.5" BR	13	\$95.00	\$1,235.00
5	Platanus acerfolia 'Bloodgood' - London Planetree	1.5" BR	18	\$95.00	\$1,710.00
6	Quercus macrocarpa - Bur Oak	1.5" BR	6	\$95.00	\$570.00
7	Quercus macrocarpa - Bur Oak	1.25" BR	6	\$80.00	\$480.00
8	Quercus shumardii - Shumard Oak	1.5" BR	2	\$95.00	\$190.00
9	Syringa reticulata 'Ivory Silk' - Ivory Silk Japanese Lilac	1.5" BR	10	\$95.00	\$950.00
10	Syringa reticulata 'Ivory Silk' - Ivory Silk Japanese Lilac	1.25" BR	6	\$80.00	\$480.00
11	Tilia cordata 'Greenspire' - Greenspire Linden	1.25" BR	2	\$80.00	\$160.00
12	Ulmus americana 'New Harmony' - New Harmony Elm	1.5" BR	7	\$95.00	\$665.00
13	CREDIT for 2 (two) trees with bark inclusion - per text message				(\$190.00)

Tax Rate (if applicable)	0%	\$0.00
--------------------------	----	--------

TREES DELIVERED ON THIS INVOICE	111
TOTAL TREES DELIVERED FOR FALL 2022	352
TOTAL	\$10,070.00

Terms: NET 10

THANK YOU FOR THE BUSINESS!



1720 East Washington Avenue
Des Moines, IA 50316
P: (515) 266-2488 F: (515) 262-8907
sales@dmfgardens.com

INVOICE

INVOICE # SI-25177
INVOICE DATE 10/05/2022
SHIPMENT DATE 10/06/2022
DELIVERY METHOD DELIVER

CUSTOMER:

Trees Forever
80 W 8th Ave
Marion IA 52302

SHIP TO:

Trees Forever
Franklin Ave
Des Moines IA

SALESPERSON		PO NUMBER	PAYMENT METHOD	
Antony		Franklin Ave / Riverbend	N30	
QTY	SIZE	DESCRIPTION	UNIT PRICE	LINE TOTAL
4	#15 single	Amelanchier grandifolia 'Robin Hill' <i>Serviceberry</i>	152.00	\$608.00
11	#15 single	Cercis canadensis <i>Eastern Redbud</i>	152.00	\$1,672.00
5	#15	Gleditsia triacanthos 'Skycole' (Skyline Honeylocust) <i>Skyline Honeylocust</i>	152.00	\$760.00
13	#15	Malus hybrida 'Cardinal' <i>Flowering Crabapple</i>	152.00	\$1,976.00
13	#15	Quercus macrocarpa <i>Bur Oak</i>	152.00	\$1,976.00
9	#10	Tilia cordata 'Greenspire' <i>Littleleaf Linden</i>	138.00	\$1,242.00

Thank you for your order!

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SUBTOTAL	\$8,234.00
TAX RATE	0.00%
TOTAL TAX	\$0.00
DELIVERY CHARGE	\$180.00
ENVIRONMENTAL FEE	\$0.00
GRAND TOTAL	\$8,414.00

PLEASE PAY FROM THIS INVOICE

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good condition _____

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Attestation of Planting Affirmation



City of Des Moines Urban Tree Planting 2022 Attestation of Planting Affirmation

I, the undersigned working on behalf of Public Works Department at the City of Des Moines attest and confirm that tree planting(s) occurred on the following dates under the project named in the City Forest Credits Registry City of Des Moines Urban Tree Planting 2022 by the Project Operator, Trees Forever.

Trees were planted under this project on the following date(s): April 9, 2022 – November 3, 2022

The approximate number of trees planted is: 1,727

Signed on December 16th in 2022, by Shane McQuillan – City Forester, for City of Des Moines Forestry

Signature

Shane McQuillan

Printed Name

224 402 0632

Phone

sdmquillan@dmgov.org

Email

Attestation of No Double Counting and No Net Harm



City of Des Moines Urban Tree Planting 2022 Attestation of No Double Counting of Credits & No Net Harm

I am the CEO of Trees Forever and make this attestation regarding no double counting of credits and no net harm from this tree planting project, City of Des Moines Urban Tree Planting 2022.

1. Project Description

The Project that is the subject of this attestation is described more fully in both our Application and our Project Design Document (PDD), both of which are incorporated into this attestation.

2. No Double Counting by Applying for Credits from another Registry

Trees Forever has not and will not seek credits for CO₂ for the project trees or for this project from any other organization or registry issuing credits for CO₂ storage.

3. No Double Counting by Seeking Credits for the Same Trees or Same CO₂ Storage

Trees Forever has not and will not apply for a project including the same trees as this project nor will it seek credits for CO₂ storage for the project trees or for this project in any other project or more than once.

4. No Net Harm

The trees planted in this project will produce many benefits, as described in our Application and PDD. Like almost all urban trees, the project trees are planted not for harvest but for the benefits they deliver to people, communities, and the environment as living trees in a metropolitan area.

The project trees will produce many benefits and will not cause net harm. Specifically, they will not:

- Displace native or indigenous populations
- Deprive any communities of food sources
- Degrade a landscape or cause environmental damage

Signed on November 22nd in 2022, by Kiley Miller, CEO, for Trees Forever.

Signature

319-537-1550

Phone

Kmiller@treesforever.org

Email

Attestation of Additionality



City of Des Moines Urban Tree Planting 2022 Attestation of Additionality

I am the CEO of Trees Forever and make this attestation regarding additionality from this tree planting project, City of Des Moines Urban Tree Planting 2022.

- Project Description
 - The Project that is the subject of this attestation is described more fully in both our Application and our Project Design Document (PDD), both of which are incorporated into this attestation.
- Legal Requirements Test (Protocol Section 1.8)
 - Project trees are not required by law or ordinance to be planted.
- The Project did not plant trees on sites that were converted out of a forest use or that were cleared of healthy trees and then planted with project trees (Protocol Section 1.9)
- Project-Specific Baseline or Performance Standard Baseline
 - Project trees are additional based on a project specific baseline. See PDD; or
 - Project trees are additional based on the Performance Standard baseline; see attached baseline to the PDD.
- Project Implementation Agreement for Project Duration
 - Trees Forever has signed a Project Implementation Agreement with City Forest Credits for 26-years.
- The 26-year Project Duration commitment is additional to and longer than any commitment Trees Forever makes to non-carbon project tree plantings.

Signed on November 22nd in 2022, by Kiley Miller, CEO, for Trees Forever.

Signature

Kiley Miller

Printed Name

319-537-1550

Phone

kmiller@treesforever.org

Email

Carbon Quantification Initial Credit Tool

Directions

- 1) In Table 1 record the number of sites planted for each tree species.
- 2) If species are not listed, add them to the bottom of Table 1.

Table 1. Planting List

Scientific Name	Common Name	Tree-Type Abbreviation	No. Sites Planted
<i>Acer ginnala</i>	Amur maple	BDS	
<i>Acer negundo</i>	boxelder	BDM	
<i>Acer nigrum</i>	black maple	BDL	
<i>Acer palmatum</i>	Japanese maple	BDS	
<i>Acer platanoides</i>	Norway maple	BDL	
<i>Acer rubrum</i>	red maple	BDL	
<i>Acer saccharinum</i>	silver maple	BDL	
<i>Acer saccharum</i>	sugar maple	BDL	
<i>Acer species</i>	maple	BDL	
<i>Aesculus glabra</i>	Ohio buckeye	BDL	
<i>Albizia julibrissin</i>	mimosa	BDS	
<i>Alnus species</i>	alder	BDM	
<i>Amelanchier arborea</i>	serviceberry, downy	BDS	13
<i>Amelanchier canadensis</i>	serviceberry, shadblow	BDS	
<i>Amelanchier laevis</i>	serviceberry, Allegheny	BDM	14
<i>Amelanchier spp.</i>	serviceberry, spp.	BDS	59
<i>Betula nigra</i>	river birch	BDM	40
<i>Betula papyrifera</i>	paper birch	BDL	
<i>Betula species</i>	birch	BDM	
<i>Broadleaf Deciduous Large</i>	broadleaf deciduous large	BDL	
<i>Broadleaf Deciduous Medium</i>	broadleaf deciduous medium	BDM	
<i>Broadleaf Deciduous Small</i>	broadleaf deciduous small	BDS	
<i>Broadleaf Evergreen Large</i>	broadleaf evergreen large	BEL	
<i>Broadleaf Evergreen Medium</i>	broadleaf evergreen medium	BEM	
<i>Broadleaf Evergreen Small</i>	broadleaf evergreen small	BES	
<i>Carpinus caroliniana</i>	American hornbeam	BDM	11
<i>Carya ovata</i>	shagbark hickory	BDL	6
<i>Carya species</i>	hickory	BDL	
<i>Castanea dentata</i>	American chestnut	BDL	
<i>Catalpa species</i>	catalpa	BDL	2
<i>Catalpa speciosa</i>	northern catalpa	BDL	
<i>Celtis occidentalis</i>	northern hackberry	BDL	
<i>Celtis occidentalis</i>	common hackberry	BDL	82
<i>Cercidiphyllum japonicum</i>	katsuratree	BDM	2
<i>Cercis canadensis</i>	eastern redbud	BDS	133
<i>Cladrastis kentukea</i>	yellowwood	BDM	
<i>Conifer Evergreen Large</i>	conifer evergreen large	CEL	
<i>Conifer Evergreen Medium</i>	conifer evergreen medium	CEM	
<i>Conifer Evergreen Small</i>	conifer evergreen small	CES	
<i>Cornus florida</i>	flowering dogwood	BDS	
<i>Cornus species</i>	dogwood	BDS	
<i>Crataegus crusgalli</i>	hawthorn, cockspur	BDS	1
<i>Crataegus spp.</i>	hawthorn, spp.	BDS	9
<i>Crataegus viridis</i>	hawthorn, green	BDM	32
<i>Diospyros virginiana</i>	common persimmon	BDM	14
<i>Eucommia ulmoides</i>	hardy rubber	BDL	18
<i>Fraxinus americana</i>	white ash	BDL	
<i>Fraxinus nigra</i>	black ash	BDM	
<i>Fraxinus pennsylvanica</i>	green ash	BDL	2
<i>Fraxinus species</i>	ash	BDM	
<i>Ginkgo biloba</i>	ginkgo	BDM	
<i>Gleditsia triacanthos</i>	honeylocust	BDM	23
<i>Gleditsia triacanthos inermis</i>	honeylocust, thornless	BDL	15
<i>Gymnocladus dioicus</i>	Kentucky coffeetree	BDL	20
<i>Hibiscus syriacus</i>	rose-of-sharon	BDS	
<i>Ilex opaca</i>	American holly	BES	
<i>Ilex species</i>	holly	BES	
<i>Juglans nigra</i>	black walnut	BDL	
<i>Juniperus species</i>	juniper	CEM	
<i>Juniperus virginiana</i>	eastern red cedar	CEM	
<i>Liquidambar styraciflua</i>	sweetgum	BDL	19
<i>Liriodendron tulipifera</i>	tulip tree	BDL	88
<i>Maackia amurensis</i>	amur maackia	BDS	5
<i>Magnolia grandiflora</i>	southern magnolia	BEM	
<i>Magnolia virginiana</i>	sweetbay	BEM	
<i>Malus species</i>	apple	BDS	
<i>Malus spp.</i>	crabapple, flowering	BDS	147
<i>Morus alba</i>	white mulberry	BDM	
<i>Morus species</i>	mulberry	BDM	
<i>Nyssa sylvatica</i>	blackgum	BDM	20
<i>Ostrya virginiana</i>	eastern hophornbeam	BDM	
<i>Ostrya virginiana</i>	American hophornbeam	BDM	28
<i>Parrotia persica</i>	persian ironwood	BDS	24

Table 2. Summary of Planting Sites

Tree-Type	Tree-Type Abbreviation
Brdlf Decid Large (>50 ft)	BDL
Brdlf Decid Med (30-50 ft)	BDM
Brdlf Decid Small (<30 ft)	BDS
Brdlf Evgrn Large (>50 ft)	BEL
Brdlf Evgrn Med (30-50 ft)	BEM
Brdlf Evgrn Small (<30 ft)	BES
Conif Evgrn Large (>50 ft)	CEL
Conif Evgrn Med (30-50 ft)	CEM
Conif Evgrn Small (<30 ft)	CES
Total Sites Planted	

<i>Phellodendron amurense</i>	Amur corktree	BDM	
<i>Picea abies</i>	Norway spruce	CEL	
<i>Picea mariana</i>	black spruce	CEM	
<i>Picea pungens</i>	blue spruce	CEM	
<i>Picea species</i>	spruce	CEL	
<i>Pinus cantorta</i>	Bolander beach pine	CES	
<i>Pinus nigra</i>	Austrian pine	CEM	
<i>Pinus ponderosa</i>	ponderosa pine	CEL	
<i>Pinus resinosa</i>	red pine	CEL	
<i>Pinus strobus</i>	eastern white pine	CEL	
<i>Pinus sylvestris</i>	Scotch pine	CEM	
<i>Pinus virginiana</i>	Virginia pine	CEM	
<i>Platanus occidentalis</i>	American sycamore	BDL	22
<i>Platanus x acerifolia</i>	planetree, London	BDL	98
<i>Populus deltoides</i>	eastern cottonwood	BDL	
<i>Populus nigra</i>	black poplar	BDL	
<i>Populus species</i>	cottonwood	BDL	
<i>Populus tremuloïdes</i>	quaking aspen	BDL	
<i>Prunus cerasifera</i>	cherry plum	BDS	
<i>Prunus serotina</i>	black cherry	BDL	
<i>Prunus serrulata</i>	Kwanzan cherry	BDS	
<i>Prunus species</i>	plum	BDS	
<i>Prunus virginiana</i>	common chokecherry	BDS	
<i>Pyrus calleryana</i>	Callery pear	BDM	
<i>Pyrus species</i>	pear	BDM	
<i>Quercus acutissima</i>	sawtooth oak	BDL	5
<i>Quercus alba</i>	white oak	BDL	6
<i>Quercus bicolor</i>	swamp white oak	BDL	4
<i>Quercus coccinea</i>	scarlet oak	BDL	46
<i>Quercus ellipsoidalis</i>	northern pin oak	BDL	
<i>Quercus macrocarpa</i>	bur oak	BDL	174
<i>Quercus muehlenbergii</i>	chinkapin oak	BDL	2
<i>Quercus nigra</i>	water oak	BEL	
<i>Quercus palustris</i>	pin oak	BDL	10
<i>Quercus rubra</i>	northern red oak	BDL	195
<i>Quercus shumardii</i>	shumard oak	BDL	36
<i>Quercus species</i>	oak	BDL	
<i>Quercus x</i>	hybrid oak	BDL	2
<i>Rhamnus species</i>	buckthorn	BDS	
<i>Rhus species</i>	sumac	BDS	
<i>Robinia pseudoacacia</i>	black locust	BDL	
<i>Salix discolor</i>	pussy willow	BDS	
<i>Salix species</i>	willow	BDL	
<i>Sorbus species</i>	mountain ash	BDS	
<i>Syringa reticulata</i>	Japanese tree lilac	BDS	87
<i>Syringa species</i>	lilac	BDS	12
<i>Taxodium distichum</i>	common baldcypress	BDL	3
<i>Thuja occidentalis</i>	northern white cedar	CEL	
<i>Tilia americana</i>	American basswood	BDL	
<i>Tilia americana</i>	American linden	BDL	62
<i>Tilia cordata</i>	littleleaf linden	BDM	11
<i>Tilia species</i>	basswood	BDL	
<i>Staphylea trifolia</i>	American bladdernut	BDS	2
<i>Tsuga canadensis</i>	eastern hemlock	CEL	
<i>Ulmus americana</i>	American elm	BDL	29
<i>Ulmus parvifolia</i>	Chinese elm	BDL	
<i>Ulmus pumila</i>	Siberian elm	BDM	
<i>Ulmus rubra</i>	slippery elm	BDM	2
<i>Ulmus species</i>	elm	BDL	
<i>Ulmus spp.</i>	spp elm	BDL	33
<i>Ulmus thomasi</i>	elm, rock	BDL	
<i>Ulmus x</i>	elm, hybrid	BDL	59

	1	2	3	4	5
2					
3		Using the information you provide and background data, the tool provides estimates of co-benefits per year after 25 years.			
4					
5		Table 5. Co-Benefits per year after 25 years (all live trees, includes tree mortality)			
6		Ecosystem Services	Resource Units Totals	Total \$	
7		Rainfall Interception (m3/yr)	9,378.28	\$67,139.69	
8		Air Quality (t/yr)			
9		O3	0.1238	\$413.66	
10		NOx	0.0200	\$66.84	
11		PM10	0.0648	\$184.05	
12		Net VOCs	0.0820	\$677.70	
13		Air Quality Total	0.2906	\$1,342.24	
14		Energy (kWh/yr & kBtu/yr)			
15		Cooling - Electricity	284,758.16	\$21,613.14	
16		Heating - Natural Gas	4,134,587.89	\$40,249.11	
17		Energy Total (\$/yr)		\$61,862.25	
18		Grand Total (\$/yr)		\$130,344.18	
19					
20				\$3,388,948.56	
21					

Tree Planting Data

ID	INV_DATE	SPP_COM	SPP_BOT	ADDRESS	STREET	X	Y	LATITUDE	LONGITUD
147745	2022/05/25	rubbertree, Hardy	Eucommia ulmoides	515	Watrous Ave	1607098.512	564104.19	41.54824	-93.6217
147631	2022/05/23	American Bladdernut	trifolia	826	Des Moines St	1611277.107	580397.24	41.59297	-93.6065
147639	2022/05/30	American Bladdernut	trifolia	827	Lyon St	1611224.666	580710.14	41.59383	-93.6067
146849	2022/04/22	Amur maackia	Maackia amurensis	100	McKinley Ave	1609025.156	561476.02	41.54103	-93.6147
146852	2022/04/22	Amur maackia	Maackia amurensis	100	McKinley Ave	1609091.974	561476.29	41.54103	-93.6144
146887	2022/04/22	Amur maackia	Maackia amurensis	420	E McKinley Ave	1610597.211	561466.32	41.54101	-93.6089
146900	2022/04/22	Amur maackia	Maackia amurensis	430	E McKinley Ave	1611112.289	561457.26	41.54099	-93.607
146902	2022/04/22	Amur maackia	Maackia amurensis	430	E McKinley Ave	1611169.195	561457.56	41.54099	-93.6068
8411	2022/07/18	ash, green	Fraxinus pennsylvanica	202	E Edison Ave	1609385.935	573059.83	41.57282	-93.6134
30889	2022/07/11	ash, green	Fraxinus pennsylvanica	709	E Spring St	1612074.119	560217.51	41.53759	-93.6035
143249	2022/06/14	baldcypress, common	Taxodium distichum	6804	Sweetwater Dr	1623051.533	554859.43	41.52291	-93.5634
143255	2022/06/14	baldcypress, common	Taxodium distichum	6721	Three Lakes Pkwy	1622935.951	554991.96	41.52328	-93.5638
143494	2022/06/14	baldcypress, common	Taxodium distichum	6721	Three Lakes Pkwy	1622957.868	554976.54	41.52323	-93.5638
8405	2022/04/23	birch, river	Betula nigra	238	E Edison Ave	1609794.779	572928.69	41.57247	-93.6119
8423	2022/04/23	birch, river	Betula nigra	1813	SE 1st St	1609097.999	573148.87	41.57307	-93.6145
11849	2022/04/28	birch, river	Betula nigra	4750	Madison Ave	1590426.003	594971.33	41.63287	-93.6829
11852	2022/04/28	birch, river	Betula nigra	3934	48th St	1590392.139	594843.76	41.63252	-93.683
11854	2022/04/28	birch, river	Betula nigra	3934	48th St	1590363.842	594769.53	41.63232	-93.6831
11859	2022/04/28	birch, river	Betula nigra	3922	48th St	1590349.461	594736.6	41.63223	-93.6831
11863	2022/04/28	birch, river	Betula nigra	3916	48th St	1590344.822	594516.25	41.63162	-93.6832
31795	2022/06/09	birch, river	Betula nigra	2621	Easton Blvd	1621887.407	585940.89	41.60821	-93.5678
31798	2022/06/09	birch, river	Betula nigra	2655	Easton Blvd	1622388.738	586155.76	41.6088	-93.5659
143247	2022/06/14	birch, river	Betula nigra	2816	Sweetwater Dr	1623108.461	554867.81	41.52294	-93.5632
143248	2022/06/14	birch, river	Betula nigra	2816	Sweetwater Dr	1623083.868	554883.92	41.52298	-93.5633
143252	2022/06/14	birch, river	Betula nigra	6721	Three Lakes Pkwy	1623031.379	554919.08	41.52308	-93.5635
143253	2022/06/14	birch, river	Betula nigra	6721	Three Lakes Pkwy	1623007.891	554939.59	41.52313	-93.5636
143254	2022/06/14	birch, river	Betula nigra	6721	Three Lakes Pkwy	1622983.3	554958.26	41.52318	-93.5637
143662	2022/06/14	birch, river	Betula nigra	2653	Moonlight Dr	1622840.303	555020.37	41.52335	-93.5642
143663	2022/06/14	birch, river	Betula nigra	2653	Moonlight Dr	1622867.465	555002.79	41.52331	-93.5641
143664	2022/06/14	birch, river	Betula nigra	2653	Moonlight Dr	1622890.955	554985.21	41.52326	-93.564
143665	2022/06/14	birch, river	Betula nigra	2653	Moonlight Dr	1622913.711	554967.63	41.52321	-93.5639
146693	2022/04/28	birch, river	Betula nigra	3929	48th St	1590421.919	594798.51	41.6324	-93.6829
146699	2022/04/28	birch, river	Betula nigra	4818	Seneca Ave	1590169.584	594404.57	41.63131	-93.6838
147284	2022/06/09	birch, river	Betula nigra	2525	Easton Blvd	1621196.316	585641.28	41.60739	-93.5703
147288	2022/06/09	birch, river	Betula nigra	2527	Easton Blvd	1621392.967	585724.79	41.60762	-93.5696
147291	2022/06/09	birch, river	Betula nigra	2529	Easton Blvd	1621522.477	585779.49	41.60777	-93.5691
147294	2022/06/09	birch, river	Betula nigra	2601	Easton Blvd	1621685.788	585852.5	41.60797	-93.5685
147296	2022/06/09	birch, river	Betula nigra	2601	Easton Blvd	1621737.152	585875.48	41.60803	-93.5683
147310	2022/06/09	birch, river	Betula nigra	2655	Easton Blvd	1622500.988	586204.1	41.60894	-93.5655
147311	2022/06/09	birch, river	Betula nigra	2707	Easton Blvd	1622607.749	586251.52	41.60907	-93.5651
147734	2022/05/25	birch, river	Betula nigra	1139	Rittenhouse St	1604757.665	554587.86	41.52211	-93.6302
147741	2022/05/25	birch, river	Betula nigra	5609	SE 5th St	1611280.05	558685.24	41.53338	-93.6064
147742	2022/05/25	birch, river	Betula nigra	5609	SE 5th St	1611280.746	558653.78	41.53329	-93.6064
147744	2022/05/25	birch, river	Betula nigra	6104	South Union St	1608614.194	556990.86	41.52872	-93.6161
147752	2022/05/25	birch, river	Betula nigra	618	E Thornton Ave	1611842.587	565128.27	41.55107	-93.6044
148690	2022/11/03	birch, river	Betula nigra	300	Franklin Ave	1606976.816	587040.19	41.61118	-93.6223
148846	2022/10/29	birch, river	Betula nigra	701	E Spring St	1611908.837	560156.44	41.53742	-93.6041
148864	2022/10/29	birch, river	Betula nigra	5213	SE 8th St	1612257.36	559973.26	41.53692	-93.6029
148881	2022/10/29	birch, river	Betula nigra	5308	SE 9th St	1612528.358	559690.56	41.53614	-93.6019
148887	2022/10/29	birch, river	Betula nigra	5313	SE 9th St	1612567.192	559617.72	41.53594	-93.6017
149035	2022/10/15	birch, river	Betula nigra	2754	E Elm St	1622899.721	577867.27	41.58606	-93.564
149042	2022/10/15	birch, river	Betula nigra	2616	E Elm St	1622255.474	577862.27	41.58604	-93.5644
149225	2022/10/01	birch, river	Betula nigra	2400	Elizabeth Ave	1620421.621	584303.59	41.60371	-93.5731
13372	2022/04/27	blackgum	Nyssa sylvatica	2901	Scott Ave	1623845.695	577164.74	41.58413	-93.5606
23845	2022/04/27	blackgum	Nyssa sylvatica	2720	Raccoon St	1622629.392	577521.23	41.58511	-93.565
23846	2022/04/27	blackgum	Nyssa sylvatica	2712	Raccoon St	1622538.251	577518.37	41.5851	-93.5654
44604	2022/04/27	blackgum	Nyssa sylvatica	2828	Raccoon St	1623497.057	577532.03	41.58514	-93.5618
44608	2022/04/27	blackgum	Nyssa sylvatica	2814	Raccoon St	1623256.443	577527.94	41.58513	-93.5627
146709	2022/04/27	blackgum	Nyssa sylvatica	2501	Scott Ave	1621640.59	576943.12	41.58352	-93.5686
146711	2022/04/27	blackgum	Nyssa sylvatica	2501	Scott Ave	1621715.131	577020.92	41.58373	-93.5684
146712	2022/04/27	blackgum	Nyssa sylvatica	2501	Scott Ave	1621811.304	577080.42	41.58389	-93.568
146714	2022/04/27	blackgum	Nyssa sylvatica	2501	Scott Ave	1621954.052	577115.4	41.58399	-93.5675
146716	2022/04/27	blackgum	Nyssa sylvatica	512	SE 27th Ct	1622774.816	577150.23	41.58409	-93.5645
146720	2022/04/27	blackgum	Nyssa sylvatica	2731	Scott Ave	1622956.428	577150.83	41.58409	-93.5638
146723	2022/04/27	blackgum	Nyssa sylvatica	600	SE 28th St	1623095.483	577154.38	41.5841	-93.5633
146727	2022/04/27	blackgum	Nyssa sylvatica	2827	Scott Ave	1623491.728	577156.66	41.58411	-93.5619
146732	2022/04/27	blackgum	Nyssa sylvatica	318	SE 30th St	1624287.778	577543.91	41.58517	-93.559
146739	2022/04/27	blackgum	Nyssa sylvatica	2730	Raccoon St	1622901.669	577524.42	41.58512	-93.564
146883	2022/04/22	blackgum	Nyssa sylvatica	4711	SE 4th St	1610506.162	561466.43	41.54101	-93.6093
146908	2022/04/22	blackgum	Nyssa sylvatica	437	E McKinley Ave	1610975.659	561411.71	41.54086	-93.6075
146909	2022/04/22	blackgum	Nyssa sylvatica	417	E McKinley Ave	1610934.543	561413.96	41.54087	-93.6077
146912	2022/04/22	blackgum	Nyssa sylvatica	417	E McKinley Ave	1610855.975	561413.32	41.54087	-93.608
146921	2022/04/22	blackgum	Nyssa sylvatica	401	E McKinley Ave	1610482.603	561416.68	41.54087	-93.6093
147623	2022/05/23	catalpa, northern	Catalpa speciosa	826	Des Moines St	1611171.746	580334.51	41.5928	-93.6069

147647	2022/05/23	catalpa, northern	Catalpa speciosa	906 Lyon St	1611508.757	580841.36	41.59419	-93.6057
1481	2022/04/21	crabapple, flowering	Malus spp.	2400 University Ave	1599333.715	583098.48	41.60033	-93.6502
1591	2022/04/21	crabapple, flowering	Malus spp.	2300 University Ave	1599823.859	583105.7	41.60036	-93.6484
31624	2022/06/09	crabapple, flowering	Malus spp.	2535 Hubbell Ave	1621898.828	585991.84	41.60835	-93.5677
31625	2022/06/09	crabapple, flowering	Malus spp.	2535 Hubbell Ave	1621848.099	585969.61	41.60829	-93.5679
31626	2022/06/09	crabapple, flowering	Malus spp.	2535 Hubbell Ave	1621802.291	585949	41.60823	-93.5681
38860	2022/04/21	crabapple, flowering	Malus spp.	2217 University Ave	1600046.583	583154.62	41.60049	-93.6476
38864	2022/04/21	crabapple, flowering	Malus spp.	2307 University Ave	1599750.502	583154.5	41.60049	-93.6487
38867	2022/04/21	crabapple, flowering	Malus spp.	2321 University Ave	1599621.817	583153.5	41.60049	-93.6492
39403	2022/10/07	crabapple, flowering	Malus spp.	400 Franklin Ave	1606560.936	587067.13	41.61126	-93.6238
140934	2022/04/21	crabapple, flowering	Malus spp.	2328 University Ave	1599527.416	583105.77	41.60035	-93.6495
141535	2022/05/19	crabapple, flowering	Malus spp.	4023 41st St	1592871.507	595365.66	41.63397	-93.6739
145465	2022/11/01	crabapple, flowering	Malus spp.	501 Holcomb Ave	1606327.535	589781.42	41.6187	-93.6247
146668	2022/04/21	crabapple, flowering	Malus spp.	2328 University Ave	1599590.107	583105.53	41.60035	-93.6493
146838	2022/04/22	crabapple, flowering	Malus spp.	100 McKinley Ave	1608705.373	561469.49	41.54101	-93.6158
146839	2022/04/22	crabapple, flowering	Malus spp.	100 McKinley Ave	1608758.609	561470.15	41.54102	-93.6156
146848	2022/04/22	crabapple, flowering	Malus spp.	100 McKinley Ave	1609002.025	561475.32	41.54103	-93.6148
146853	2022/04/22	crabapple, flowering	Malus spp.	100 McKinley Ave	1609116.94	561476.63	41.54103	-93.6143
146854	2022/04/22	crabapple, flowering	Malus spp.	100 McKinley Ave	1609160.259	561474.74	41.54103	-93.6142
146856	2022/04/22	crabapple, flowering	Malus spp.	130 E McKinley Ave	1609345.293	561473.4	41.54103	-93.6135
146857	2022/04/22	crabapple, flowering	Malus spp.	4716 SE 3rd St	1609398.896	561474.43	41.54103	-93.6133
146858	2022/04/22	crabapple, flowering	Malus spp.	4716 SE 3rd St	1609430.836	561474.02	41.54103	-93.6132
146863	2022/04/22	crabapple, flowering	Malus spp.	4713 SE 3rd St	1609575.485	561472.74	41.54103	-93.6127
146867	2022/04/22	crabapple, flowering	Malus spp.	310 E McKinley Ave	1609734.454	561472.53	41.54103	-93.6121
146872	2022/04/22	crabapple, flowering	Malus spp.	330 E McKinley Ave	1610038.436	561468.85	41.54102	-93.6111
146875	2022/04/22	crabapple, flowering	Malus spp.	346 E McKinley Ave	1610169.137	561469.42	41.54102	-93.6105
146877	2022/04/22	crabapple, flowering	Malus spp.	354 E McKinley Ave	1610244.766	561469.32	41.54102	-93.6102
146881	2022/04/22	crabapple, flowering	Malus spp.	4711 SE 4th St	1610456.967	561466.86	41.54101	-93.6094
146885	2022/04/22	crabapple, flowering	Malus spp.	4711 SE 4th St	1610554.992	561467.1	41.54101	-93.6091
146891	2022/04/22	crabapple, flowering	Malus spp.	430 E McKinley Ave	1610833.277	561465.29	41.54101	-93.6081
146895	2022/04/22	crabapple, flowering	Malus spp.	430 E McKinley Ave	1610969.847	561461.83	41.541	-93.6076
146897	2022/04/22	crabapple, flowering	Malus spp.	430 E McKinley Ave	1611030.422	561460.29	41.541	-93.6073
146899	2022/04/22	crabapple, flowering	Malus spp.	430 E McKinley Ave	1611086.592	561459.49	41.54099	-93.6071
146901	2022/04/22	crabapple, flowering	Malus spp.	430 E McKinley Ave	1611140.926	561457.23	41.54099	-93.6069
146907	2022/04/22	crabapple, flowering	Malus spp.	437 E McKinley Ave	1611037.337	561410.91	41.54086	-93.6073
146926	2022/04/22	crabapple, flowering	Malus spp.	321 E McKinley Ave	1610253.879	561417.33	41.54088	-93.6102
147019	2022/05/19	crabapple, flowering	Malus spp.	4100 43rd St	1591997.374	595919.71	41.63548	-93.6771
147020	2022/05/19	crabapple, flowering	Malus spp.	4100 43rd St	1592021.569	595919.66	41.63548	-93.677
147021	2022/05/19	crabapple, flowering	Malus spp.	4100 43rd St	1592051.264	595919.6	41.63548	-93.6769
147032	2022/05/19	crabapple, flowering	Malus spp.	3909 Shawnee Ave	1593840.146	595927.77	41.63551	-93.6704
147033	2022/05/19	crabapple, flowering	Malus spp.	3909 Shawnee Ave	1593860.682	595930.65	41.63552	-93.6703
147034	2022/05/19	crabapple, flowering	Malus spp.	4059 41st St	1592866.942	595808.81	41.63518	-93.6739
147035	2022/05/19	crabapple, flowering	Malus spp.	4059 41st St	1592865.419	595780.32	41.6351	-93.674
147037	2022/05/19	crabapple, flowering	Malus spp.	4001 41st St	1592870.372	595140.42	41.63335	-93.6739
147038	2022/05/19	crabapple, flowering	Malus spp.	4001 41st St	1592869.218	595113.76	41.63327	-93.6739
147301	2022/06/09	crabapple, flowering	Malus spp.	2535 Hubbell Ave	1621739.757	585922.98	41.60816	-93.5683
147735	2022/05/25	crabapple, flowering	Malus spp.	5114 SW 17th St	1602166.415	560288.48	41.53775	-93.6397
147736	2022/05/25	crabapple, flowering	Malus spp.	5114 SW 17th St	1602167.375	560257.83	41.53766	-93.6397
147737	2022/05/25	crabapple, flowering	Malus spp.	919 Titus Ave	1605498.565	560819.4	41.53922	-93.6275
147738	2022/05/25	crabapple, flowering	Malus spp.	919 Titus Ave	1605469.192	560818.35	41.53921	-93.6277
147749	2022/05/25	crabapple, flowering	Malus spp.	334 E Park Ave	1610458.253	566730.41	41.55546	-93.6095
147750	2022/05/25	crabapple, flowering	Malus spp.	334 E Park Ave	1610498.709	566720.93	41.55543	-93.6093
147755	2022/05/27	crabapple, flowering	Malus spp.	706 Virginia Ave	1606582.609	567708.17	41.55813	-93.6236
147759	2022/05/27	crabapple, flowering	Malus spp.	803 Bell Ave	1606609.862	569628.31	41.5634	-93.6235
148511	2022/10/07	crabapple, flowering	Malus spp.	300 Franklin Ave	1606864.502	587064.13	41.61125	-93.6227
148514	2022/10/07	crabapple, flowering	Malus spp.	312 Franklin Ave	1606755.948	587065.02	41.61125	-93.6231
148516	2022/10/07	crabapple, flowering	Malus spp.	1825 Oakland Ave	1606672.333	587065.87	41.61125	-93.6234
148520	2022/10/07	crabapple, flowering	Malus spp.	410 Franklin Ave	1606376.743	587067.02	41.61125	-93.6245
148525	2022/10/07	crabapple, flowering	Malus spp.	510 Franklin Ave	1606278.459	587068.98	41.61126	-93.6248
148527	2022/10/07	crabapple, flowering	Malus spp.	512 Franklin Ave	1606209.141	587066.16	41.61125	-93.6251
148528	2022/10/07	crabapple, flowering	Malus spp.	514 Franklin Ave	1606109.024	587067.77	41.61126	-93.6255
148529	2022/10/06	crabapple, flowering	Malus spp.	1825 7th St	1605793.628	587065.3	41.61125	-93.6266
148535	2022/10/06	crabapple, flowering	Malus spp.	1821 8th St	1605504.461	587072.67	41.61127	-93.6277
148536	2022/10/08	crabapple, flowering	Malus spp.	1821 8th St	1605469.988	587073.45	41.61127	-93.6278
148537	2022/10/08	crabapple, flowering	Malus spp.	1821 8th St	1605439.915	587072.76	41.61127	-93.6279
148538	2022/10/08	crabapple, flowering	Malus spp.	1821 8th St	1605406.175	587072.81	41.61127	-93.628
148697	2022/11/03	crabapple, flowering	Malus spp.	1804 Arlington Ave	1606976.369	586719.55	41.6103	-93.6223
148734	2022/11/03	crabapple, flowering	Malus spp.	1530 Arlington Ave	1606966.439	585431.26	41.60677	-93.6223
148736	2022/11/03	crabapple, flowering	Malus spp.	1514 Arlington Ave	1606968.55	585367.68	41.60659	-93.6223
148754	2022/11/03	crabapple, flowering	Malus spp.	1805 Arlington Ave	1607024.625	586775.73	41.61046	-93.6221
148757	2022/11/03	crabapple, flowering	Malus spp.	1805 Arlington Ave	1607023.988	586844.42	41.61065	-93.6221
148758	2022/11/03	crabapple, flowering	Malus spp.	1817 Arlington Ave	1607024.67	586938.46	41.6109	-93.6221
148760	2022/11/03	crabapple, flowering	Malus spp.	1817 Arlington Ave	1607024.616	586900.1	41.6108	-93.6221
148895	2022/10/27	crabapple, flowering	Malus spp.	1629 E 27th Ct	1622963.604	586175.49	41.60886	-93.5638
148897	2022/10/27	crabapple, flowering	Malus spp.	1621 E 27th Ct	1622962.824	586111.91	41.60868	-93.5638

148900	2022/10/27	crabapple, flowering	Malus spp.	1615 E 27th Ct	1622964.234	586034.45	41.60847	-93.5638
148904	2022/10/27	crabapple, flowering	Malus spp.	2730 Kinsey Ave	1622964.888	585677.14	41.60749	-93.5638
148906	2022/10/27	crabapple, flowering	Malus spp.	2730 Kinsey Ave	1622965.962	585640.6	41.60739	-93.5638
148909	2022/10/27	crabapple, flowering	Malus spp.	2731 Kinsey Ave	1622964.395	585504.68	41.60702	-93.5638
148913	2022/10/27	crabapple, flowering	Malus spp.	2730 Indianapolis Ave	1622965.722	585313.22	41.60649	-93.5638
148915	2022/10/27	crabapple, flowering	Malus spp.	2730 Indianapolis Ave	1622967.162	585276.31	41.60639	-93.5638
148918	2022/10/27	crabapple, flowering	Malus spp.	2732 Chicago Ave	1622968.606	584745.03	41.60493	-93.5638
148925	2022/10/27	crabapple, flowering	Malus spp.	1325 E 27th Ct	1622968.729	584413.24	41.60402	-93.5638
148929	2022/10/27	crabapple, flowering	Malus spp.	1255 E 27th Ct	1622972.476	584021.16	41.60295	-93.5638
148930	2022/10/27	crabapple, flowering	Malus spp.	1253 E 27th Ct	1622971.709	583975.49	41.60282	-93.5638
148932	2022/10/27	crabapple, flowering	Malus spp.	1245 E 27th Ct	1622970.134	583827.5	41.60241	-93.5638
148933	2022/10/27	crabapple, flowering	Malus spp.	1241 E 27th Ct	1622970.832	583779.63	41.60228	-93.5638
148934	2022/10/27	crabapple, flowering	Malus spp.	1241 E 27th Ct	1622970.815	583756.6	41.60222	-93.5638
148937	2022/10/27	crabapple, flowering	Malus spp.	1223 E 27th Ct	1622969.129	583458.43	41.6014	-93.5638
148948	2022/10/27	crabapple, flowering	Malus spp.	1720 State Ave	1622910.511	584050.44	41.60303	-93.564
148949	2022/10/27	crabapple, flowering	Malus spp.	1720 State Ave	1622883.737	584051.56	41.60303	-93.5641
148950	2022/10/27	crabapple, flowering	Malus spp.	1720 State Ave	1622842.29	584052.32	41.60303	-93.5643
148951	2022/10/27	crabapple, flowering	Malus spp.	1720 State Ave	1622818.449	584051.6	41.60303	-93.5643
148952	2022/10/27	crabapple, flowering	Malus spp.	1720 State Ave	1622788.739	584051.63	41.60303	-93.5645
149023	2022/10/15	crabapple, flowering	Malus spp.	307 SE 28th St	1623159.742	577733.05	41.58569	-93.5631
149024	2022/10/15	crabapple, flowering	Malus spp.	307 SE 28th St	1623160.461	577713.31	41.58563	-93.5631
149050	2022/10/15	crabapple, flowering	Malus spp.	2716 E Elm St	1622622.511	577825.33	41.58594	-93.565
149086	2022/10/22	crabapple, flowering	Malus spp.	1111 11th St	1604961.11	576732.06	41.58289	-93.6296
149131	2022/10/01	crabapple, flowering	Malus spp.	3940 10th St	1604552.602	595026.04	41.63309	-93.6312
149135	2022/10/01	crabapple, flowering	Malus spp.	1020 Madison Ave	1604447.015	595024.74	41.63309	-93.6316
149136	2022/10/01	crabapple, flowering	Malus spp.	3950 11th St	1604264.448	595030.13	41.6331	-93.6322
149139	2022/10/01	crabapple, flowering	Malus spp.	3950 11th St	1604201.389	595029.49	41.6331	-93.6325
149143	2022/10/01	crabapple, flowering	Malus spp.	1116 Madison Ave	1604057.306	595028.25	41.63309	-93.633
149145	2022/10/01	crabapple, flowering	Malus spp.	3946 11th Pl	1603937.423	595028.44	41.63309	-93.6334
149147	2022/10/01	crabapple, flowering	Malus spp.	3946 11th Pl	1603855.665	595027.1	41.63309	-93.6337
149150	2022/10/01	crabapple, flowering	Malus spp.	3945 12th St	1603706.087	595028.43	41.63309	-93.6343
149155	2022/10/01	crabapple, flowering	Malus spp.	3948 12th St	1603548.079	595030.86	41.6331	-93.6349
149156	2022/10/01	crabapple, flowering	Malus spp.	3950 13th St	1603301.711	595029.79	41.6331	-93.6358
149157	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613356.818	585802.65	41.60781	-93.5989
149158	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613379.555	585800.8	41.6078	-93.5989
149159	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613398.995	585802.24	41.60781	-93.5988
149160	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613422.833	585801.48	41.60781	-93.5987
149162	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613494.901	585801.47	41.60781	-93.5984
149164	2022/10/01	crabapple, flowering	Malus spp.	3951 14th St	1603149.567	595031.12	41.6331	-93.6363
149167	2022/10/01	crabapple, flowering	Malus spp.	3951 14th St	1603043.612	595029.46	41.63309	-93.6367
149168	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613516.539	585800.35	41.6078	-93.5984
149169	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613541.848	585802.52	41.60781	-93.5983
149170	2022/11/18	crabapple, flowering	Malus spp.	1444 E Washington Ave	1613567.153	585801.76	41.60781	-93.5982
149172	2022/11/18	crabapple, flowering	Malus spp.	1550 E Washington Ave	1613651.513	585806.41	41.60782	-93.5979
149174	2022/11/18	crabapple, flowering	Malus spp.	1550 E Washington Ave	1613688.189	585806.37	41.60782	-93.5977
149175	2022/11/18	crabapple, flowering	Malus spp.	1550 E Washington Ave	1613716.795	585805.61	41.60782	-93.5976
149177	2022/11/18	crabapple, flowering	Malus spp.	1550 E Washington Ave	1613747.605	585807.04	41.60782	-93.5975
149180	2022/10/01	crabapple, flowering	Malus spp.	4000 12th St	1603611.549	595059.62	41.63318	-93.6346
149185	2022/11/18	crabapple, flowering	Malus spp.	1410 E 15th St	1613712.909	584957.55	41.60549	-93.5976
149186	2022/11/18	crabapple, flowering	Malus spp.	1410 E 15th St	1613713.665	584977.28	41.60555	-93.5976
149191	2022/11/18	crabapple, flowering	Malus spp.	1424 E 15th St	1613712.047	585169.84	41.60607	-93.5976
149209	2022/10/01	crabapple, flowering	Malus spp.	815 Madison Ave	1605380.984	595061.48	41.63319	-93.6282
149212	2022/10/01	crabapple, flowering	Malus spp.	801 Madison Ave	1605497.201	595060.94	41.63319	-93.6277
149214	2022/10/01	crabapple, flowering	Malus spp.	801 Madison Ave	1605511.992	595062.29	41.63319	-93.6275
149220	2022/10/01	crabapple, flowering	Malus spp.	4001 7th St	1606080.488	595061.55	41.63319	-93.6256
149242	2022/10/12	crabapple, flowering	Malus spp.	1512 E 15th St	1613715.428	585401.68	41.60671	-93.5976
149243	2022/10/12	crabapple, flowering	Malus spp.	1508 E 15th St	1613712.818	585363.68	41.60661	-93.5976
149245	2022/10/12	crabapple, flowering	Malus spp.	1508 E 15th St	1613713.853	585305.21	41.60645	-93.5976
149248	2022/10/12	crabapple, flowering	Malus spp.	1428 E 15th St	1613712.279	585210.22	41.60618	-93.5976
149249	2022/10/12	crabapple, flowering	Malus spp.	1406 E 15th St	1613710.105	584924.48	41.6054	-93.5977
149255	2022/11/18	crabapple, flowering	Malus spp.	1437 E Washington Ave	1613446.601	585752.02	41.60767	-93.5986
149258	2022/11/18	crabapple, flowering	Malus spp.	1441 E Washington Ave	1613588.171	585752.95	41.60767	-93.5981
149262	2022/11/18	crabapple, flowering	Malus spp.	1436 E Washington Ave	1613704.439	585757.94	41.60769	-93.5977
149266	2022/11/18	crabapple, flowering	Malus spp.	1534 McCormick St	1614627.95	585767.52	41.60772	-93.5943
149269	2022/11/18	crabapple, flowering	Malus spp.	1601 E Washington Ave	1614528.925	585767.62	41.60772	-93.5947
149290	2022/11/18	crabapple, flowering	Malus spp.	1406 E 16th St	1614385.107	584913.08	41.60537	-93.5952
149292	2022/11/18	crabapple, flowering	Malus spp.	1420 E 16th St	1614386.377	585067.64	41.6058	-93.5952
149296	2022/11/18	crabapple, flowering	Malus spp.	1510 E 16th St	1614383.808	585401.25	41.60671	-93.5952
149301	2022/11/21	crabapple, flowering	Malus spp.	801 Forest Ave	1605050.754	584673	41.60468	-93.6293
149308	2022/09/24	crabapple, flowering	Malus spp.	1225 9th St	1605052.767	583405.38	41.6012	-93.6293
149311	2022/09/24	crabapple, flowering	Malus spp.	1233 9th St	1605052.893	583490.52	41.60143	-93.6293
149321	2022/09/24	crabapple, flowering	Malus spp.	1234 9th St	1605015.173	583530.41	41.60154	-93.6294
149361	2022/05/07	crabapple, flowering	Malus spp.	5809 Snyder Ave	1586161.612	590721.18	41.62118	-93.6984
134600	2022/05/07	elm, American	Ulmus americana	504 E Locust St	1610099.327	579258.11	41.58984	-93.6108
148820	2022/10/29	elm, American	Ulmus americana	613 Spring St	1611863.909	560194.4	41.53752	-93.6043

148824	2022/10/29	elm, American	Ulmus americana	5216 SE 7th St	1611864.383	559977.87	41.53693	-93.6043
148826	2022/10/29	elm, American	Ulmus americana	5220 SE 7th St	1611863.926	559902.52	41.53672	-93.6043
148832	2022/10/29	elm, American	Ulmus americana	5314 SE 7th St	1611865.14	559539.42	41.53573	-93.6043
148834	2022/10/29	elm, American	Ulmus americana	700 E Kenyon Ave	1611931.864	559455.94	41.53555	-93.604
148837	2022/10/29	elm, American	Ulmus americana	5301 SE 7th St	1611899.17	559749.34	41.5363	-93.6042
148839	2022/10/29	elm, American	Ulmus americana	5225 SE 7th St	1611902.895	559793.96	41.53643	-93.6042
148841	2022/10/29	elm, American	Ulmus americana	5215 SE 7th St	1611902.682	559922.35	41.53678	-93.6042
148849	2022/10/29	elm, American	Ulmus americana	714 E Kenyon Ave	1612187.958	559453.41	41.53549	-93.6031
148852	2022/10/29	elm, American	Ulmus americana	5308 SE 8th St	1612227.29	559696.84	41.53616	-93.603
148853	2022/10/29	elm, American	Ulmus americana	5304 SE 8th St	1612225.141	559742.93	41.53629	-93.603
148854	2022/10/29	elm, American	Ulmus americana	5300 SE 8th St	1612228.134	559789.74	41.53642	-93.603
148863	2022/10/29	elm, American	Ulmus americana	5209 SE 8th St	1612264.05	560042.01	41.53711	-93.6028
148866	2022/10/29	elm, American	Ulmus americana	5217 SE 8th St	1612257.281	559906.68	41.53674	-93.6029
148870	2022/10/29	elm, American	Ulmus americana	5305 SE 8th St	1612263.662	559713.55	41.53621	-93.6028
148873	2022/10/29	elm, American	Ulmus americana	5313 SE 8th St	1612262.836	559636	41.53599	-93.6028
149064	2022/10/22	elm, American	Ulmus americana	811 Keosauqua Way	1605300.176	579501.32	41.59049	-93.6284
149071	2022/10/22	elm, American	Ulmus americana	0 Unassigned	1607339.832	578003.36	41.58638	-93.6209
149072	2022/10/22	elm, American	Ulmus americana	0 Unassigned	1607330.336	578034.07	41.58647	-93.6209
149080	2022/10/22	elm, American	Ulmus americana	520 Walnut St	1606378.964	577739.36	41.58566	-93.6244
149084	2022/10/22	elm, American	Ulmus americana	1001 Cherry St	1605062.602	576761.7	41.58297	-93.6292
149091	2022/10/22	elm, American	Ulmus americana	0 Unassigned	1604747.829	576901.25	41.58335	-93.6304
149092	2022/10/22	elm, American	Ulmus americana	1100 Walnut St	1604377.216	577112.35	41.58393	-93.6317
149094	2022/10/22	elm, American	Ulmus americana	1200 Locust St	1604032.492	577214.12	41.58421	-93.633
149100	2022/10/22	elm, American	Ulmus americana	0 Unassigned	1605236.876	577504.53	41.58501	-93.6286
149118	2022/10/01	elm, American	Ulmus americana	808 Madison Ave	1605532.934	595024.58	41.63309	-93.6276
149122	2022/10/01	elm, American	Ulmus americana	3936 8th Pl	1605266.767	595022.78	41.63308	-93.6286
149190	2022/10/01	elm, American	Ulmus americana	4000 11th St	1604192.595	595059.97	41.63318	-93.6325
8425	2022/04/23	elm, hybrid	Ulmus x	1809 SE 1st St	1609085.781	573336	41.57358	-93.6145
31603	2022/06/09	elm, hybrid	Ulmus x	2737 Easton Blvd	1623058.647	586445.02	41.6096	-93.5635
31604	2022/06/09	elm, hybrid	Ulmus x	2757 Easton Blvd	1623228.11	586518.32	41.6098	-93.5629
31605	2022/06/09	elm, hybrid	Ulmus x	2759 Easton Blvd	1623295.498	586502.82	41.60976	-93.5626
31608	2022/06/09	elm, hybrid	Ulmus x	2759 Easton Blvd	1623298.662	586402.45	41.60948	-93.5626
31751	2022/06/09	elm, hybrid	Ulmus x	2725 Easton Blvd	1622843.277	586351.85	41.60934	-93.5643
41643	2022/04/16	elm, hybrid	Ulmus x	1425 Idaho St	1613355.862	585153.38	41.60603	-93.5989
41670	2022/04/16	elm, hybrid	Ulmus x	1413 Hutton St	1614079.156	584958.97	41.6055	-93.5963
41673	2022/04/16	elm, hybrid	Ulmus x	1429 Hutton St	1614083.802	585181.55	41.60611	-93.5963
41676	2022/04/16	elm, hybrid	Ulmus x	1505 Hutton St	1614084.646	585334.41	41.60653	-93.5963
41715	2022/04/16	elm, hybrid	Ulmus x	1405 Idaho St	1613491.893	584828.68	41.60514	-93.5985
42064	2022/04/16	elm, hybrid	Ulmus x	1223 Hutton St	1614077.268	583723.27	41.60211	-93.5963
42076	2022/04/16	elm, hybrid	Ulmus x	1363 Hutton St	1614082.593	584625.23	41.60458	-93.5963
131595	2022/05/07	elm, hybrid	Ulmus x	508 10th St	1604596.272	578100	41.58664	-93.6309
131928	2022/05/07	elm, hybrid	Ulmus x	717 Grand Ave	1605546.585	578587.43	41.58798	-93.6275
131946	2022/05/07	elm, hybrid	Ulmus x	416 4th St	1606703.196	578632.64	41.58811	-93.6232
131981	2022/05/07	elm, hybrid	Ulmus x	999999 Unassigned	1607021.221	578721.62	41.58835	-93.6221
132055	2022/05/07	elm, hybrid	Ulmus x	717 Grand Ave	1605621.056	578395.61	41.58745	-93.6272
132288	2022/05/07	elm, hybrid	Ulmus x	303 Locust St	1607179.193	578557.54	41.5879	-93.6215
143971	2022/05/07	elm, hybrid	Ulmus x	612 Locust St	1605954.506	578066.88	41.58655	-93.626
146319	2022/05/07	elm, hybrid	Ulmus x	500 Grand Ave	1606428.305	578556.35	41.5879	-93.6242
146638	2022/04/16	elm, hybrid	Ulmus x	1522 E University Ave	1614075.394	583404.82	41.60123	-93.5963
146643	2022/04/16	elm, hybrid	Ulmus x	999999 Hutton St	1614082.842	584168.16	41.60333	-93.5963
146655	2022/04/16	elm, hybrid	Ulmus x	1402 Hutton St	1613917.837	584828.41	41.60514	-93.5969
146658	2022/04/16	elm, hybrid	Ulmus x	1401 E 15th St	1613767.826	584828.21	41.60514	-93.5974
146661	2022/04/16	elm, hybrid	Ulmus x	1402 E 15th St	1613558.031	584828.08	41.60514	-93.5982
146665	2022/04/16	elm, hybrid	Ulmus x	1416 Cleveland Ave	1613168.151	584828.53	41.60514	-93.5996
146751	2022/04/23	elm, hybrid	Ulmus x	106 E Granger Ave	1609271.171	573859.25	41.57502	-93.6138
146759	2022/04/23	elm, hybrid	Ulmus x	1721 SE 1st St	1609147.788	573511.76	41.57406	-93.6143
146760	2022/04/23	elm, hybrid	Ulmus x	1722 SE 1st St	1609110.767	573542.88	41.57415	-93.6144
146770	2022/04/23	elm, hybrid	Ulmus x	1811 SE 1st St	1609073.023	573303.48	41.57349	-93.6146
146771	2022/04/23	elm, hybrid	Ulmus x	202 E Edison Ave	1609433.033	573044.55	41.57278	-93.6132
146772	2022/04/23	elm, hybrid	Ulmus x	208 E Edison Ave	1609511.529	573019.96	41.57272	-93.6129
146774	2022/04/23	elm, hybrid	Ulmus x	224 E Edison Ave	1609672.187	572966.37	41.57257	-93.6124
146775	2022/04/23	elm, hybrid	Ulmus x	244 E Edison Ave	1609820.376	572918.29	41.57244	-93.6118
146783	2022/04/23	elm, hybrid	Ulmus x	309 E Edison Ave	1609965.994	572868.75	41.5723	-93.6113
146961	2022/05/07	elm, hybrid	Ulmus x	603 E 6th St	1610509.126	580150.82	41.59229	-93.6093
147286	2022/06/09	elm, hybrid	Ulmus x	2525 Easton Blvd	1621290.606	585681.39	41.6075	-93.5699
147290	2022/06/09	elm, hybrid	Ulmus x	2527 Easton Blvd	1621435.526	585743.03	41.60767	-93.5694
147293	2022/06/09	elm, hybrid	Ulmus x	2529 Easton Blvd	1621583.011	585803.56	41.60783	-93.5689
147297	2022/06/09	elm, hybrid	Ulmus x	2601 Easton Blvd	1621763.201	585887.52	41.60806	-93.5682
147309	2022/06/09	elm, hybrid	Ulmus x	2655 Easton Blvd	1622471.638	586191.33	41.6089	-93.5656
147312	2022/06/09	elm, hybrid	Ulmus x	2707 Easton Blvd	1622635.998	586263.55	41.6091	-93.565
147313	2022/06/09	elm, hybrid	Ulmus x	2707 Easton Blvd	1622671.95	586277.41	41.60914	-93.5649
147314	2022/06/09	elm, hybrid	Ulmus x	2707 Easton Blvd	1622698.732	586290.18	41.60917	-93.5648
147316	2022/06/09	elm, hybrid	Ulmus x	2723 Easton Blvd	1622809.159	586337.6	41.6093	-93.5644
147317	2022/06/09	elm, hybrid	Ulmus x	2727 Easton Blvd	1622879.964	586367.87	41.60939	-93.5641
147321	2022/06/09	elm, hybrid	Ulmus x	2759 Easton Blvd	1623276.177	586538.21	41.60985	-93.5627

147324	2022/06/09	elm, hybrid	Ulmus x	2825 Easton Blvd	1623530.5	586645.79	41.61015	-93.5617
147455	2022/05/13	elm, hybrid	Ulmus x	2836 Sweetwater Dr	1623709.635	555564.27	41.52485	-93.561
147456	2022/05/13	elm, hybrid	Ulmus x	2836 Sweetwater Dr	1623728.374	555578.89	41.52489	-93.5609
147457	2022/05/13	elm, hybrid	Ulmus x	2836 Sweetwater Dr	1623735.009	555614.37	41.52499	-93.5609
147458	2022/05/13	elm, hybrid	Ulmus x	2836 Sweetwater Dr	1623751.913	555631.55	41.52503	-93.5609
147459	2022/05/13	elm, hybrid	Ulmus x	2836 Sweetwater Dr	1623769.184	555647.64	41.52508	-93.5608
147493	2022/05/13	elm, hybrid	Ulmus x	3009 E Payton Ave	1625119.599	556620.59	41.52775	-93.5559
147494	2022/05/13	elm, hybrid	Ulmus x	3009 E Payton Ave	1625136.504	556642.53	41.52781	-93.5558
148173	2022/07/07	elm, hybrid	Ulmus x	909 Locust St	1605022.909	578160	41.58681	-93.6294
148444	2022/05/07	elm, hybrid	Ulmus x	1519 Grand Ave	1602584.81	577596.4	41.58525	-93.6383
148445	2022/05/07	elm, hybrid	Ulmus x	1519 Grand Ave	1602578.973	577617.25	41.58531	-93.6383
148827	2022/10/29	elm, slippery	Ulmus rubra	5222 SE 7th St	1611865.171	559871.55	41.53664	-93.6043
148829	2022/10/29	elm, slippery	Ulmus rubra	5226 SE 7th St	1611865.453	559800.95	41.53645	-93.6043
15513	2022/11/01	elm, spp.	Ulmus spp.	3322 Aurora Ave	1595494.124	596244.41	41.63639	-93.6643
148590	2022/10/08	elm, spp.	Ulmus spp.	1511 South Union St	1609066.418	574206.24	41.57597	-93.6146
148601	2022/10/08	elm, spp.	Ulmus spp.	12 Livingston Ave	1608916.867	574560.18	41.57694	-93.6151
148605	2022/10/08	elm, spp.	Ulmus spp.	10 Livingston Ave	1609068.718	574512.82	41.57681	-93.6146
148611	2022/10/08	elm, spp.	Ulmus spp.	111 Jackson Ave	1608503.163	574363.02	41.5764	-93.6166
148616	2022/10/08	elm, spp.	Ulmus spp.	1403 SW 1st St	1608986.854	574890.86	41.57785	-93.6149
148621	2022/10/08	elm, spp.	Ulmus spp.	1400 South Union St	1609191.58	574781.64	41.57755	-93.6141
148769	2022/09/17	elm, spp.	Ulmus spp.	1730 8th St	1605229.061	586661.51	41.61014	-93.6287
148770	2022/09/17	elm, spp.	Ulmus spp.	820 Jefferson Ave	1605174.05	586662.32	41.61014	-93.6289
148771	2022/09/17	elm, spp.	Ulmus spp.	820 Jefferson Ave	1605121.241	586664.23	41.61014	-93.6291
148783	2022/09/17	elm, spp.	Ulmus spp.	1807 7th St	1605609.244	586696.83	41.61024	-93.6273
148791	2022/09/17	elm, spp.	Ulmus spp.	1631 7th St	1605809.881	586211.32	41.6089	-93.6265
148810	2022/09/17	elm, spp.	Ulmus spp.	825 Washington Ave	1605074.965	586249.3	41.60901	-93.6292
148818	2022/09/17	elm, spp.	Ulmus spp.	1701 Washington Ave	1605472.521	586246.89	41.609	-93.6278
148995	2022/10/15	elm, spp.	Ulmus spp.	2681 E Market St	1622205.07	578157.38	41.58685	-93.5666
149001	2022/10/15	elm, spp.	Ulmus spp.	2708 E Market St	1622467.756	578160.1	41.58686	-93.5656
149014	2022/10/15	elm, spp.	Ulmus spp.	2754 E Elm St	1623115.12	577923.14	41.58621	-93.5632
149033	2022/10/15	elm, spp.	Ulmus spp.	2746 Elm St	1622960.623	577867.22	41.58606	-93.5638
149038	2022/10/15	elm, spp.	Ulmus spp.	2736 E Elm St	1622801.396	577866.98	41.58606	-93.5644
149123	2022/10/01	elm, spp.	Ulmus spp.	3936 8th Pl	1605218.374	595022.85	41.63308	-93.6288
149125	2022/10/01	elm, spp.	Ulmus spp.	3947 9th St	1605088.595	595025.24	41.63309	-93.6292
149298	2022/11/21	elm, spp.	Ulmus spp.	1441 9th St	1605051.916	584960.93	41.60547	-93.6293
149304	2022/11/21	elm, spp.	Ulmus spp.	801 Forest Ave	1605050.573	584551.33	41.60435	-93.6293
149310	2022/11/21	elm, spp.	Ulmus spp.	1345 Forest Ave	1605050.147	584264.85	41.60356	-93.6293
149317	2022/09/24	elm, spp.	Ulmus spp.	1331 Forest Ave	1605049.541	584104.07	41.60312	-93.6293
149320	2022/09/24	elm, spp.	Ulmus spp.	1236 9th St	1605015.638	583596.91	41.60173	-93.6294
149323	2022/09/24	elm, spp.	Ulmus spp.	1319 Forest Ave	1605050.106	583990.43	41.60281	-93.6293
149325	2022/09/24	elm, spp.	Ulmus spp.	1311 Forest Ave	1605057.321	583909.3	41.60258	-93.6293
149330	2022/09/24	elm, spp.	Ulmus spp.	1424 9th St	1605010.701	584807.79	41.60505	-93.6295
149333	2022/09/24	elm, spp.	Ulmus spp.	1424 9th St	1605010.229	584737.26	41.60486	-93.6295
149342	2022/09/24	elm, spp.	Ulmus spp.	1328 9th St	1605015.143	584095.97	41.6031	-93.6294
149347	2022/09/24	elm, spp.	Ulmus spp.	1312 9th St	1605017.12	583853.06	41.60243	-93.6294
149354	2022/11/01	elm, spp.	Ulmus spp.	700 4th St	1606444.641	579529.08	41.59057	-93.6242
1035	2022/04/09	hackberry, common	Celtis occidentalis	3114 Cottage Grove Ave	1596628.431	582416.71	41.59845	-93.6601
1037	2022/04/09	hackberry, common	Celtis occidentalis	3102 Cottage Grove Ave	1596779.674	582416.35	41.59845	-93.6595
1216	2022/04/09	hackberry, common	Celtis occidentalis	1094 28th St	1598083.06	582413.44	41.59845	-93.6548
32116	2022/05/21	hackberry, common	Celtis occidentalis	4231 Forest Ave	1592251.15	584470.65	41.60406	-93.6761
37166	2022/05/21	hackberry, common	Celtis occidentalis	1910 46th St	1591099.359	587296.26	41.61181	-93.6803
146620	2022/04/09	hackberry, common	Celtis occidentalis	2816 Cottage Grove Ave	1597694.708	582416	41.59845	-93.6562
146622	2022/04/09	hackberry, common	Celtis occidentalis	2822 Cottage Grove Ave	1597548.716	582415.53	41.59845	-93.6567
146625	2022/04/09	hackberry, common	Celtis occidentalis	3102 Cottage Grove Ave	1596804.308	582335.03	41.59823	-93.6595
146628	2022/04/09	hackberry, common	Celtis occidentalis	3130 Cottage Grove Ave	1596381.524	582416.93	41.59845	-93.661
146630	2022/04/09	hackberry, common	Celtis occidentalis	3300 Cottage Grove Ave	1596125.86	582418.87	41.59845	-93.6619
146632	2022/04/09	hackberry, common	Celtis occidentalis	3400 Cottage Grove Ave	1595925.212	582418.15	41.59845	-93.6627
146633	2022/04/09	hackberry, common	Celtis occidentalis	3412 Cottage Grove Ave	1595729.702	582418.51	41.59845	-93.6634
146635	2022/04/09	hackberry, common	Celtis occidentalis	3424 Cottage Grove Ave	1595551.798	582418.12	41.59845	-93.664
146821	2022/05/21	hackberry, common	Celtis occidentalis	1440 44th St	1591775.819	585018.69	41.60556	-93.6779
146825	2022/05/21	hackberry, common	Celtis occidentalis	4231 Forest Ave	1592173.438	584494.99	41.60413	-93.6764
146828	2022/05/21	hackberry, common	Celtis occidentalis	1409 43rd St	1592168.565	584624.35	41.60448	-93.6764
147407	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623161.107	555139.49	41.52368	-93.563
147408	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623170.669	555158.87	41.52373	-93.563
147409	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623182.068	555178.98	41.52379	-93.5629
147410	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623196.402	555195.44	41.52384	-93.5629
147411	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623210.368	555211.16	41.52388	-93.5628
147424	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624221.021	555871.59	41.52569	-93.5591
147425	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624251.508	555883.27	41.52573	-93.559
147434	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623337.791	555267.1	41.52403	-93.5624
147435	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623357.265	555282.09	41.52407	-93.5623
147436	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623375.271	555298.17	41.52412	-93.5622
147437	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623394.745	555313.89	41.52416	-93.5622
147438	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623411.647	555327.78	41.5242	-93.5621
147439	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623436.264	555344.96	41.52425	-93.562

147440	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623455.004	555361.41	41.52429	-93.5619
147441	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623471.541	555377.13	41.52433	-93.5619
147442	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623489.546	555393.21	41.52438	-93.5618
147443	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623506.816	555407.83	41.52442	-93.5618
147454	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1623689.428	555549.65	41.52481	-93.5611
147463	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624036.529	555769.68	41.52541	-93.5598
147464	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624075.833	555786.49	41.52546	-93.5597
147466	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624152.962	555804.36	41.52551	-93.5594
147467	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624186.758	555820.8	41.52555	-93.5593
147468	2022/05/13	hackberry, common	Celtis occidentalis	2836 Sweetwater Dr	1624217.246	555834.68	41.52559	-93.5592
147481	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1624872.656	556347.11	41.527	-93.5568
147482	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1624909.391	556367.58	41.52706	-93.5566
147504	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625467.524	556906.08	41.52853	-93.5546
147505	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625477.462	556943.02	41.52864	-93.5546
147518	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625473.201	557174.59	41.52927	-93.5546
147519	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625477.619	557193.61	41.52932	-93.5546
147520	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625484.606	557208.97	41.52937	-93.5545
147521	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625495.997	557222.86	41.5294	-93.5545
147522	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625509.591	557234.19	41.52943	-93.5544
147523	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625521.716	557246.99	41.52947	-93.5544
147561	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1624982.477	556384.72	41.5271	-93.5564
147563	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625016.631	556389.46	41.52712	-93.5562
147564	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625032.073	556418.71	41.5272	-93.5562
147566	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625116.256	556562.06	41.52759	-93.5559
147571	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625165.861	556611.78	41.52773	-93.5557
147572	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625168.085	556643.97	41.52781	-93.5557
147577	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625355.83	556803.72	41.52825	-93.5555
147578	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625392.555	556811.38	41.52827	-93.5549
147580	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625432.59	556827.08	41.52832	-93.5547
147583	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625494.692	556898.02	41.52851	-93.5545
147585	2022/05/13	hackberry, common	Celtis occidentalis	3009 E Payton Ave	1625504.634	556941.18	41.52863	-93.5545
148596	2022/10/08	hackberry, common	Celtis occidentalis	1414 SW 1st St	1608809.229	574743.47	41.57744	-93.6155
148600	2022/10/08	hackberry, common	Celtis occidentalis	1400 SW 1st St	1608860.792	574888.89	41.57784	-93.6153
148602	2022/10/08	hackberry, common	Celtis occidentalis	10 Livingston Ave	1608968.952	574545.49	41.5769	-93.6149
148609	2022/10/08	hackberry, common	Celtis occidentalis	111 Jackson Ave	1608631.566	574344.57	41.57635	-93.6162
148618	2022/10/08	hackberry, common	Celtis occidentalis	1400 South Union St	1609113.872	574843.16	41.57772	-93.6144
148695	2022/11/03	hackberry, common	Celtis occidentalis	1808 Arlington Ave	1606978.301	586790.06	41.6105	-93.6223
148699	2022/11/03	hackberry, common	Celtis occidentalis	1730 Arlington Ave	1606979.91	586630.03	41.61006	-93.6223
148724	2022/11/03	hackberry, common	Celtis occidentalis	1635 Arlington Ave	1607024.746	586173.25	41.6088	-93.6221
148742	2022/11/03	hackberry, common	Celtis occidentalis	1523 Arlington Ave	1607003.678	585309.16	41.60643	-93.6222
148768	2022/09/17	hackberry, common	Celtis occidentalis	1730 8th St	1605269.407	586664.37	41.61015	-93.6285
148772	2022/09/17	hackberry, common	Celtis occidentalis	820 Jefferson Ave	1605084.934	586664.28	41.61014	-93.6292
148784	2022/09/17	hackberry, common	Celtis occidentalis	1807 7th St	1605640.417	586696.42	41.61023	-93.6272
148997	2022/10/15	hackberry, common	Celtis occidentalis	2681 E Market St	1622261.57	578158.06	41.58685	-93.5664
149003	2022/10/15	hackberry, common	Celtis occidentalis	2711 E Market St	1622542.598	578159.31	41.58686	-93.5653
149009	2022/10/15	hackberry, common	Celtis occidentalis	2727 E Market St	1622863.25	578162	41.58687	-93.5642
149028	2022/10/15	hackberry, common	Celtis occidentalis	2736 Raccoon St	1623114.859	577563.38	41.58522	-93.5632
149032	2022/10/15	hackberry, common	Celtis occidentalis	2746 E Elm St	1622977.866	577867.58	41.58606	-93.5637
149041	2022/10/15	hackberry, common	Celtis occidentalis	2700 E Elm St	1622360.402	577861.82	41.58604	-93.566
149061	2022/10/22	hackberry, common	Celtis occidentalis	941 8th St	1605685.48	580766.67	41.59396	-93.627
149281	2022/11/18	hackberry, common	Celtis occidentalis	1433 E 16th St	1614416.268	585150.66	41.60602	-93.5951
149282	2022/11/18	hackberry, common	Celtis occidentalis	1423 E 16th St	1614418.423	585109.01	41.60591	-93.5951
149284	2022/11/18	hackberry, common	Celtis occidentalis	1405 E 16th St	1614418.816	584881.62	41.60529	-93.5951
149273	2022/11/18	hawthorn, cockspur	Crataegus crugalli	1601 E Washington Ave	1614414.809	585718.79	41.60758	-93.5951
8339	2022/04/23	hawthorn, green	Crataegus viridis	237 E Edison Ave	1609750.02	572907.05	41.57241	-93.6121
32159	2022/05/21	hawthorn, green	Crataegus viridis	4120 College Ave	1592757.338	585755.64	41.60759	-93.6743
36351	2022/05/21	hawthorn, green	Crataegus viridis	1424 47th St	1590791.9	584811.87	41.60499	-93.6815
37104	2022/05/21	hawthorn, green	Crataegus viridis	1921 46th St	1591138.06	587414.11	41.61213	-93.6802
146748	2022/04/23	hawthorn, green	Crataegus viridis	1602 SE 1st St	1609279.457	574022.28	41.57547	-93.6138
146750	2022/04/23	hawthorn, green	Crataegus viridis	1616 SE 1st St	1609212.055	573830.82	41.57494	-93.614
146754	2022/04/23	hawthorn, green	Crataegus viridis	21 E Granger Ave	1609170.068	573712.43	41.57462	-93.6142
146761	2022/04/23	hawthorn, green	Crataegus viridis	1800 SE 1st St	1609070.621	573429.97	41.57384	-93.6146
146764	2022/04/23	hawthorn, green	Crataegus viridis	1800 SE 1st St	1609042.266	573353.97	41.57363	-93.6147
146777	2022/04/23	hawthorn, green	Crataegus viridis	203 E Edison Ave	1609372.833	573030.37	41.57274	-93.6135
146780	2022/04/23	hawthorn, green	Crataegus viridis	225 E Edison Ave	1609641.702	572945.21	41.57251	-93.6125
146784	2022/04/23	hawthorn, green	Crataegus viridis	302 E Edison Ave	1609952.832	572906.06	41.5724	-93.6113
146787	2022/04/23	hawthorn, green	Crataegus viridis	306 E Edison Ave	1610042.339	572882.18	41.57234	-93.6111
146819	2022/05/21	hawthorn, green	Crataegus viridis	2201 46th St	1591128.483	588116.38	41.61406	-93.6802
146833	2022/05/21	hawthorn, green	Crataegus viridis	4125 College Ave	1592855.897	585765.71	41.60762	-93.6739
146843	2022/04/22	hawthorn, green	Crataegus viridis	100 McKinley Ave	1608895.92	561472.9	41.54102	-93.6151
146847	2022/04/22	hawthorn, green	Crataegus viridis	100 McKinley Ave	1608982.566	561474.24	41.54103	-93.6148
146861	2022/04/22	hawthorn, green	Crataegus viridis	4716 SE 3rd St	1609481.133	561473.59	41.54103	-93.613
146865	2022/04/22	hawthorn, green	Crataegus viridis	306 E McKinley Ave	1609668.737	561472.62	41.54103	-93.6123
146868	2022/04/22	hawthorn, green	Crataegus viridis	310 E McKinley Ave	1609752.075	561471.41	41.54102	-93.612
146870	2022/04/22	hawthorn, green	Crataegus viridis	322 E McKinley Ave	1609883.507	561470.15	41.54102	-93.6115

146874	2022/04/22	hawthorn, green	Crataegus viridis	340 E McKinley Ave	1610114.434	561469.49	41.54102	-93.6107
146879	2022/04/22	hawthorn, green	Crataegus viridis	354 E McKinley Ave	1610302.405	561468.52	41.54102	-93.61
146880	2022/04/22	hawthorn, green	Crataegus viridis	354 E McKinley Ave	1610341.321	561467.73	41.54101	-93.6099
146893	2022/04/22	hawthorn, green	Crataegus viridis	430 E McKinley Ave	1610896.055	561463.38	41.541	-93.6078
146894	2022/04/22	hawthorn, green	Crataegus viridis	430 E McKinley Ave	1610932.034	561463.7	41.54101	-93.6077
146898	2022/04/22	hawthorn, green	Crataegus viridis	430 E McKinley Ave	1611058.324	561459.89	41.541	-93.6072
146925	2022/07/07	hawthorn, green	Crataegus viridis	333 E McKinley Ave	1610291.693	561416.92	41.54087	-93.61
146927	2022/07/07	hawthorn, green	Crataegus viridis	321 E McKinley Ave	1610227.077	561417	41.54087	-93.6103
146929	2022/04/22	hawthorn, green	Crataegus viridis	321 E McKinley Ave	1610174.945	561417.8	41.54088	-93.6105
146930	2022/04/22	hawthorn, green	Crataegus viridis	321 E McKinley Ave	1610154.752	561417.09	41.54087	-93.6105
149270	2022/11/18	hawthorn, green	Crataegus viridis	1601 E Washington Ave	1614497.384	585767.66	41.60772	-93.5948
147731	2022/05/27	hawthorn, spp.	Crataegus spp.	5809 SE 25th St	1621090.663	557619.99	41.53048	-93.5706
149088	2022/10/22	hawthorn, spp.	Crataegus spp.	1111 11th St	1604920.001	576720.79	41.58285	-93.6297
149229	2022/10/01	hawthorn, spp.	Crataegus spp.	4413 Bel Aire Rd	1591512.562	598136.41	41.64156	-93.6789
149234	2022/10/01	hawthorn, spp.	Crataegus spp.	3837 Urbandale Ave	1594096.379	590008.69	41.61927	-93.6694
149265	2022/11/18	hawthorn, spp.	Crataegus spp.	1534 McCormick St	1614669.026	585766.74	41.60772	-93.5941
149268	2022/11/18	hawthorn, spp.	Crataegus spp.	1601 E Washington Ave	1614545.061	585766.51	41.60771	-93.5946
149274	2022/11/18	hawthorn, spp.	Crataegus spp.	1531 E 16th St	1614411.443	585658.87	41.60742	-93.5951
149289	2022/11/18	hawthorn, spp.	Crataegus spp.	1404 E 16th St	1614384.315	584859.73	41.60523	-93.5952
149291	2022/11/18	hawthorn, spp.	Crataegus spp.	1420 E 16th St	1614386.699	585026.72	41.60568	-93.5952
11853	2022/04/28	hickory, shagbark	Carya ovata	3934 48th St	1590392.603	594804.33	41.63241	-93.683
11855	2022/04/28	hickory, shagbark	Carya ovata	3934 48th St	1590310.958	594772.32	41.63232	-93.6833
11857	2022/04/28	hickory, shagbark	Carya ovata	4808 Fleming Ave	1590224.674	594728.25	41.6322	-93.6836
146692	2022/04/28	hickory, shagbark	Carya ovata	4750 Madison Ave	1590422.354	595005.23	41.63296	-93.6829
146696	2022/04/28	hickory, shagbark	Carya ovata	3916 48th St	1590367.838	594534.91	41.63167	-93.6831
146698	2022/04/28	hickory, shagbark	Carya ovata	3916 48th St	1590271.617	594456.95	41.63146	-93.6834
35753	2022/10/08	honeylocust	Gleditsia triacanthos	717 Franklin Ave	1605378.79	587146.22	41.61147	-93.6281
35757	2022/11/01	honeylocust	Gleditsia triacanthos	1917 8th St	1605378.267	587349.24	41.61203	-93.6281
35764	2022/11/01	honeylocust	Gleditsia triacanthos	810 Hickman Rd	1605200.592	587647.63	41.61284	-93.6288
39390	2022/10/07	honeylocust	Gleditsia triacanthos	409 Franklin Ave	1606514.756	587105.54	41.61136	-93.624
39393	2022/10/07	honeylocust	Gleditsia triacanthos	509 Franklin Ave	1606421.315	587105.78	41.61136	-93.6243
39396	2022/10/07	honeylocust	Gleditsia triacanthos	511 Franklin Ave	1606322.693	587106.19	41.61136	-93.6247
52195	2022/11/14	honeylocust	Gleditsia triacanthos	1700 7th St	1605550.384	586244.54	41.60899	-93.6275
148490	2022/09/30	honeylocust	Gleditsia triacanthos	717 Franklin Ave	1605502.854	587109.05	41.61137	-93.6277
148494	2022/09/28	honeylocust	Gleditsia triacanthos	814 Hickman Rd	1605163.362	587677.2	41.61292	-93.6289
148501	2022/11/01	honeylocust	Gleditsia triacanthos	806 Hickman Rd	1605264.346	587643.07	41.61283	-93.6285
148502	2022/11/01	honeylocust	Gleditsia triacanthos	806 Hickman Rd	1605341.319	587615.92	41.61276	-93.6283
148521	2022/10/07	honeylocust	Gleditsia triacanthos	517 Franklin Ave	1606208.466	587106.9	41.61136	-93.6251
148691	2022/11/03	honeylocust	Gleditsia triacanthos	300 Franklin Ave	1606978.256	587018.41	41.61112	-93.6223
148692	2022/11/03	honeylocust	Gleditsia triacanthos	1818 Arlington Ave	1606982.198	586953.37	41.61095	-93.6223
148720	2022/11/03	honeylocust	Gleditsia triacanthos	1611 Arlington Ave	1607028.198	586019.78	41.60838	-93.6221
148726	2022/11/03	honeylocust	Gleditsia triacanthos	1639 Arlington Ave	1607027.071	586262.39	41.60905	-93.6221
148727	2022/11/03	honeylocust	Gleditsia triacanthos	1641 Arlington Ave	1607024.187	586298.21	41.60915	-93.6221
148741	2022/11/03	honeylocust	Gleditsia triacanthos	1511 Arlington Ave	1607003.61	585260.93	41.6063	-93.6222
148746	2022/11/03	honeylocust	Gleditsia triacanthos	1537 Arlington Ave	1607002.623	585602.94	41.60724	-93.6222
148747	2022/11/03	honeylocust	Gleditsia triacanthos	1701 Arlington Ave	1607028.444	586361.14	41.60932	-93.6221
148779	2022/09/17	honeylocust	Gleditsia triacanthos	1805 8th St	1605417.255	586697.77	41.61024	-93.628
148795	2022/09/17	honeylocust	Gleditsia triacanthos	1630 7th St	1605598.265	586211.63	41.6089	-93.6273
149228	2022/10/01	honeylocust	Gleditsia triacanthos	6821 Sweetwater Dr	1622990.97	554581.83	41.52215	-93.5636
31606	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2759 Easton Blvd	1623298.21	586474.34	41.60968	-93.5626
50616	2022/05/18	honeylocust, thornless	Gleditsia triacanthos inermis	400 4th St	1607005.574	577880.81	41.58605	-93.6221
134853	2022/07/05	honeylocust, thornless	Gleditsia triacanthos inermis	420 Court Ave	1607175.793	577276.19	41.58439	-93.6215
147285	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2525 Easton Blvd	1621227.868	585653.67	41.60742	-93.5702
147298	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2611 Kinsey Ave	1621802.825	585905.03	41.60811	-93.5681
147299	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2611 Kinsey Ave	1621860.057	585928	41.60818	-93.5679
147308	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2655 Easton Blvd	1622441.189	586178.93	41.60887	-93.5657
147315	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2707 Easton Blvd	1622727.348	586302.58	41.60921	-93.5647
147318	2022/06/09	honeylocust, thornless	Gleditsia triacanthos inermis	2735 Easton Blvd	1622987.823	586415.29	41.60952	-93.5637
147414	2022/05/13	honeylocust, thornless	Gleditsia triacanthos inermis	2836 Sweetwater Dr	1623270.988	555249.53	41.52398	-93.5626
147415	2022/05/13	honeylocust, thornless	Gleditsia triacanthos inermis	2836 Sweetwater Dr	1623291.562	555261.59	41.52402	-93.5625
147416	2022/05/13	honeylocust, thornless	Gleditsia triacanthos inermis	2836 Sweetwater Dr	1623336.389	555297.04	41.52411	-93.5624
147417	2022/05/13	honeylocust, thornless	Gleditsia triacanthos inermis	2836 Sweetwater Dr	1623354.761	555311.29	41.52415	-93.5623
148700	2022/11/03	honeylocust, thornless	Gleditsia triacanthos inermis	1730 Arlington Ave	1606979.139	586603.35	41.60998	-93.6223
148723	2022/11/03	honeylocust, thornless	Gleditsia triacanthos inermis	1615 Arlington Ave	1607025.43	586138.17	41.60871	-93.6221
146296	2022/05/07	hophornbeam, American	Ostrya virginiana	511 E 6th St	1610258.439	580031.83	41.59196	-93.6103
146297	2022/05/07	hophornbeam, American	Ostrya virginiana	511 E 6th St	1610283.757	580036.19	41.59197	-93.6102
146298	2022/05/07	hophornbeam, American	Ostrya virginiana	511 E 6th St	1610330.733	580051.48	41.59202	-93.61
146299	2022/05/07	hophornbeam, American	Ostrya virginiana	511 E 6th St	1610363.394	580060.57	41.59204	-93.6099
146302	2022/05/07	hophornbeam, American	Ostrya virginiana	625 Des Moines St	1610504.679	580099.5	41.59215	-93.6094
146303	2022/05/07	hophornbeam, American	Ostrya virginiana	625 Des Moines St	1610529.633	580105.68	41.59217	-93.6093
146960	2022/05/07	hophornbeam, American	Ostrya virginiana	603 E 6th St	1610488.577	580146.09	41.59228	-93.6094
147339	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622267.21	564321.1	41.54888	-93.5663
147340	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622300.803	564321.39	41.54888	-93.5662
147345	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622365.312	564191.52	41.54852	-93.5659
147346	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622363.09	564165.19	41.54845	-93.566

147347	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622363.432	564131.91	41.54836	-93.566
147348	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1622360.838	564100.46	41.54827	-93.566
147369	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1623177.294	564030.71	41.54808	-93.563
147370	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1623215.105	564030.32	41.54808	-93.5628
147371	2022/05/14	hophornbeam, American	Ostrya virginiana	2620 E Watrous Ave	1623248.51	564030.3	41.54808	-93.5627
148917	2022/10/27	hophornbeam, American	Ostrya virginiana	2732 Cleveland Ave	1622967.707	585020.17	41.60569	-93.5638
148919	2022/10/27	hophornbeam, American	Ostrya virginiana	2732 Chicago Ave	1622968.584	584715.8	41.60485	-93.5638
148921	2022/10/27	hophornbeam, American	Ostrya virginiana	2735 Chicago Ave	1622968.844	584568.91	41.60445	-93.5638
148923	2022/10/27	hophornbeam, American	Ostrya virginiana	2735 Chicago Ave	1622970.994	584499.84	41.60426	-93.5638
149239	2022/10/12	hophornbeam, American	Ostrya virginiana	1532 E 15th St	1613711.876	585670.82	41.60745	-93.5976
149246	2022/10/12	hophornbeam, American	Ostrya virginiana	1508 E 15th St	1613712.358	585280	41.60638	-93.5976
149254	2022/11/18	hophornbeam, American	Ostrya virginiana	1437 E Washington Ave	1613399.655	585752.07	41.60767	-93.5988
149261	2022/11/18	hophornbeam, American	Ostrya virginiana	1436 E Washington Ave	1613686.834	585752.23	41.60769	-93.5977
149275	2022/11/18	hophornbeam, American	Ostrya virginiana	1527 E 16th St	1614411.956	585609.76	41.60728	-93.5951
149309	2022/09/24	hophornbeam, American	Ostrya virginiana	1229 9th St	1605051.032	583472.25	41.60138	-93.6293
149322	2022/09/24	hophornbeam, American	Ostrya virginiana	1230 9th St	1605015.505	583507.02	41.60148	-93.6294
149340	2022/09/24	hophornbeam, American	Ostrya virginiana	1308 9th St	1605015.858	583744.17	41.60213	-93.6294
1588	2022/04/21	hornbeam, American	Carpinus caroliniana	2314 University Ave	1599703.004	583104.4	41.60035	-93.6489
140935	2022/04/21	hornbeam, American	Carpinus caroliniana	2328 University Ave	1599557.125	583104.99	41.60035	-93.6494
140937	2022/04/21	hornbeam, American	Carpinus caroliniana	2414 University Ave	1599276.626	583098.59	41.60033	-93.6504
140938	2022/04/21	hornbeam, American	Carpinus caroliniana	2400 University Ave	1599353.288	583098.82	41.60033	-93.6501
146814	2022/05/21	hornbeam, American	Carpinus caroliniana	1510 47th St	1590788.468	585274.51	41.60626	-93.6815
146830	2022/05/21	hornbeam, American	Carpinus caroliniana	4120 College Ave	1592824.317	585746.78	41.60757	-93.674
146835	2022/05/21	hornbeam, American	Carpinus caroliniana	1504 41st Pl	1592811.58	585246.58	41.6062	-93.6741
146836	2022/05/21	hornbeam, American	Carpinus caroliniana	1504 41st Pl	1592815.559	585218.81	41.60612	-93.6741
147380	2022/05/14	hornbeam, American	Carpinus caroliniana	2620 E Watrous Ave	1623460.733	564029.72	41.54808	-93.5619
147381	2022/05/14	hornbeam, American	Carpinus caroliniana	2620 E Watrous Ave	1623482.391	564028.97	41.54808	-93.5619
147706	2022/06/04	hornbeam, American	Carpinus caroliniana	2402 E Porter Ave	1620116.893	559009.15	41.5343	-93.5741
148926	2022/10/27	katsuratree	Cercidiphyllum japonicum	1321 E 27th Ct	1622969.079	584390.22	41.60396	-93.5638
148946	2022/10/27	katsuratree	Cercidiphyllum japonicum	1720 State Ave	1622929.917	584004.38	41.6029	-93.5639
133945	2022/05/23	Kentucky coffeetree	Gymnocladus dioicus	820 Des Moines St	1611102.412	580316.24	41.59275	-93.6072
147625	2022/05/23	Kentucky coffeetree	Gymnocladus dioicus	826 Des Moines St	1611237.068	580354.17	41.59285	-93.6067
148947	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	1720 State Ave	1622931.038	584033.25	41.60298	-93.5639
148958	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	1316 E 27th Ct	1622927.404	584327.44	41.60379	-93.5639
148963	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2727 Chicago Ave	1622929.026	584539.37	41.60437	-93.5639
148965	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	1406 E 27th Ct	1622928.77	584688.82	41.60478	-93.5639
148970	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2726 Cleveland Ave	1622928.608	584967.62	41.60554	-93.5639
148972	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2726 Cleveland Ave	1622928.657	585034.12	41.60573	-93.5639
148977	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2727 Kinsey Ave	1622926.738	585417.05	41.60678	-93.564
148979	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2727 Kinsey Ave	1622926.801	585504.01	41.60701	-93.564
148982	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2724 Kinsey Ave	1622925.975	585627.19	41.60735	-93.564
148983	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2724 Kinsey Ave	1622926.364	585657.51	41.60744	-93.564
148986	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2727 E Washington Ave	1622926.093	585787.22	41.60779	-93.564
148987	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2727 E Washington Ave	1622926.111	585812.07	41.60786	-93.564
148988	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2722 E Washington Ave	1622925.437	585893.19	41.60808	-93.564
148990	2022/10/27	Kentucky coffeetree	Gymnocladus dioicus	2722 E Washington Ave	1622924.368	585935.94	41.6082	-93.564
149011	2022/10/15	Kentucky coffeetree	Gymnocladus dioicus	2733 E Market St	1622920.483	578162.69	41.58687	-93.564
149280	2022/11/18	Kentucky coffeetree	Gymnocladus dioicus	1433 E 16th St	1614418.514	585192.32	41.60614	-93.5951
149285	2022/11/18	Kentucky coffeetree	Gymnocladus dioicus	1413 E 16th St	1614420.034	584989.41	41.60558	-93.5951
149286	2022/11/18	Kentucky coffeetree	Gymnocladus dioicus	1604 Cleveland Ave	1614419.1	584806.35	41.60508	-93.5951
148559	2022/10/08	lilac, common	Syringa vulgaris	417 E Dunham Ave	1610838.039	572965.24	41.57257	-93.6081
148705	2022/11/03	lilac, common	Syringa vulgaris	1630 Arlington Ave	1606976.859	586285.85	41.60911	-93.6223
148708	2022/11/03	lilac, common	Syringa vulgaris	1624 Arlington Ave	1606977.808	586178.43	41.60882	-93.6223
148709	2022/11/03	lilac, common	Syringa vulgaris	1620 Arlington Ave	1606980.285	586113.75	41.60864	-93.6223
149140	2022/10/01	lilac, common	Syringa vulgaris	3950 11th St	1604181.587	595026.6	41.63309	-93.6326
149141	2022/10/01	lilac, common	Syringa vulgaris	1116 Madison Ave	1604109.367	595028.9	41.6331	-93.6328
149161	2022/10/01	lilac, common	Syringa vulgaris	3950 13th St	1603279.714	595029.82	41.6331	-93.6358
149165	2022/10/01	lilac, common	Syringa vulgaris	3951 14th St	1603109.237	595029.36	41.63309	-93.6365
149194	2022/10/01	lilac, common	Syringa vulgaris	4000 11th St	1604285.715	595059.83	41.63318	-93.6322
149196	2022/10/01	lilac, common	Syringa vulgaris	4001 11th St	1604393.505	595062.59	41.63319	-93.6318
149210	2022/10/01	lilac, common	Syringa vulgaris	815 Madison Ave	1605408.481	595062.17	41.63319	-93.6281
149213	2022/10/01	lilac, common	Syringa vulgaris	801 Madison Ave	1605519.567	595063.1	41.6332	-93.6277
146300	2022/05/07	lilac, Japanese tree	Syringa reticulata	621 Des Moines St	1610389.081	580066.39	41.59206	-93.6098
146301	2022/05/07	lilac, Japanese tree	Syringa reticulata	625 Des Moines St	1610459.907	580086.03	41.59211	-93.6095
146840	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1608732.176	561470.92	41.54102	-93.6157
146842	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1608869.12	561473.3	41.54102	-93.6152
146846	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1608961.272	561474.27	41.54103	-93.6149
146850	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1609047.551	561475.99	41.54103	-93.6146
146851	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1609068.477	561475.59	41.54103	-93.6145
146855	2022/04/22	lilac, Japanese tree	Syringa reticulata	100 McKinley Ave	1609142.638	561475.86	41.54103	-93.6142
146859	2022/04/22	lilac, Japanese tree	Syringa reticulata	4716 SE 3rd St	1609416.885	561473.67	41.54103	-93.6132
146860	2022/04/22	lilac, Japanese tree	Syringa reticulata	4716 SE 3rd St	1609448.826	561474	41.54103	-93.6131
146864	2022/04/22	lilac, Japanese tree	Syringa reticulata	4713 SE 3rd St	1609600.084	561473.44	41.54103	-93.6126
146866	2022/04/22	lilac, Japanese tree	Syringa reticulata	306 E McKinley Ave	1609706.183	561471.47	41.54102	-93.6122
146871	2022/04/22	lilac, Japanese tree	Syringa reticulata	326 E McKinley Ave	1609960.239	561470.41	41.54102	-93.6113

146873	2022/04/22	lilac, Japanese tree	Syringa reticulata	330 E McKinley Ave	1610061.2	561469.55	41.54102	-93.6109
146876	2022/04/22	lilac, Japanese tree	Syringa reticulata	346 E McKinley Ave	1610197.406	561469.38	41.54102	-93.6104
146882	2022/04/22	lilac, Japanese tree	Syringa reticulata	4711 SE 4th St	1610482.667	561467.56	41.54101	-93.6093
146884	2022/04/22	lilac, Japanese tree	Syringa reticulata	4711 SE 4th St	1610530.393	561466.76	41.54101	-93.6092
146888	2022/04/22	lilac, Japanese tree	Syringa reticulata	420 E McKinley Ave	1610621.441	561465.55	41.54101	-93.6088
146890	2022/04/22	lilac, Japanese tree	Syringa reticulata	420 E McKinley Ave	1610720.2	561465.06	41.54101	-93.6085
146892	2022/04/22	lilac, Japanese tree	Syringa reticulata	430 E McKinley Ave	1610865.215	561463.42	41.541	-93.6079
146896	2022/04/22	lilac, Japanese tree	Syringa reticulata	430 E McKinley Ave	1611004.724	561461.79	41.541	-93.6074
146923	2022/04/22	lilac, Japanese tree	Syringa reticulata	333 E McKinley Ave	1610408.075	561416.77	41.54087	-93.6096
146928	2022/04/22	lilac, Japanese tree	Syringa reticulata	321 E McKinley Ave	1610197.342	561419.23	41.54088	-93.6104
146959	2022/05/07	lilac, Japanese tree	Syringa reticulata	511 E 6th St	1610306.125	580044.36	41.592	-93.6101
148549	2022/10/08	lilac, Japanese tree	Syringa reticulata	1800 SE 6th St	1611548.345	572870.78	41.57231	-93.6055
148553	2022/10/08	lilac, Japanese tree	Syringa reticulata	501 E Dunham Ave	1611293.678	572871.82	41.57232	-93.6064
148555	2022/10/08	lilac, Japanese tree	Syringa reticulata	441 E Dunham Ave	1611138.849	572891.38	41.57237	-93.607
148562	2022/10/08	lilac, Japanese tree	Syringa reticulata	411 E Dunham Ave	1610736.793	572993.15	41.57265	-93.6085
148577	2022/10/08	lilac, Japanese tree	Syringa reticulata	11 E Dunham Ave	1608930.407	573507.08	41.57405	-93.6151
148580	2022/10/08	lilac, Japanese tree	Syringa reticulata	123 E Dunham Ave	1609394.769	573357.32	41.57364	-93.6134
148582	2022/10/08	lilac, Japanese tree	Syringa reticulata	233 E Dunham Ave	1609794.939	573222.64	41.57327	-93.6119
148586	2022/10/08	lilac, Japanese tree	Syringa reticulata	317 E Dunham Ave	1610263.043	573116.02	41.57298	-93.6102
148587	2022/10/08	lilac, Japanese tree	Syringa reticulata	331 E Dunham Ave	1610352.549	573092.14	41.57292	-93.6099
148703	2022/11/03	lilac, Japanese tree	Syringa reticulata	1702 Arlington Ave	1606978.08	586371.35	41.60935	-93.6223
148712	2022/11/03	lilac, Japanese tree	Syringa reticulata	1618 Arlington Ave	1606980.182	586040.31	41.60844	-93.6223
148715	2022/11/03	lilac, Japanese tree	Syringa reticulata	1608 Arlington Ave	1606980.065	585957.37	41.60821	-93.6223
148717	2022/11/03	lilac, Japanese tree	Syringa reticulata	1604 Arlington Ave	1606978.14	585892.34	41.60803	-93.6223
148725	2022/11/03	lilac, Japanese tree	Syringa reticulata	1635 Arlington Ave	1607025.516	586199.55	41.60888	-93.6221
148733	2022/11/03	lilac, Japanese tree	Syringa reticulata	1530 Arlington Ave	1606966.484	585463.41	41.60686	-93.6223
148737	2022/11/03	lilac, Japanese tree	Syringa reticulata	1514 Arlington Ave	1606964.708	585243.45	41.60625	-93.6223
148739	2022/11/03	lilac, Japanese tree	Syringa reticulata	309 Clark St	1606967.536	585168.17	41.60605	-93.6223
148755	2022/11/03	lilac, Japanese tree	Syringa reticulata	1805 Arlington Ave	1607026.125	586799.11	41.61052	-93.6221
148756	2022/11/03	lilac, Japanese tree	Syringa reticulata	1805 Arlington Ave	1607025.422	586821.03	41.61058	-93.6221
148759	2022/11/03	lilac, Japanese tree	Syringa reticulata	1817 Arlington Ave	1607025.011	586919.83	41.61085	-93.6221
148774	2022/09/17	lilac, Japanese tree	Syringa reticulata	821 Jefferson Ave	1605117.994	586700.4	41.61024	-93.6291
148798	2022/09/17	lilac, Japanese tree	Syringa reticulata	1625 8th St	1605465.869	586212.92	41.60891	-93.6278
148802	2022/09/17	lilac, Japanese tree	Syringa reticulata	1630 8th St	1605291.293	586211.72	41.6089	-93.6284
148804	2022/09/17	lilac, Japanese tree	Syringa reticulata	1630 8th St	1605246.184	586212.88	41.60891	-93.6286
148807	2022/09/17	lilac, Japanese tree	Syringa reticulata	1631 9th St	1605146.43	586214.12	41.60891	-93.629
148825	2022/10/29	lilac, Japanese tree	Syringa reticulata	5218 SE 7th St	1611865.086	559951.53	41.53686	-93.6043
148831	2022/10/29	lilac, Japanese tree	Syringa reticulata	5304 SE 7th St	1611863.457	559667.45	41.53608	-93.6043
148855	2022/10/29	lilac, Japanese tree	Syringa reticulata	5216 SE 8th St	1612226.819	559919.23	41.53677	-93.603
148857	2022/10/29	lilac, Japanese tree	Syringa reticulata	5208 SE 8th St	1612217.44	560060.43	41.53716	-93.603
148871	2022/10/29	lilac, Japanese tree	Syringa reticulata	5309 SE 8th St	1612263.633	559689.4	41.53614	-93.6028
148875	2022/10/29	lilac, Japanese tree	Syringa reticulata	5317 SE 8th St	1612253.188	559549.69	41.53576	-93.6029
148885	2022/10/29	lilac, Japanese tree	Syringa reticulata	5309 SE 9th St	1612570.214	559690.51	41.53614	-93.6017
148908	2022/10/27	lilac, Japanese tree	Syringa reticulata	2730 Kinsey Ave	1622964.824	585588.72	41.60725	-93.5638
148911	2022/10/27	lilac, Japanese tree	Syringa reticulata	2731 Kinsey Ave	1622966.204	585471.06	41.60692	-93.5638
148916	2022/10/27	lilac, Japanese tree	Syringa reticulata	2732 Cleveland Ave	1622967.359	585044.65	41.60575	-93.5638
148920	2022/10/27	lilac, Japanese tree	Syringa reticulata	2732 Chicago Ave	1622972.214	584663.91	41.60471	-93.5638
148922	2022/10/27	lilac, Japanese tree	Syringa reticulata	2735 Chicago Ave	1622968.831	584551.37	41.6044	-93.5638
148924	2022/10/27	lilac, Japanese tree	Syringa reticulata	1325 E 27th Ct	1622967.641	584430.05	41.60407	-93.5638
148927	2022/10/27	lilac, Japanese tree	Syringa reticulata	1321 E 27th Ct	1622968.633	584282.06	41.60366	-93.5638
148935	2022/10/27	lilac, Japanese tree	Syringa reticulata	1237 E 27th Ct	1622972.578	583660.13	41.60195	-93.5638
148960	2022/10/27	lilac, Japanese tree	Syringa reticulata	1324 E 27th Ct	1622933.347	584429.02	41.60406	-93.5639
149019	2022/10/15	lilac, Japanese tree	Syringa reticulata	229 SE 28th St	1623156.931	577904.11	41.58616	-93.5631
149022	2022/10/15	lilac, Japanese tree	Syringa reticulata	301 SE 28th St	1623160.508	577778.37	41.58581	-93.5631
149030	2022/10/15	lilac, Japanese tree	Syringa reticulata	2742 E Elm St	1622981.144	577834.31	41.58597	-93.5637
149044	2022/10/15	lilac, Japanese tree	Syringa reticulata	2613 E Elm St	1622151.433	577822.4	41.58593	-93.5668
149045	2022/10/15	lilac, Japanese tree	Syringa reticulata	2613 E Elm St	1622173.078	577821.65	41.58593	-93.5667
149048	2022/10/15	lilac, Japanese tree	Syringa reticulata	2705 E Elm St	1622440.539	577826.93	41.58594	-93.5657
149073	2022/10/22	lilac, Japanese tree	Syringa reticulata	0 Unassigned	1607325.233	578058.2	41.58653	-93.621
149077	2022/10/22	lilac, Japanese tree	Syringa reticulata	0 Unassigned	1607070.534	577997.15	41.58637	-93.6219
149087	2022/10/22	lilac, Japanese tree	Syringa reticulata	1111 11th St	1604942.758	576726.97	41.58287	-93.6297
149089	2022/10/22	lilac, Japanese tree	Syringa reticulata	1111 11th St	1604877.055	576708.43	41.58282	-93.6299
149117	2022/10/01	lilac, Japanese tree	Syringa reticulata	3949 8th St	1605575.458	595022.33	41.63308	-93.6275
149124	2022/10/01	lilac, Japanese tree	Syringa reticulata	3947 9th St	1605115.726	595025.93	41.63309	-93.6291
149128	2022/10/01	lilac, Japanese tree	Syringa reticulata	3944 9th St	1604859.824	595024.12	41.63309	-93.6301
149132	2022/10/01	lilac, Japanese tree	Syringa reticulata	3940 10th St	1604529.877	595029	41.6331	-93.6313
149133	2022/10/01	lilac, Japanese tree	Syringa reticulata	3940 10th St	1604510.811	595028.29	41.6331	-93.6313
149137	2022/10/01	lilac, Japanese tree	Syringa reticulata	3950 11th St	1604240.982	595028.7	41.6331	-93.6323
149144	2022/10/01	lilac, Japanese tree	Syringa reticulata	3946 11th Pl	1603953.551	595026.59	41.63309	-93.6334
149148	2022/10/01	lilac, Japanese tree	Syringa reticulata	3945 12th St	1603770.61	595026.87	41.63309	-93.6341
149153	2022/10/01	lilac, Japanese tree	Syringa reticulata	3948 12th St	1603607.468	595028.94	41.63309	-93.6347
149215	2022/10/01	lilac, Japanese tree	Syringa reticulata	4000 7th St	1605862.352	595062.24	41.63319	-93.6264
149217	2022/10/01	lilac, Japanese tree	Syringa reticulata	4000 7th St	1605919.912	595062.88	41.6332	-93.6262
149218	2022/10/01	lilac, Japanese tree	Syringa reticulata	4001 7th St	1606008.267	595063.12	41.6332	-93.6259
31609	2022/06/09	linden, American	Tilia americana	1712 E 28th St	1623298.662	586343.68	41.60932	-93.5626

35744	2022/10/06	linden, American	Tilia americana	603 Allison Ave	1605887.255	587367.79	41.61208	-93.6263
50643	2022/05/07	linden, American	Tilia americana	608 Locust St	1606107.84	578109.92	41.58667	-93.6254
131952	2022/05/07	linden, American	Tilia americana	416 4th St	1606734.917	578642.03	41.58813	-93.6231
132009	2022/05/07	linden, American	Tilia americana	999999 Unassigned	1607105.256	578744.07	41.58842	-93.6218
141339	2022/05/07	linden, American	Tilia americana	909 Locust St	1604849.288	578109.96	41.58667	-93.63
143970	2022/05/07	linden, American	Tilia americana	612 Locust St	1605984.599	578073.42	41.58657	-93.6259
143973	2022/05/07	linden, American	Tilia americana	612 Locust St	1605940.471	578002.57	41.58638	-93.626
146318	2022/05/07	linden, American	Tilia americana	303 Locust St	1607149.163	578457.9	41.58763	-93.6216
146962	2022/05/07	linden, American	Tilia americana	717 Lyon St	1610589.861	580174.11	41.59235	-93.609
146963	2022/05/07	linden, American	Tilia americana	808 Des Moines St	1610938.849	580269.06	41.59262	-93.6078
147025	2022/05/19	linden, American	Tilia americana	4059 Beaver Ave	1591880.351	595882.7	41.63538	-93.6776
147287	2022/06/09	linden, American	Tilia americana	2525 Easton Blvd	1621324.359	585694.88	41.60754	-93.5698
147289	2022/06/09	linden, American	Tilia americana	2527 Easton Blvd	1621414.98	585733.91	41.60764	-93.5695
147292	2022/06/09	linden, American	Tilia americana	2529 Easton Blvd	1621553.294	585791.16	41.6078	-93.569
147295	2022/06/09	linden, American	Tilia americana	2601 Easton Blvd	1621707.802	585864.18	41.608	-93.5684
147300	2022/06/09	linden, American	Tilia americana	2621 Easton Blvd	1621915.456	585953.17	41.60825	-93.5677
147307	2022/06/09	linden, American	Tilia americana	2655 Easton Blvd	1622412.206	586166.53	41.60883	-93.5658
147319	2022/06/09	linden, American	Tilia americana	2735 Easton Blvd	1623028.912	586432.43	41.60956	-93.5636
147320	2022/06/09	linden, American	Tilia americana	2759 Easton Blvd	1623256	586530.19	41.60983	-93.5628
147323	2022/06/09	linden, American	Tilia americana	2801 Easton Blvd	1623349.275	586571.39	41.60994	-93.5624
147325	2022/05/14	linden, American	Tilia americana	2601 E Rose Ave	1621957.637	564702.98	41.54993	-93.5674
147326	2022/05/14	linden, American	Tilia americana	2601 E Rose Ave	1621955.022	564644.47	41.54977	-93.5674
147327	2022/05/14	linden, American	Tilia americana	2601 E Rose Ave	1621955.359	564605.7	41.54966	-93.5674
147328	2022/05/14	linden, American	Tilia americana	3807 SE 26th St	1621952.764	564573.16	41.54957	-93.5675
147329	2022/05/14	linden, American	Tilia americana	3807 SE 26th St	1621953.466	564531.1	41.54945	-93.5675
147330	2022/05/14	linden, American	Tilia americana	3813 SE 26th St	1621952.318	564471.49	41.54929	-93.5675
147484	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1624933.269	556381.46	41.52709	-93.5565
147485	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1624952.372	556394.62	41.52713	-93.5565
147486	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1624978.089	556412.53	41.52718	-93.5564
147488	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1624999.032	556431.17	41.52723	-93.5563
147489	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625017.042	556457.13	41.5273	-93.5562
147509	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625473.117	557041.8	41.52891	-93.5546
147510	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625470.198	557070.33	41.52899	-93.5546
147512	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625467.645	557098.14	41.52906	-93.5546
147513	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625467.295	557126.3	41.52914	-93.5546
147514	2022/05/13	linden, American	Tilia americana	3009 E Payton Ave	1625470.616	557152.28	41.52921	-93.5546
147764	2022/05/25	linden, American	Tilia americana	2600 Leach Ave	1621817.92	563605.33	41.54691	-93.5679
147766	2022/06/03	linden, American	Tilia americana	2501 E Rose Ave	1621172.357	564643.95	41.54976	-93.5703
147768	2022/05/27	linden, American	Tilia americana	3734 SE 19th St	1617328.101	564211.5	41.54857	-93.5844
148443	2022/05/07	linden, American	Tilia americana	1519 Grand Ave	1602593.018	577568.98	41.58517	-93.6383
148531	2022/10/06	linden, American	Tilia americana	603 Allison Ave	1605776.296	587380.45	41.61211	-93.6267
148534	2022/10/06	linden, American	Tilia americana	603 Allison Ave	1605709.229	587411.42	41.6122	-93.6269
148892	2022/10/27	linden, American	Tilia americana	2735 Easton Blvd	1622960.79	586339.91	41.60931	-93.5638
148941	2022/10/27	linden, American	Tilia americana	1212 E 27th Ct	1622930.536	583349.2	41.60111	-93.5639
148943	2022/10/27	linden, American	Tilia americana	1228 E 27th Ct	1622931.39	583513.27	41.60155	-93.5639
148944	2022/10/27	linden, American	Tilia americana	1230 E 27th Ct	1622931.411	583542.14	41.60163	-93.5639
148945	2022/10/27	linden, American	Tilia americana	1720 State Ave	1622931.867	583662.72	41.60196	-93.5639
148961	2022/10/27	linden, American	Tilia americana	2727 Chicago Ave	1622928.249	584479.81	41.6042	-93.5639
148962	2022/10/27	linden, American	Tilia americana	2727 Chicago Ave	1622928.998	584500.28	41.60426	-93.5639
148968	2022/10/27	linden, American	Tilia americana	2713 Cleveland Ave	1622927.789	584852.16	41.60523	-93.5639
148969	2022/10/27	linden, American	Tilia americana	2713 Cleveland Ave	1622928.545	584882.85	41.60531	-93.5639
148978	2022/10/27	linden, American	Tilia americana	2727 Kinsey Ave	1622926.036	585460.17	41.60689	-93.564
148980	2022/10/27	linden, American	Tilia americana	2724 Kinsey Ave	1622924.842	585582.61	41.60723	-93.564
148984	2022/10/27	linden, American	Tilia americana	2727 E Washington Ave	1622924.576	585720	41.60761	-93.564
148985	2022/10/27	linden, American	Tilia americana	2727 E Washington Ave	1622925.692	585741.55	41.60767	-93.564
148989	2022/10/27	linden, American	Tilia americana	2722 E Washington Ave	1622923.621	585916.94	41.60815	-93.564
148994	2022/10/27	linden, American	Tilia americana	2727 Easton Blvd	1622925.355	586279.75	41.60914	-93.564
149078	2022/10/22	linden, American	Tilia americana	0 Unassigned	1606967.031	577966.6	41.58628	-93.6223
149098	2022/10/22	linden, American	Tilia americana	101 4th St	1607564.676	577167.86	41.58409	-93.6201
149099	2022/10/22	linden, American	Tilia americana	0 Unassigned	1605177.414	577486.35	41.58496	-93.6288
149230	2022/10/01	linden, American	Tilia americana	3928 Twana Dr	1593454.85	597257.19	41.63916	-93.6718
30875	2022/10/29	linden, littleleaf	Tilia cordata	5311 SE 7th St	1611909.471	559627.78	41.53597	-93.6041
35737	2022/10/06	linden, littleleaf	Tilia cordata	1901 7th St	1605788.227	587107.28	41.61136	-93.6266
35739	2022/10/06	linden, littleleaf	Tilia cordata	1901 7th St	1605733.879	587107.28	41.61136	-93.6268
35745	2022/10/06	linden, littleleaf	Tilia cordata	603 Allison Ave	1605736.48	587385.49	41.61213	-93.6268
39399	2022/10/07	linden, littleleaf	Tilia cordata	519 Franklin Ave	1606144.322	587104.82	41.61136	-93.6253
148523	2022/09/28	linden, littleleaf	Tilia cordata	401 Franklin Ave	1606605.643	587105.78	41.61136	-93.6236
148593	2022/10/08	linden, littleleaf	Tilia cordata	1515 SW 1st St	1608761.259	574298.76	41.57622	-93.6157
148617	2022/10/08	linden, littleleaf	Tilia cordata	1400 South Union St	1609069.128	574859.3	41.57776	-93.6146
148893	2022/10/27	linden, littleleaf	Tilia cordata	2735 Easton Blvd	1622961.495	586301.18	41.6092	-93.5638
149043	2022/10/15	linden, littleleaf	Tilia cordata	2605 E Elm St	1622108.506	577819.87	41.58592	-93.5669
149233	2022/10/01	linden, littleleaf	Tilia cordata	2807 42nd St	1592425.227	590434.93	41.62043	-93.6755
968	2022/04/09	oak, bur	Quercus macrocarpa	3418 Cottage Grove Ave	1595653.15	582416.82	41.59844	-93.6637
970	2022/04/09	oak, bur	Quercus macrocarpa	3408 Cottage Grove Ave	1595819.24	582416.82	41.59845	-93.6631
1038	2022/04/09	oak, bur	Quercus macrocarpa	3102 Cottage Grove Ave	1596806.641	582391.83	41.59838	-93.6594

1208	2022/04/09	oak, bur	Quercus macrocarpa	2816 Cottage Grove Ave	1597733.586	582415.02	41.59845	-93.6561
8523	2022/10/08	oak, bur	Quercus macrocarpa	408 E Dunham Ave	1610635.46	573055.36	41.57282	-93.6088
30939	2022/06/04	oak, bur	Quercus macrocarpa	5305 SE 9th St	1612579.372	559748.04	41.53363	-93.6017
30944	2022/06/04	oak, bur	Quercus macrocarpa	5115 SE 9th St	1612593.314	560238.92	41.53765	-93.6016
30947	2022/06/04	oak, bur	Quercus macrocarpa	812 E Spring St	1612405.537	560254.48	41.53769	-93.6023
30948	2022/06/04	oak, bur	Quercus macrocarpa	808 E Spring St	1612350.371	560252.77	41.53769	-93.6025
30951	2022/06/04	oak, bur	Quercus macrocarpa	712 E Spring St	1612110.962	560254.49	41.53769	-93.6034
30952	2022/06/04	oak, bur	Quercus macrocarpa	708 E Spring St	1612059.294	560258.11	41.53777	-93.6036
30953	2022/06/04	oak, bur	Quercus macrocarpa	700 E Spring St	1611928.546	560255.34	41.53769	-93.6041
30954	2022/06/04	oak, bur	Quercus macrocarpa	612 E Spring St	1611819.24	560260.23	41.53771	-93.6045
32105	2022/05/21	oak, bur	Quercus macrocarpa	4125 Forest Ave	1592818.791	584468.56	41.60406	-93.674
32202	2022/05/21	oak, bur	Quercus macrocarpa	4309 Forest Ave	1592135.848	584501.47	41.60415	-93.6765
32306	2022/05/21	oak, bur	Quercus macrocarpa	1535 41st St	1593129.974	585479.12	41.60683	-93.6729
35736	2022/10/06	oak, bur	Quercus macrocarpa	1901 7th St	1605821.672	587108.07	41.61137	-93.6265
35746	2022/10/06	oak, bur	Quercus macrocarpa	708 Hickman Rd	1605674.828	587579.17	41.61266	-93.627
35747	2022/10/06	oak, bur	Quercus macrocarpa	2010 7th St	1605674.828	587528.74	41.61252	-93.627
35754	2022/10/08	oak, bur	Quercus macrocarpa	717 Franklin Ave	1605378.267	587185.67	41.61158	-93.6281
35758	2022/10/08	oak, bur	Quercus macrocarpa	1921 8th St	1605379.051	587405.67	41.61218	-93.6281
35761	2022/11/01	oak, bur	Quercus macrocarpa	718 Hickman Rd	1605378.79	587623.85	41.61278	-93.6281
35770	2022/11/21	oak, bur	Quercus macrocarpa	1908 8th St	1605343.73	587264.58	41.61179	-93.6283
36001	2022/05/21	oak, bur	Quercus macrocarpa	4400 College Ave	1591776.753	585707.45	41.60745	-93.6779
36004	2022/05/21	oak, bur	Quercus macrocarpa	1534 44th St	1591772.491	585546.53	41.60701	-93.6779
36005	2022/05/21	oak, bur	Quercus macrocarpa	1528 44th St	1591773.163	585464.21	41.60679	-93.6779
36008	2022/05/21	oak, bur	Quercus macrocarpa	1516 44th St	1591774.324	585332.21	41.60642	-93.6779
36009	2022/05/21	oak, bur	Quercus macrocarpa	1512 44th St	1591774.014	585225.82	41.60613	-93.6779
36020	2022/05/21	oak, bur	Quercus macrocarpa	1406 44th St	1591780.074	584560.81	41.60431	-93.6778
36087	2022/05/21	oak, bur	Quercus macrocarpa	4635 University Ave	1590837.563	583272.14	41.60077	-93.6813
36131	2022/05/21	oak, bur	Quercus macrocarpa	1425 47th St	1590826.609	584798.35	41.60495	-93.6813
36156	2022/05/21	oak, bur	Quercus macrocarpa	1524 46th St	1591113.991	585452.84	41.60675	-93.6803
37187	2022/05/21	oak, bur	Quercus macrocarpa	2016 47th St	1590767.737	587648.63	41.61278	-93.6816
39391	2022/10/07	oak, bur	Quercus macrocarpa	401 Franklin Ave	1606544.654	587106.09	41.61136	-93.6239
39392	2022/10/07	oak, bur	Quercus macrocarpa	409 Franklin Ave	1606485.687	587106.61	41.61136	-93.6241
39394	2022/10/07	oak, bur	Quercus macrocarpa	509 Franklin Ave	1606394.08	587105.78	41.61136	-93.6244
39395	2022/10/07	oak, bur	Quercus macrocarpa	511 Franklin Ave	1606359.418	587107.43	41.61137	-93.6245
39398	2022/10/07	oak, bur	Quercus macrocarpa	517 Franklin Ave	1606176.689	587105.94	41.61136	-93.6252
41645	2022/04/16	oak, bur	Quercus macrocarpa	1513 Idaho St	1613355.69	585333.65	41.60652	-93.599
41674	2022/04/16	oak, bur	Quercus macrocarpa	1435 Hutton St	1614085.909	585215.53	41.60622	-93.5963
41694	2022/04/16	oak, bur	Quercus macrocarpa	1402 Hutton St	1613955.681	584829.12	41.60514	-93.5968
42072	2022/04/16	oak, bur	Quercus macrocarpa	1349 Hutton St	1614080.518	584438.02	41.60407	-93.5963
42077	2022/04/16	oak, bur	Quercus macrocarpa	1367 Hutton St	1614083.321	584671.1	41.60471	-93.5963
50166	2022/06/04	oak, bur	Quercus macrocarpa	716 E Spring St	1612165.685	560258.55	41.53777	-93.6032
50169	2022/06/04	oak, bur	Quercus macrocarpa	816 E Spring St	1612482.104	560260.61	41.53771	-93.602
143257	2022/06/14	oak, bur	Quercus macrocarpa	6721 Three Lakes Pkwy	1622833.555	555076.18	41.52351	-93.5642
143259	2022/06/14	oak, bur	Quercus macrocarpa	6721 Three Lakes Pkwy	1622826.23	555102.16	41.52358	-93.5642
146617	2022/04/09	oak, bur	Quercus macrocarpa	1094 28th St	1598118.006	582414.51	41.59845	-93.6546
146619	2022/04/09	oak, bur	Quercus macrocarpa	2812 Cottage Grove Ave	1597806.582	582413.97	41.59845	-93.6558
146621	2022/04/09	oak, bur	Quercus macrocarpa	2820 Cottage Grove Ave	1597610.709	582416.52	41.59845	-93.6565
146623	2022/04/09	oak, bur	Quercus macrocarpa	2934 Cottage Grove Ave	1596955.952	582417.7	41.59845	-93.6589
146626	2022/04/09	oak, bur	Quercus macrocarpa	3104 Cottage Grove Ave	1596691.481	582417.46	41.59845	-93.6599
146627	2022/04/09	oak, bur	Quercus macrocarpa	3120 Cottage Grove Ave	1596465.529	582419.7	41.59846	-93.6607
146631	2022/04/09	oak, bur	Quercus macrocarpa	3314 Cottage Grove Ave	1595995.643	582419.84	41.59845	-93.6624
146639	2022/04/16	oak, bur	Quercus macrocarpa	1213 Hutton St	1614075.893	583523.95	41.60156	-93.5963
146640	2022/04/16	oak, bur	Quercus macrocarpa	1219 Hutton St	1614077.108	583627.72	41.60184	-93.5963
146644	2022/04/16	oak, bur	Quercus macrocarpa	1331 Hutton St	1614081.769	584193.01	41.60339	-93.5963
146645	2022/04/16	oak, bur	Quercus macrocarpa	1417 Hutton St	1614083.04	585010.41	41.60564	-93.5963
146647	2022/04/16	oak, bur	Quercus macrocarpa	1511 Hutton St	1614083.139	585430.61	41.60679	-93.5963
146650	2022/04/16	oak, bur	Quercus macrocarpa	1517 Idaho St	1613359.133	585419.73	41.60676	-93.5989
146653	2022/04/16	oak, bur	Quercus macrocarpa	1421 Idaho St	1613353.651	585114.27	41.60592	-93.599
146657	2022/04/16	oak, bur	Quercus macrocarpa	1401 E 15th St	1613792.399	584827.82	41.60514	-93.5974
146659	2022/04/16	oak, bur	Quercus macrocarpa	1402 E 15th St	1613666.23	584828.69	41.60514	-93.5978
146662	2022/04/16	oak, bur	Quercus macrocarpa	1405 Idaho St	1613453.134	584827.84	41.60513	-93.5986
146663	2022/04/16	oak, bur	Quercus macrocarpa	1424 Cleveland Ave	1613285.153	584829.49	41.60514	-93.5992
146815	2022/05/21	oak, bur	Quercus macrocarpa	4635 University Ave	1590838.161	583248.59	41.6007	-93.6813
146827	2022/05/21	oak, bur	Quercus macrocarpa	1409 43rd St	1592168.529	584606.45	41.60443	-93.6764
146831	2022/05/21	oak, bur	Quercus macrocarpa	4120 College Ave	1592848.854	585728.46	41.60752	-93.6739
146832	2022/05/21	oak, bur	Quercus macrocarpa	4120 College Ave	1592871.186	585708.32	41.60746	-93.6739
146834	2022/05/21	oak, bur	Quercus macrocarpa	1534 42nd St	1592476.258	585563.32	41.60706	-93.6753
147010	2022/07/08	oak, bur	Quercus macrocarpa	616 E Spring St	1611870.442	560260.24	41.53771	-93.6043
147011	2022/06/04	oak, bur	Quercus macrocarpa	704 E Spring St	1611984.625	560259.38	41.53777	-93.6039
147375	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623335.049	564029.66	41.54808	-93.5624
147376	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623362.213	564029.27	41.54808	-93.5623
147377	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623389.378	564028.89	41.54808	-93.5622
147378	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623412.872	564028.14	41.54808	-93.5621
147379	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623438.936	564028.85	41.54808	-93.562
147387	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623621.886	564028.51	41.54808	-93.5614

147388	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623647.214	564026.66	41.54807	-93.5613
147389	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623671.81	564027.01	41.54807	-93.5612
147390	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623696.772	564026.26	41.54807	-93.5611
147391	2022/05/14	oak, bur	Quercus macrocarpa	2620 E Watrous Ave	1623721	564026.61	41.54807	-93.561
147426	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623194.477	555136.96	41.52367	-93.5629
147427	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623202.938	555156.71	41.52373	-93.5629
147428	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623212.131	555174.27	41.52378	-93.5628
147429	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623224.628	555188.53	41.52382	-93.5628
147430	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623239.326	555201.32	41.52385	-93.5627
147449	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623601.621	555492.27	41.52465	-93.5614
147450	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623619.625	555506.53	41.52469	-93.5613
147451	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623635.424	555519.32	41.52473	-93.5613
147452	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623649.755	555531.75	41.52476	-93.5612
147453	2022/05/13	oak, bur	Quercus macrocarpa	2836 Sweetwater Dr	1623663.72	555547.11	41.5248	-93.5612
147472	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1624519.268	556152.72	41.52647	-93.5581
147473	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1624536.909	556174.66	41.52653	-93.558
147474	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1624559.69	556195.86	41.52658	-93.5579
147475	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1624586.872	556207.55	41.52662	-93.5578
147476	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1624614.419	556215.58	41.52664	-93.5577
147490	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625085.414	556567.94	41.52761	-93.556
147492	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625104.161	556596.82	41.52768	-93.5559
147496	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625158.192	556676.91	41.5279	-93.5557
147497	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625175.099	556701.4	41.52797	-93.5557
147500	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625193.107	556724.81	41.52804	-93.5556
147502	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625211.116	556750.4	41.52811	-93.5555
147503	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625233.166	556777.46	41.52818	-93.5555
147507	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625477.486	556980.7	41.52874	-93.5546
147508	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625474.937	557015.46	41.52883	-93.5546
147568	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625141.233	556572.29	41.52762	-93.5558
147569	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625140.886	556603.02	41.5277	-93.5558
147574	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625270.248	556768.29	41.52816	-93.5553
147575	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625293.026	556785.47	41.5282	-93.5552
147576	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625322.776	556796.06	41.52823	-93.5551
147581	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625466.39	556854.87	41.52839	-93.5546
147587	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625507.227	556977.76	41.52873	-93.5545
147588	2022/05/13	oak, bur	Quercus macrocarpa	3009 E Payton Ave	1625504.681	557016.17	41.52884	-93.5545
147636	2022/05/23	oak, bur	Quercus macrocarpa	826 Des Moines St	1611274.331	580526.62	41.59332	-93.6065
147642	2022/05/23	oak, bur	Quercus macrocarpa	823 Lyon St	1611094.392	580672.66	41.59372	-93.6072
147692	2022/06/04	oak, bur	Quercus macrocarpa	3210 SE 23rd St	1620402.246	566283.68	41.55426	-93.5731
147700	2022/06/04	oak, bur	Quercus macrocarpa	3205 SE 25th St	1621083.236	566445.42	41.55471	-93.5706
147701	2022/06/04	oak, bur	Quercus macrocarpa	3205 SE 25th St	1621118.106	566444.66	41.5547	-93.5705
147702	2022/06/04	oak, bur	Quercus macrocarpa	1816 E Thornton Ave	1617048.638	564957.5	41.55061	-93.5854
147709	2022/06/04	oak, bur	Quercus macrocarpa	2402 E Porter Ave	1620053.781	559057.48	41.53443	-93.5744
147712	2022/06/04	oak, bur	Quercus macrocarpa	2402 E Porter Ave	1620063.74	559111.61	41.53458	-93.5743
147748	2022/05/25	oak, bur	Quercus macrocarpa	3305 South Union St	1608639.27	566207.67	41.55402	-93.6161
147813	2022/05/25	oak, bur	Quercus macrocarpa	3734 SE 18th Ct	1616997.309	564350.21	41.54895	-93.5856
148492	2022/09/30	oak, bur	Quercus macrocarpa	1900 7th St	1605591.605	587106.36	41.61136	-93.6273
148493	2022/11/01	oak, bur	Quercus macrocarpa	718 Hickman Rd	1605375.662	587527.64	41.61252	-93.6281
148503	2022/11/01	oak, bur	Quercus macrocarpa	806 Hickman Rd	1605342.714	587566.96	41.61262	-93.6283
148522	2022/10/07	oak, bur	Quercus macrocarpa	515 Franklin Ave	1606281.448	587107.34	41.61137	-93.6248
148532	2022/10/06	oak, bur	Quercus macrocarpa	603 Allison Ave	1605807.832	587377.85	41.61211	-93.6266
148533	2022/10/06	oak, bur	Quercus macrocarpa	603 Allison Ave	1605860.267	587372.47	41.61209	-93.6264
148573	2022/10/08	oak, bur	Quercus macrocarpa	1722 SE 1st St	1609030.415	573520.3	41.57409	-93.6147
148589	2022/10/08	oak, bur	Quercus macrocarpa	5 Jackson Ave	1608901.728	574255.44	41.5761	-93.6152
148595	2022/10/08	oak, bur	Quercus macrocarpa	1416 SW 1st St	1608797.439	574706.93	41.57734	-93.6156
148606	2022/10/08	oak, bur	Quercus macrocarpa	1511 South Union St	1609109.147	574187.65	41.57592	-93.6144
148612	2022/10/08	oak, bur	Quercus macrocarpa	111 Jackson Ave	1608460.585	574352.84	41.57637	-93.6168
148613	2022/10/08	oak, bur	Quercus macrocarpa	111 E Jackson Ave	1608715.426	574493.6	41.57676	-93.6159
148615	2022/10/08	oak, bur	Quercus macrocarpa	1403 SW 1st St	1608950.179	574904.07	41.57788	-93.615
148619	2022/10/08	oak, bur	Quercus macrocarpa	1400 South Union St	1609158.618	574828.48	41.57768	-93.6142
148761	2022/09/17	oak, bur	Quercus macrocarpa	1714 6th Ave	1605876.732	586660.12	41.61014	-93.6263
148762	2022/09/17	oak, bur	Quercus macrocarpa	1735 7th St	1605726.368	586661.8	41.61014	-93.6269
148766	2022/09/17	oak, bur	Quercus macrocarpa	1731 6th Ave	1605426.359	586654.28	41.61012	-93.628
148777	2022/09/17	oak, bur	Quercus macrocarpa	1800 8th St	1605303.932	586698.67	41.61024	-93.6284
148778	2022/09/17	oak, bur	Quercus macrocarpa	1805 8th St	1605399.101	586697.79	41.61024	-93.6281
148781	2022/09/17	oak, bur	Quercus macrocarpa	1805 8th St	1605485.47	586698.03	41.61024	-93.6277
148789	2022/09/17	oak, bur	Quercus macrocarpa	1630 6th St	1605914.772	586210.8	41.6089	-93.6262
148792	2022/09/17	oak, bur	Quercus macrocarpa	1631 7th St	1605777.605	586210.27	41.6089	-93.6267
148814	2022/09/17	oak, bur	Quercus macrocarpa	811 Washington Ave	1605286.945	586247.16	41.609	-93.6285
148816	2022/09/17	oak, bur	Quercus macrocarpa	1701 Washington Ave	1605399.904	586247	41.609	-93.628
149000	2022/10/15	oak, bur	Quercus macrocarpa	2708 E Market St	1622431.067	578157.93	41.58685	-93.5657
149008	2022/10/15	oak, bur	Quercus macrocarpa	2727 E Market St	1622825.095	578162.76	41.58687	-93.5643
149017	2022/10/15	oak, bur	Quercus macrocarpa	2754 E Elm St	1623058.948	577868.72	41.58606	-93.5634
149115	2022/10/01	oak, bur	Quercus macrocarpa	3946 7th St	1605876.823	595026.27	41.6331	-93.6263
149120	2022/10/01	oak, bur	Quercus macrocarpa	812 Madison Ave	1605447.142	595022.52	41.63308	-93.6279

149126	2022/10/01	oak, bur	Quercus macrocarpa	3947 9th St	1605054.867	595026.02	41.63309	-93.6294
149129	2022/10/01	oak, bur	Quercus macrocarpa	3945 10th St	1604721.248	595027.25	41.63309	-93.6306
149173	2022/10/01	oak, bur	Quercus macrocarpa	1305 Madison Ave	1603180.409	595060.65	41.63318	-93.6362
149193	2022/10/01	oak, bur	Quercus macrocarpa	4000 11th St	1604257.12	595060.6	41.63318	-93.6323
149199	2022/10/01	oak, bur	Quercus macrocarpa	4002 10th St	1604521.82	595062.39	41.63319	-93.6313
149203	2022/10/01	oak, bur	Quercus macrocarpa	917 Madison Ave	1604728.042	595062.81	41.63319	-93.6306
149204	2022/10/01	oak, bur	Quercus macrocarpa	4003 9th St	1605019.502	595062.74	41.63319	-93.6295
149299	2022/11/21	oak, bur	Quercus macrocarpa	1435 9th St	1605050.706	584887.49	41.60527	-93.6293
149303	2022/11/21	oak, bur	Quercus macrocarpa	801 Forest Ave	1605049.516	584580.56	41.60443	-93.6293
149314	2022/11/21	oak, bur	Quercus macrocarpa	1331 Forest Ave	1605051.113	584174.23	41.60331	-93.6293
149318	2022/09/24	oak, bur	Quercus macrocarpa	1245 9th St	1605052.689	583599.78	41.60173	-93.6293
149319	2022/09/24	oak, bur	Quercus macrocarpa	1319 Forest Ave	1605049.422	584024.05	41.6029	-93.6293
149327	2022/09/24	oak, bur	Quercus macrocarpa	1438 9th St	1605009.462	584961.25	41.60547	-93.6295
149331	2022/09/24	oak, bur	Quercus macrocarpa	1424 9th St	1605011.017	584773.8	41.60496	-93.6295
149334	2022/09/24	oak, bur	Quercus macrocarpa	1414 9th St	1605009.32	584619.61	41.60453	-93.6295
149339	2022/09/24	oak, bur	Quercus macrocarpa	1334 9th St	1605017.261	584286.71	41.60362	-93.6294
149341	2022/09/24	oak, bur	Quercus macrocarpa	1328 9th St	1605014.463	584131.78	41.60319	-93.6294
149363	2022/10/15	oak, bur	Quercus macrocarpa	9999999 Unassigned	1599811.008	582184.59	41.59783	-93.6485
149364	2022/10/15	oak, bur	Quercus macrocarpa	9999999 Unassigned	1599718.97	582203.75	41.59788	-93.6488
149365	2022/10/15	oak, bur	Quercus macrocarpa	9999999 Unassigned	1599646.521	582095.34	41.59758	-93.6491
149366	2022/10/15	oak, bur	Quercus macrocarpa	9999999 Unassigned	1599511.7	581978.99	41.59726	-93.6496
147638	2022/05/23	oak, chinkapin	Quercus muehlenbergii	826 Des Moines St	1611275.232	580663.3	41.5937	-93.6065
147641	2022/05/23	oak, chinkapin	Quercus muehlenbergii	823 Lyon St	1611128.154	580683.22	41.59375	-93.6071
147753	2022/05/25	oak, hybrid	Quercus x	618 E Thornton Ave	1611875.254	565126.04	41.55106	-93.6043
147757	2022/05/27	oak, hybrid	Quercus x	940 SW 12th Pl	1605435.827	568835.67	41.56122	-93.6278
973	2022/04/09	oak, northern red	Quercus rubra	3300 Cottage Grove Ave	1596051.473	582418.27	41.59845	-93.6622
1036	2022/04/09	oak, northern red	Quercus rubra	3104 Cottage Grove Ave	1596719.71	582415.21	41.59845	-93.6598
1100	2022/04/09	oak, northern red	Quercus rubra	2932 Cottage Grove Ave	1597015.35	582418.07	41.59845	-93.6587
1207	2022/04/09	oak, northern red	Quercus rubra	2818 Cottage Grove Ave	1597651.938	582416.27	41.59845	-93.6564
1209	2022/04/09	oak, northern red	Quercus rubra	2812 Cottage Grove Ave	1597773.748	582416.05	41.59845	-93.6559
1211	2022/04/09	oak, northern red	Quercus rubra	2810 Cottage Grove Ave	1597874.91	582413.53	41.59845	-93.6555
8408	2022/04/23	oak, northern red	Quercus rubra	214 E Edison Ave	1609564.009	573001.98	41.57267	-93.6128
8422	2022/04/23	oak, northern red	Quercus rubra	1813 SE 1st St	1609138.962	573135.69	41.57303	-93.6143
8426	2022/04/23	oak, northern red	Quercus rubra	103 E Dunham Ave	1609099.234	573374.39	41.57369	-93.6145
19302	2022/06/04	oak, northern red	Quercus rubra	1508 Pioneer Rd	1614681.799	570563.24	41.56599	-93.594
30888	2022/06/04	oak, northern red	Quercus rubra	701 E Spring St	1612009.91	560219.27	41.53759	-93.6038
30890	2022/06/04	oak, northern red	Quercus rubra	713 E Spring St	1612142.973	560216.76	41.53759	-93.6033
30922	2022/06/04	oak, northern red	Quercus rubra	801 E Spring St	1612284.611	560218.25	41.53759	-93.6028
30923	2022/06/04	oak, northern red	Quercus rubra	801 E Spring St	1612361.35	560218.6	41.53759	-93.6025
30924	2022/06/04	oak, northern red	Quercus rubra	811 E Spring St	1612474.014	560214.36	41.53758	-93.6021
30926	2022/06/04	oak, northern red	Quercus rubra	5204 SE 9th St	1612528.38	560097.67	41.53726	-93.6019
30928	2022/06/04	oak, northern red	Quercus rubra	5212 SE 9th St	1612532.337	559986.27	41.53696	-93.6019
30929	2022/06/04	oak, northern red	Quercus rubra	5216 SE 9th St	1612527.773	559929.27	41.5368	-93.6019
30930	2022/06/04	oak, northern red	Quercus rubra	5220 SE 9th St	1612529.336	559864.71	41.53662	-93.6019
30955	2022/07/08	oak, northern red	Quercus rubra	608 E Spring St	1611752.85	560260.17	41.53771	-93.6047
30956	2022/06/04	oak, northern red	Quercus rubra	604 E Spring St	1611276.25	560261.59	41.53771	-93.605
30957	2022/06/04	oak, northern red	Quercus rubra	600 E Spring St	1611628.223	560260.54	41.53771	-93.6052
30958	2022/06/04	oak, northern red	Quercus rubra	512 E Spring St	1611573.556	560258.4	41.5377	-93.6054
30960	2022/06/04	oak, northern red	Quercus rubra	500 E Spring St	1611339.892	560260.74	41.53771	-93.6062
30995	2022/06/04	oak, northern red	Quercus rubra	505 E Spring St	1611376.943	560220.88	41.5376	-93.6061
30996	2022/06/04	oak, northern red	Quercus rubra	509 E Spring St	1611440.363	560222.18	41.5376	-93.6058
30997	2022/06/04	oak, northern red	Quercus rubra	509 E Spring St	1611514.745	560222.16	41.5376	-93.6056
31006	2022/06/04	oak, northern red	Quercus rubra	601 E Spring St	1611635.867	560222.15	41.5376	-93.6051
31007	2022/06/04	oak, northern red	Quercus rubra	601 E Spring St	1611728.23	560221.96	41.5376	-93.6048
32104	2022/05/21	oak, northern red	Quercus rubra	4125 Forest Ave	1592856.812	584468.56	41.60406	-93.6739
32106	2022/05/21	oak, northern red	Quercus rubra	4125 Forest Ave	1592777.953	584468.1	41.60406	-93.6742
32160	2022/05/21	oak, northern red	Quercus rubra	4120 College Ave	1592890.925	585695.59	41.60743	-93.6738
32171	2022/05/21	oak, northern red	Quercus rubra	4131 College Ave	1592654.187	585792.07	41.60769	-93.6747
32183	2022/05/21	oak, northern red	Quercus rubra	1538 43rd St	1592126.101	585628.55	41.60724	-93.6766
32213	2022/05/21	oak, northern red	Quercus rubra	1509 43rd St	1592163.637	585271.06	41.60626	-93.6764
35771	2022/09/29	oak, northern red	Quercus rubra	1908 8th St	1605344.009	587233.4	41.61171	-93.6283
36013	2022/05/21	oak, northern red	Quercus rubra	1438 44th St	1591776.404	584972.64	41.60544	-93.6779
36266	2022/05/21	oak, northern red	Quercus rubra	1710 46th St	1591107.374	586377.55	41.60929	-93.6803
36283	2022/05/21	oak, northern red	Quercus rubra	1603 47th St	1590857.262	585790.87	41.60768	-93.6812
37184	2022/05/21	oak, northern red	Quercus rubra	2024 47th St	1590767.094	587781.07	41.61314	-93.6816
41638	2022/04/16	oak, northern red	Quercus rubra	1405 Idaho St	1613353.542	584868	41.60524	-93.599
41646	2022/04/16	oak, northern red	Quercus rubra	1437 Idaho St	1613359.167	585735.79	41.60763	-93.5989
41657	2022/04/16	oak, northern red	Quercus rubra	1410 Cleveland Ave	1613095.667	584827.96	41.60513	-93.5999
41668	2022/04/16	oak, northern red	Quercus rubra	1407 Hutton St	1614083.466	584860.41	41.60523	-93.5963
41675	2022/04/16	oak, northern red	Quercus rubra	1501 Hutton St	1614083.814	585280.15	41.60638	-93.5963
41716	2022/04/16	oak, northern red	Quercus rubra	1405 Idaho St	1613418.109	584828.33	41.60514	-93.5987
42067	2022/04/16	oak, northern red	Quercus rubra	1323 Hutton St	1614082.061	584129.61	41.60322	-93.5963
42068	2022/04/16	oak, northern red	Quercus rubra	1331 Hutton St	1614081.721	584237.02	41.60352	-93.5963
42073	2022/04/16	oak, northern red	Quercus rubra	1353 Hutton St	1614081.647	584482.06	41.60419	-93.5963
143245	2022/06/14	oak, northern red	Quercus rubra	2816 Sweetwater Dr	1623279.319	554750.05	41.52261	-93.5626

143256	2022/06/14	oak, northern red	Quercus rubra	6721 Three Lakes Pkwy	1622853.739	555057.14	41.52346	-93.5641
143668	2022/06/14	oak, northern red	Quercus rubra	2653 Moonlight Dr	1622960.687	554926.62	41.5231	-93.5637
143669	2022/06/14	oak, northern red	Quercus rubra	2653 Moonlight Dr	1623009.132	554885.61	41.52298	-93.5636
146618	2022/04/09	oak, northern red	Quercus rubra	2804 Cottage Grove Ave	1598002.828	582415.08	41.59845	-93.6551
146624	2022/04/09	oak, northern red	Quercus rubra	3102 Cottage Grove Ave	1596805.463	582364.99	41.59831	-93.6594
146629	2022/04/09	oak, northern red	Quercus rubra	3132 Cottage Grove Ave	1596315.499	582417.79	41.59845	-93.6612
146634	2022/04/09	oak, northern red	Quercus rubra	3418 Cottage Grove Ave	1595686.419	582418.96	41.59845	-93.6635
146636	2022/04/09	oak, northern red	Quercus rubra	3400 Cottage Grove Ave	1595873.232	582418.56	41.59845	-93.6629
146641	2022/04/16	oak, northern red	Quercus rubra	1221 Hutton St	1614076.43	583677.79	41.60198	-93.5963
146642	2022/04/16	oak, northern red	Quercus rubra	1241 Hutton St	1614077.688	583820.3	41.60237	-93.5963
146646	2022/04/16	oak, northern red	Quercus rubra	1427 Hutton St	1614084.279	585135.01	41.60598	-93.5963
146648	2022/04/16	oak, northern red	Quercus rubra	1515 Hutton St	1614083.168	585457.28	41.60686	-93.5963
146649	2022/04/16	oak, northern red	Quercus rubra	1437 Idaho St	1613356.826	585648.46	41.60739	-93.5989
146651	2022/04/16	oak, northern red	Quercus rubra	1515 Idaho St	1613358.729	585386.48	41.60667	-93.5989
146652	2022/04/16	oak, northern red	Quercus rubra	1425 Idaho St	1613355.572	585190.63	41.60613	-93.599
146654	2022/04/16	oak, northern red	Quercus rubra	1402 Hutton St	1613993.025	584828.33	41.60514	-93.5966
146656	2022/04/16	oak, northern red	Quercus rubra	1401 E 15th St	1613849.618	584829.58	41.60514	-93.5971
146660	2022/04/16	oak, northern red	Quercus rubra	1402 E 15th St	1613619.648	584827.28	41.60513	-93.598
146664	2022/04/16	oak, northern red	Quercus rubra	1420 Cleveland Ave	1613210.697	584828.85	41.60514	-93.5995
146670	2022/04/16	oak, northern red	Quercus rubra	1522 E University Ave	1614073.521	583369.01	41.60113	-93.5963
146752	2022/04/23	oak, northern red	Quercus rubra	106 E Granger Ave	1609258.652	573827.1	41.57493	-93.6139
146757	2022/04/23	oak, northern red	Quercus rubra	1705 SE 1st St	1609194.933	573645.5	41.57443	-93.6141
146758	2022/04/23	oak, northern red	Quercus rubra	1717 SE 1st St	1609158.105	573543.92	41.57415	-93.6142
146767	2022/04/23	oak, northern red	Quercus rubra	1814 SE 1st St	1608997.696	573225.72	41.57328	-93.6148
146768	2022/04/23	oak, northern red	Quercus rubra	1813 SE 1st St	1609054.604	573249.4	41.57334	-93.6146
146769	2022/04/23	oak, northern red	Quercus rubra	1813 SE 1st St	1609062.561	573161.29	41.5731	-93.6146
146773	2022/04/23	oak, northern red	Quercus rubra	224 E Edison Ave	1609653.115	572973.71	41.57259	-93.6124
146776	2022/04/23	oak, northern red	Quercus rubra	244 E Edison Ave	1609849.354	572909.85	41.57241	-93.6117
146812	2022/05/21	oak, northern red	Quercus rubra	1509 47th St	1590822.577	585274.07	41.60626	-93.6813
146813	2022/05/21	oak, northern red	Quercus rubra	1509 47th St	1590822.577	585274.07	41.60626	-93.6813
146816	2022/05/21	oak, northern red	Quercus rubra	4635 University Ave	1590837.372	583221.92	41.60063	-93.6813
146817	2022/05/21	oak, northern red	Quercus rubra	1524 46th St	1591114.579	585477.72	41.60682	-93.6803
146820	2022/05/21	oak, northern red	Quercus rubra	1534 44th St	1591770.981	585522.93	41.60695	-93.6779
146822	2022/05/21	oak, northern red	Quercus rubra	1420 44th St	1591780.061	584761.44	41.60486	-93.6778
146823	2022/05/21	oak, northern red	Quercus rubra	1402 44th St	1591779.573	584522.83	41.6042	-93.6778
146824	2022/05/21	oak, northern red	Quercus rubra	4231 Forest Ave	1592206.767	584471.54	41.60406	-93.6763
146826	2022/05/21	oak, northern red	Quercus rubra	4231 Forest Ave	1592172.411	584531.17	41.60423	-93.6764
147004	2022/06/04	oak, northern red	Quercus rubra	509 E Spring St	1611467.629	560222.32	41.5376	-93.6057
147005	2022/06/04	oak, northern red	Quercus rubra	509 E Spring St	1611490.026	560222.66	41.5376	-93.6057
147006	2022/06/04	oak, northern red	Quercus rubra	512 E Spring St	1611506.965	560263.61	41.53771	-93.6056
147007	2022/06/04	oak, northern red	Quercus rubra	604 E Spring St	1611698.25	560262.28	41.53771	-93.6049
147008	2022/06/04	oak, northern red	Quercus rubra	613 E Spring St	1611770.896	560221.23	41.5376	-93.6046
147009	2022/06/04	oak, northern red	Quercus rubra	613 E Spring St	1611800.269	560221.19	41.5376	-93.6045
147013	2022/06/04	oak, northern red	Quercus rubra	701 E Spring St	1611974.939	560218.99	41.53759	-93.6039
147014	2022/06/04	oak, northern red	Quercus rubra	713 E Spring St	1612195.232	560219.46	41.53759	-93.6031
147015	2022/06/04	oak, northern red	Quercus rubra	801 E Spring St	1612322.266	560218.94	41.53759	-93.6026
147016	2022/06/04	oak, northern red	Quercus rubra	811 E Spring St	1612438.649	560215.15	41.53758	-93.6022
147354	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1622478.628	564037.83	41.5481	-93.5655
147355	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1622520.108	564035.61	41.5481	-93.5654
147356	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1622558.285	564035.21	41.54809	-93.5652
147357	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1622601.969	564034.08	41.54809	-93.5651
147358	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1622650.058	564033.68	41.54809	-93.5649
147397	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1623856.456	564024.32	41.54807	-93.5605
147398	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1623877.381	564024.31	41.54807	-93.5604
147399	2022/05/14	oak, northern red	Quercus rubra	2620 E Watrous Ave	1623897.938	564023.93	41.54807	-93.5603
147460	2022/05/13	oak, northern red	Quercus rubra	2836 Sweetwater Dr	1623826.495	555681.99	41.52517	-93.5606
147614	2022/06/04	oak, northern red	Quercus rubra	1506 Pioneer Rd	1614643.787	570563.79	41.56599	-93.5942
147615	2022/06/04	oak, northern red	Quercus rubra	1448 Pioneer Rd	1614563.784	570565.34	41.566	-93.5945
147616	2022/06/04	oak, northern red	Quercus rubra	1448 Pioneer Rd	1614543.967	570565.36	41.566	-93.5945
147617	2022/06/04	oak, northern red	Quercus rubra	1448 Pioneer Rd	1614521.579	570564.29	41.56599	-93.5946
147685	2022/06/04	oak, northern red	Quercus rubra	3225 SE 22nd Ct	1619980.831	566252.82	41.55417	-93.5747
147686	2022/05/27	oak, northern red	Quercus rubra	3225 SE 22nd Ct	1619970.186	566252.83	41.55417	-93.5747
147728	2022/06/04	oak, northern red	Quercus rubra	2455 Hart Ave	1620900.54	558213.62	41.53211	-93.5713
147730	2022/06/04	oak, northern red	Quercus rubra	2455 Hart Ave	1620843.63	558217.69	41.53212	-93.5715
147983	2022/06/04	oak, northern red	Quercus rubra	713 E Spring St	1612111.36	560222.93	41.5376	-93.6034
147984	2022/06/04	oak, northern red	Quercus rubra	2745 E Porter Ave	1623360.494	559105.5	41.53457	-93.5623
147985	2022/06/04	oak, northern red	Quercus rubra	2745 E Porter Ave	1623419.252	559120.46	41.53461	-93.5621
148030	2022/04/23	oak, northern red	Quercus rubra	202 E Edison Ave	1609408.325	573052.03	41.5728	-93.6133
148441	2022/08/17	oak, northern red	Quercus rubra	1412 44th St	1591780.934	584650.21	41.60455	-93.6778
148491	2022/09/30	oak, northern red	Quercus rubra	1900 7th St	1605557.87	587110.06	41.61137	-93.6275
148495	2022/11/01	oak, northern red	Quercus rubra	814 Hickman Rd	1605136.958	587677.24	41.61292	-93.629
148607	2022/10/08	oak, northern red	Quercus rubra	1515 SW 1st St	1608734.989	574305.31	41.57624	-93.6158
148610	2022/10/08	oak, northern red	Quercus rubra	111 Jackson Ave	1608578.742	574355.6	41.57638	-93.6164
148693	2022/11/03	oak, northern red	Quercus rubra	1819 Arlington Ave	1606977.7	586884.32	41.61076	-93.6223
148698	2022/11/03	oak, northern red	Quercus rubra	1804 Arlington Ave	1606976.694	586689.95	41.61022	-93.6223

148721	2022/11/03	oak, northern red	Quercus rubra	1615 Arlington Ave	1607029.018	586081.9	41.60855	-93.6221
148740	2022/11/03	oak, northern red	Quercus rubra	1511 Arlington Ave	1607005.024	585222.93	41.6062	-93.6222
148743	2022/11/03	oak, northern red	Quercus rubra	1525 Arlington Ave	1607003.742	585355.2	41.60656	-93.6222
148745	2022/11/03	oak, northern red	Quercus rubra	1529 Arlington Ave	1607004.639	585471.4	41.60688	-93.6222
148765	2022/09/17	oak, northern red	Quercus rubra	714 Jefferson Ave	1605493.482	586660.02	41.61013	-93.6277
148767	2022/09/17	oak, northern red	Quercus rubra	1731 6th Ave	1605391.896	586661.63	41.61014	-93.6281
148775	2022/09/17	oak, northern red	Quercus rubra	1800 8th St	1605226.916	586699.14	41.61024	-93.6287
148780	2022/09/17	oak, northern red	Quercus rubra	1805 8th St	1605445.495	586698.46	41.61024	-93.6279
148786	2022/09/17	oak, northern red	Quercus rubra	1801 7th St	1605802.518	586696.18	41.61023	-93.6266
148787	2022/09/17	oak, northern red	Quercus rubra	1700 6th St	1605945.631	586246.93	41.609	-93.6261
148790	2022/09/17	oak, northern red	Quercus rubra	1630 6th St	1605889.099	586210.47	41.6089	-93.6263
148793	2022/09/17	oak, northern red	Quercus rubra	1631 7th St	1605731.762	586211.07	41.6089	-93.6268
148805	2022/09/17	oak, northern red	Quercus rubra	1630 8th St	1605223.078	586212.18	41.6089	-93.6287
148811	2022/09/17	oak, northern red	Quercus rubra	825 Washington Ave	1605098.802	586248.17	41.609	-93.6291
148817	2022/09/17	oak, northern red	Quercus rubra	1701 Washington Ave	1605426.309	586246.23	41.609	-93.6279
148821	2022/10/29	oak, northern red	Quercus rubra	613 Spring St	1611863.861	560154.9	41.53742	-93.6043
148822	2022/10/29	oak, northern red	Quercus rubra	5606 SE 7th St	1611864.545	560112.84	41.5373	-93.6043
148828	2022/10/29	oak, northern red	Quercus rubra	5224 SE 7th St	1611864.014	559825.83	41.53651	-93.6043
148833	2022/10/29	oak, northern red	Quercus rubra	616 E Kenyon Ave	1611863.969	559481.26	41.53557	-93.6043
148836	2022/10/29	oak, northern red	Quercus rubra	5135 SE 7th St	1611903.333	559545.96	41.53575	-93.6041
148840	2022/10/29	oak, northern red	Quercus rubra	5225 SE 7th St	1611903.281	559809.69	41.53647	-93.6041
148845	2022/10/29	oak, northern red	Quercus rubra	5209 SE 7th St	1611906.948	560112.18	41.5373	-93.6041
148848	2022/10/29	oak, northern red	Quercus rubra	714 E Kenyon Ave	1612162.256	559452.71	41.53549	-93.6032
148851	2022/10/29	oak, northern red	Quercus rubra	5308 SE 8th St	1612227.992	559669.77	41.53609	-93.603
148858	2022/10/29	oak, northern red	Quercus rubra	5204 SE 8th St	1612218.203	560084.57	41.53722	-93.603
148860	2022/10/29	oak, northern red	Quercus rubra	713 E Spring St	1612219.023	560156.99	41.53742	-93.603
148865	2022/10/29	oak, northern red	Quercus rubra	5217 SE 8th St	1612257.298	559920.58	41.53677	-93.6029
148869	2022/10/29	oak, northern red	Quercus rubra	5305 SE 8th St	1612261.481	559732.57	41.53626	-93.6028
148876	2022/10/29	oak, northern red	Quercus rubra	800 E Kenyon Ave	1612255.323	559492.62	41.5356	-93.6029
148884	2022/10/29	oak, northern red	Quercus rubra	5301 SE 9th St	1612572.551	559804.99	41.53646	-93.6017
148955	2022/10/27	oak, northern red	Quercus rubra	1306 E 27th Ct	1622929.135	584188.22	41.6034	-93.5639
148956	2022/10/27	oak, northern red	Quercus rubra	1308 E 27th Ct	1622928.426	584221.11	41.60349	-93.5639
148957	2022/10/27	oak, northern red	Quercus rubra	1312 E 27th Ct	1622927.735	584279.21	41.60365	-93.5639
148973	2022/10/27	oak, northern red	Quercus rubra	1440 E 27th Ct	1622925.795	585132.78	41.606	-93.564
148975	2022/10/27	oak, northern red	Quercus rubra	1440 E 27th Ct	1622926.576	585197.09	41.60617	-93.564
148996	2022/10/15	oak, northern red	Quercus rubra	2681 E Market St	1622229.284	578156.63	41.58685	-93.5665
149002	2022/10/15	oak, northern red	Quercus rubra	2711 E Market St	1622500.774	578158.61	41.58686	-93.5655
149004	2022/10/15	oak, northern red	Quercus rubra	2711 E Market St	1622584.423	578161.47	41.58686	-93.5652
149007	2022/10/15	oak, northern red	Quercus rubra	2727 E Market St	1622789.875	578162.05	41.58687	-93.5644
149010	2022/10/15	oak, northern red	Quercus rubra	2727 E Market St	1622888.933	578164.17	41.58687	-93.5641
149013	2022/10/15	oak, northern red	Quercus rubra	2754 E Elm St	1623116.627	577976.87	41.58636	-93.5632
149015	2022/10/15	oak, northern red	Quercus rubra	2754 E Elm St	1623116.196	577889.52	41.58612	-93.5632
149026	2022/10/15	oak, northern red	Quercus rubra	2736 Raccoon St	1623115.29	577652.56	41.58547	-93.5632
149031	2022/10/15	oak, northern red	Quercus rubra	2750 E Elm St	1623034.001	577870.09	41.58606	-93.5635
149034	2022/10/15	oak, northern red	Quercus rubra	2742 Elm St	1622921.366	577866.89	41.58606	-93.564
149037	2022/10/15	oak, northern red	Quercus rubra	2736 E Elm St	1622835.883	577866.95	41.58606	-93.5643
149039	2022/10/15	oak, northern red	Quercus rubra	2736 E Elm St	1622773.513	577866.63	41.58605	-93.5645
149055	2022/10/15	oak, northern red	Quercus rubra	0 Scott Ave	1622204.335	576957.56	41.58356	-93.5666
149056	2022/10/15	oak, northern red	Quercus rubra	99999 Unassigned	1622205.781	576929.05	41.58348	-93.5666
149057	2022/10/15	oak, northern red	Quercus rubra	99999 Unassigned	1622206.502	576911.5	41.58343	-93.5666
149058	2022/10/15	oak, northern red	Quercus rubra	99999 Unassigned	1622207.212	576881.53	41.58335	-93.5666
149063	2022/10/22	oak, northern red	Quercus rubra	701 Park St	1605684.798	579608.93	41.59078	-93.627
149066	2022/10/22	oak, northern red	Quercus rubra	303 Locust	1607166.826	578643.95	41.58814	-93.6215
149067	2022/10/22	oak, northern red	Quercus rubra	401 Locust	1606852.544	578472.61	41.58767	-93.6227
149069	2022/10/22	oak, northern red	Quercus rubra	401 Locust	1606777.342	578347.17	41.58733	-93.623
149085	2022/10/22	oak, northern red	Quercus rubra	1001 Cherry St	1605042.046	576755.15	41.58295	-93.6293
149090	2022/10/22	oak, northern red	Quercus rubra	0 Unassigned	1604740.167	576930.14	41.58343	-93.6304
149097	2022/10/22	oak, northern red	Quercus rubra	100 2nd Ave	1607580.991	577292.11	41.58443	-93.62
149103	2022/10/22	oak, northern red	Quercus rubra	612 Locust St	1606048.539	578088.16	41.58661	-93.6256
149227	2022/10/01	oak, northern red	Quercus rubra	3330 Village Run Dr	1636988.402	592064.49	41.62504	-93.5125
149231	2022/10/01	oak, northern red	Quercus rubra	3300 Valdez Dr	1595688.085	596704.8	41.63766	-93.6636
149235	2022/10/01	oak, northern red	Quercus rubra	1918 40th St	1593750.686	587380.65	41.61206	-93.6707
149305	2022/11/21	oak, northern red	Quercus rubra	801 Forest Ave	1605049.428	584521.36	41.60426	-93.6293
149316	2022/11/21	oak, northern red	Quercus rubra	1331 Forest Ave	1605051.435	584144.26	41.60323	-93.6293
149326	2022/09/24	oak, northern red	Quercus rubra	1311 Forest Ave	1605055.077	583880.07	41.6025	-93.6293
149329	2022/09/24	oak, northern red	Quercus rubra	1230 9th St	1605015.104	583484.36	41.60142	-93.6294
149335	2022/09/24	oak, northern red	Quercus rubra	1414 9th St	1605010.374	584588.18	41.60445	-93.6295
149337	2022/09/24	oak, northern red	Quercus rubra	1338 9th St	1605015.11	584319.97	41.60371	-93.6294
149344	2022/09/24	oak, northern red	Quercus rubra	1308 9th St	1605014.801	583773.41	41.60221	-93.6294
149346	2022/09/24	oak, northern red	Quercus rubra	1324 9th St	1605014.625	583994.39	41.60282	-93.6294
147331	2022/05/14	oak, pin	Quercus palustris	3819 SE 26th St	1621928.023	564385.2	41.54905	-93.5675
147332	2022/05/14	oak, pin	Quercus palustris	3825 SE 26th St	1621947.807	564334.35	41.54891	-93.5675
147333	2022/05/14	oak, pin	Quercus palustris	2620 E Watrous Ave	1622002.168	564316.55	41.54887	-93.5673
147350	2022/05/14	oak, pin	Quercus palustris	2620 E Watrous Ave	1622362.644	564062.06	41.54817	-93.566
147351	2022/05/14	oak, pin	Quercus palustris	2620 E Watrous Ave	1622385.38	564030.22	41.54808	-93.5659

147352	2022/05/14	oak, pin	Quercus palustris	2620 E Watrous Ave	1622423.18	564015.57	41.54804	-93.5657
148891	2022/10/27	oak, pin	Quercus palustris	2735 Easton Blvd	1622961.545	586368.4	41.60939	-93.5638
149060	2022/10/22	oak, pin	Quercus palustris	941 8th St	1605685.539	580806.87	41.59407	-93.627
149221	2022/10/01	oak, pin	Quercus palustris	1131 18th St	1601772.616	582565.62	41.59888	-93.6413
149222	2022/10/01	oak, pin	Quercus palustris	1407 12th St	1604061.156	584521.08	41.60426	-93.6329
11847	2022/04/28	oak, sawtooth	Quercus acutissima	3933 48th St	1590425.54	594840.51	41.63251	-93.6829
146694	2022/04/28	oak, sawtooth	Quercus acutissima	3934 48th St	1590336.069	594769.47	41.63232	-93.6832
146695	2022/04/28	oak, sawtooth	Quercus acutissima	3916 48th St	1590393.612	594587.45	41.63182	-93.683
146697	2022/04/28	oak, sawtooth	Quercus acutissima	3916 48th St	1590324.493	594495.56	41.63156	-93.6832
146700	2022/04/28	oak, sawtooth	Quercus acutissima	4830 Seneca Ave	1590104.324	594403.98	41.63131	-93.684
35752	2022/10/08	oak, scarlet	Quercus coccinea	717 Franklin Ave	1605398.111	587108.84	41.61137	-93.6281
131970	2022/05/07	oak, scarlet	Quercus coccinea	999999 Unassigned	1606948.722	578704.49	41.58831	-93.6223
132017	2022/05/07	oak, scarlet	Quercus coccinea	999999 Unassigned	1607127.091	578751.42	41.58844	-93.6217
141331	2022/07/07	oak, scarlet	Quercus coccinea	909 Locust St	1605084.189	578176.86	41.58685	-93.6292
142793	2022/05/07	oak, scarlet	Quercus coccinea	400 Locust St	1606600.484	578238.33	41.58703	-93.6236
143187	2022/05/07	oak, scarlet	Quercus coccinea	401 Locust St	1606686.384	578321	41.58725	-93.6233
143972	2022/05/07	oak, scarlet	Quercus coccinea	612 Locust St	1605931.711	578033.29	41.58646	-93.6261
144358	2022/05/07	oak, scarlet	Quercus coccinea	504 E Locust St	1610184.884	579281.36	41.5899	-93.6105
144359	2022/05/07	oak, scarlet	Quercus coccinea	504 E Locust St	1610231.858	579293.36	41.58994	-93.6103
146317	2022/05/07	oak, scarlet	Quercus coccinea	303 Locust St	1607177.058	578466.64	41.58766	-93.6215
146394	2022/05/07	oak, scarlet	Quercus coccinea	301 Grand Ave	1607153.089	578865.82	41.58875	-93.6216
146395	2022/05/07	oak, scarlet	Quercus coccinea	303 Locust St	1607190.025	578518.55	41.5878	-93.6215
146964	2022/05/07	oak, scarlet	Quercus coccinea	808 Des Moines St	1611021.05	580291.98	41.59268	-93.6075
147334	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622052.825	564315.04	41.54886	-93.5671
147335	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622097.979	564316.84	41.54887	-93.5669
147336	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622140.928	564317.17	41.54887	-93.5668
147337	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622179.841	564318.6	41.54887	-93.5666
147338	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622233.804	564320.02	41.54888	-93.5664
147364	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1622944.466	564032.37	41.54809	-93.5638
147365	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623004.302	564031.96	41.54809	-93.5636
147366	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623053.125	564030.82	41.54808	-93.5634
147367	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623099.47	564029.67	41.54808	-93.5633
147368	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623141.319	564030.01	41.54808	-93.5631
147382	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623505.885	564029.32	41.54808	-93.5618
147383	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623529.011	564028.21	41.54808	-93.5617
147400	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623922.167	564024.64	41.54807	-93.5603
147401	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623946.394	564024.26	41.54807	-93.5602
147402	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623970.255	564023.51	41.54807	-93.5601
147403	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1623996.685	564021.66	41.54806	-93.56
147404	2022/05/14	oak, scarlet	Quercus coccinea	2620 E Watrous Ave	1624025.314	564016.52	41.54805	-93.5599
147418	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623372.398	555324.82	41.52419	-93.5622
147419	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623390.402	555338.71	41.52423	-93.5622
147420	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623409.142	555355.16	41.52427	-93.5621
147421	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1624128.457	555836.16	41.5256	-93.5595
147422	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1624160.046	555847.48	41.52563	-93.5594
147444	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623523.72	555423.18	41.52446	-93.5617
147445	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623540.989	555436.71	41.5245	-93.5616
147446	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623558.26	555452.43	41.52454	-93.5616
147447	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623572.959	555467.05	41.52458	-93.5615
147448	2022/05/13	oak, scarlet	Quercus coccinea	2836 Sweetwater Dr	1623588.024	555479.85	41.52462	-93.5615
148497	2022/11/01	oak, scarlet	Quercus coccinea	2009 9th St	1605078.05	587645.54	41.61284	-93.6292
148499	2022/11/01	oak, scarlet	Quercus coccinea	814 Hickman Rd	1605159.462	587643.96	41.61283	-93.6289
148882	2022/10/29	oak, scarlet	Quercus coccinea	5304 SE 9th St	1612528.781	559737.74	41.53627	-93.6019
148886	2022/10/29	oak, scarlet	Quercus coccinea	5313 SE 9th St	1612566.849	559638.57	41.536	-93.6017
149183	2022/10/01	oak, scarlet	Quercus coccinea	1139 Madison Ave	1603776.157	595058.27	41.63318	-93.634
149197	2022/10/01	oak, scarlet	Quercus coccinea	4001 11th St	1604443.365	595063.24	41.63319	-93.6316
30941	2022/06/04	oak, Shumard	Quercus shumardii	5209 SE 9th St	1612575.604	560036.73	41.53709	-93.6017
30942	2022/06/04	oak, Shumard	Quercus shumardii	5205 SE 9th St	1612579.379	560098.5	41.53726	-93.6017
147017	2022/06/04	oak, Shumard	Quercus shumardii	5213 SE 9th St	1612566.893	559993.34	41.53698	-93.6017
147341	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622338.978	564318.07	41.54887	-93.566
147342	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622365.755	564291.36	41.54888	-93.5659
147343	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622366.832	564258.81	41.54871	-93.5659
147344	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622366.436	564220.77	41.5486	-93.5659
147359	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622709.893	564032.54	41.54809	-93.5647
147360	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622757.249	564033.24	41.54809	-93.5645
147361	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622804.604	564032.84	41.54809	-93.5643
147362	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622847.552	564031.34	41.54808	-93.5642
147363	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1622892.338	564031.31	41.54808	-93.564
147392	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1623743.025	564025.86	41.54807	-93.5609
147393	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1623766.152	564025.48	41.54807	-93.5608
147394	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1623788.177	564024.73	41.54807	-93.5607
147395	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1623810.57	564024.72	41.54807	-93.5607
147396	2022/05/14	oak, Shumard	Quercus shumardii	2620 E Watrous Ave	1623833.33	564025.43	41.54807	-93.5606
147412	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623229.106	555223.95	41.52391	-93.5628
147413	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623249.682	555239.3	41.52396	-93.5627

147423	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1624192.737	555859.9	41.52566	-93.5593
147431	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623256.595	555213.75	41.52389	-93.5627
147432	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623275.699	555225.44	41.52392	-93.5626
147433	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623297.008	555238.96	41.52395	-93.5625
147461	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623887.762	555708.69	41.52525	-93.5604
147462	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1623924.129	555725.86	41.52529	-93.5602
147465	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1624116.231	555790.85	41.52547	-93.5595
147469	2022/05/13	oak, Shumard	Quercus shumardii	2836 Sweetwater Dr	1624252.512	555852.95	41.52564	-93.559
147478	2022/05/13	oak, Shumard	Quercus shumardii	3009 E Payton Ave	1624644.167	556221.42	41.52665	-93.5576
147479	2022/05/13	oak, Shumard	Quercus shumardii	3009 E Payton Ave	1624675.016	556226.52	41.52667	-93.5575
147557	2022/05/13	oak, Shumard	Quercus shumardii	3009 E Payton Ave	1624863.079	556301.39	41.52687	-93.5568
147559	2022/05/13	oak, Shumard	Quercus shumardii	3009 E Payton Ave	1624900.549	556322.95	41.52693	-93.5567
147560	2022/05/13	oak, Shumard	Quercus shumardii	3009 E Payton Ave	1624943.531	556351.82	41.52701	-93.5565
148694	2022/11/03	oak, Shumard	Quercus shumardii	1810 Arlington Ave	1606977.638	586840.12	41.61063	-93.6223
148744	2022/11/03	oak, Shumard	Quercus shumardii	1525 Arlington Ave	1607002.325	585390.28	41.60666	-93.6222
148859	2022/10/29	oak, Shumard	Quercus shumardii	5204 SE 8th St	1612218.99	560129.2	41.53735	-93.603
148883	2022/10/29	oak, Shumard	Quercus shumardii	5304 SE 9th St	1612528.069	559757.13	41.53633	-93.6019
148542	2022/10/08	oak, swamp white	Quercus bicolor	416 E Dunham Ave	1610778.094	573016.31	41.57271	-93.6083
148599	2022/10/08	oak, swamp white	Quercus bicolor	1406 SW 1st St	1608848.262	574847.96	41.57773	-93.6154
148942	2022/10/27	oak, swamp white	Quercus bicolor	1226 E 27th Ct	1622931.724	583468.69	41.60143	-93.5639
149096	2022/10/22	oak, swamp white	Quercus bicolor	100 2nd Ave	1607568.56	577323.56	41.58452	-93.6201
133888	2022/05/23	oak, white	Quercus alba	827 Lyon St	1611197.489	580702.22	41.5938	-93.6068
134029	2022/05/30	oak, white	Quercus alba	827 Lyon St	1611275.084	580693.04	41.59378	-93.6065
147635	2022/05/23	oak, white	Quercus alba	826 Des Moines St	1611276.403	580421.73	41.59304	-93.6065
147637	2022/05/23	oak, white	Quercus alba	826 Des Moines St	1611275.491	580575.22	41.59346	-93.6065
148544	2022/10/08	oak, white	Quercus alba	416 E Dunham Ave	1610837.158	573000.7	41.57267	-93.6081
149287	2022/11/18	oak, white	Quercus alba	1604 Cleveland Ave	1614419.129	584832.66	41.60515	-93.5951
11664	2022/05/19	persian ironwood	Parrotia persica	4001 41st St	1592947.896	595085.55	41.6332	-93.6736
11908	2022/05/19	persian ironwood	Parrotia persica	4001 39th Pl	1593630.823	595087.09	41.63321	-93.6711
13316	2022/04/27	persian ironwood	Parrotia persica	2501 Scott Ave	1621688.667	576995.93	41.58366	-93.5685
146708	2022/04/27	persian ironwood	Parrotia persica	2501 Scott Ave	1621627.366	576923.4	41.58346	-93.5687
146722	2022/04/27	persian ironwood	Parrotia persica	600 SE 28th St	1623059.161	577154.41	41.5841	-93.5634
146726	2022/04/27	persian ironwood	Parrotia persica	2827 Scott Ave	1623462.376	577156.31	41.58411	-93.562
146747	2022/04/27	persian ironwood	Parrotia persica	2706 Raccoon St	1622432.05	577517.83	41.5851	-93.5657
147022	2022/05/19	persian ironwood	Parrotia persica	4059 Beaver Ave	1591802.997	595882.49	41.63538	-93.6778
147026	2022/05/19	persian ironwood	Parrotia persica	4224 Shawnee Ave	1592158.611	595886.15	41.63539	-93.6765
147039	2022/05/19	persian ironwood	Parrotia persica	4001 41st St	1592921.224	595086.63	41.6332	-93.6737
147041	2022/05/19	persian ironwood	Parrotia persica	4001 41st St	1593005.915	595087.92	41.6332	-93.6734
147042	2022/05/19	persian ironwood	Parrotia persica	4035 Madison Ave	1593081.072	595088.5	41.63321	-93.6732
147043	2022/05/19	persian ironwood	Parrotia persica	4001 40th St	1593271.715	595089.58	41.63321	-93.6725
147044	2022/05/19	persian ironwood	Parrotia persica	3917 Madison Ave	1593706.157	595090.19	41.63321	-93.6709
147045	2022/05/19	persian ironwood	Parrotia persica	3913 Madison Ave	1593786.815	595091.49	41.63322	-93.6706
147048	2022/05/19	persian ironwood	Parrotia persica	4001 42nd St	1592583.936	595086.57	41.6332	-93.675
147052	2022/05/19	persian ironwood	Parrotia persica	4207 Madison Ave	1592336.468	595085.61	41.63319	-93.6759
147053	2022/05/19	persian ironwood	Parrotia persica	4001 43rd St	1592275.977	595086.1	41.6332	-93.6761
147056	2022/05/19	persian ironwood	Parrotia persica	4303 Madison Ave	1592058.938	595084.71	41.63319	-93.6769
147058	2022/05/19	persian ironwood	Parrotia persica	4303 Madison Ave	1591986.348	595084.86	41.63319	-93.6772
147060	2022/05/19	persian ironwood	Parrotia persica	4005 Beaver Ave	1591895.426	595084.68	41.63319	-93.6775
147973	2022/07/11	persian ironwood	Parrotia persica	4001 39th Pl	1593609.416	595085.63	41.6332	-93.6712
149110	2022/11/18	persian ironwood	Parrotia persica	1418 E Washington Ave	1613112.732	585795.37	41.60779	-93.5998
149253	2022/11/18	persian ironwood	Parrotia persica	1437 E Washington Ave	1613376.183	585752.46	41.60767	-93.5989
13318	2022/04/27	persimmon, common	Diospyros virginiana	2501 Scott Ave	1621761.158	577051.19	41.58381	-93.5682
13321	2022/04/27	persimmon, common	Diospyros virginiana	2501 Scott Ave	1621897.303	577106.3	41.58397	-93.5677
44609	2022/04/27	persimmon, common	Diospyros virginiana	2800 Raccoon St	1623187.239	577525.73	41.58512	-93.563
146710	2022/04/27	persimmon, common	Diospyros virginiana	2501 Scott Ave	1621671.805	576979.28	41.58362	-93.5685
146717	2022/04/27	persimmon, common	Diospyros virginiana	512 SE 27th Ct	1622684.56	577149.57	41.58409	-93.5648
146718	2022/04/27	persimmon, common	Diospyros virginiana	2729 Scott Ave	1622866.172	577149.43	41.58409	-93.5642
146721	2022/04/27	persimmon, common	Diospyros virginiana	2739 Scott Ave	1623029.442	577154.07	41.5841	-93.5636
146725	2022/04/27	persimmon, common	Diospyros virginiana	2827 Scott Ave	1623434.493	577157.79	41.58411	-93.5621
146729	2022/04/27	persimmon, common	Diospyros virginiana	2841 Scott Ave	1623688.753	577163.1	41.58413	-93.5611
146730	2022/04/27	persimmon, common	Diospyros virginiana	2907 Scott Ave	1623875.501	577162.97	41.58413	-93.5605
146733	2022/04/27	persimmon, common	Diospyros virginiana	2940 Raccoon St	1624251.823	577543.2	41.58517	-93.5591
146734	2022/04/27	persimmon, common	Diospyros virginiana	2900 Raccoon St	1623826.231	577536.55	41.58515	-93.5606
146736	2022/04/27	persimmon, common	Diospyros virginiana	2814 Raccoon St	1623330.93	577529.96	41.58513	-93.5625
146743	2022/04/27	persimmon, common	Diospyros virginiana	2720 Raccoon St	1622699.512	577520.55	41.5851	-93.5648
8485	2022/10/08	planetree, London	Platanus x acerifolia	1723 South Union St	1608918.929	573553.46	41.57418	-93.6151
8630	2022/10/08	planetree, London	Platanus x acerifolia	111 E Jackson Ave	1608709.779	574461.84	41.57667	-93.6159
13314	2022/04/27	planetree, London	Platanus x acerifolia	2501 Scott Ave	1621614.225	576901.63	41.5834	-93.5687
35511	2022/11/14	planetree, London	Platanus x acerifolia	1701 7th St	1605632.391	586242.19	41.60899	-93.6272
35755	2022/10/08	planetree, London	Platanus x acerifolia	1909 8th St	1605378.529	587237.67	41.61172	-93.6281
35760	2022/11/02	planetree, London	Platanus x acerifolia	718 Hickman Rd	1605379.051	587583.09	41.61267	-93.6281
38869	2022/04/21	planetree, London	Platanus x acerifolia	2401 University Ave	1599393.16	583155.16	41.60049	-93.65
38870	2022/04/21	planetree, London	Platanus x acerifolia	2409 University Ave	1599365.953	583155.07	41.60049	-93.6501
144342	2022/10/08	planetree, London	Platanus x acerifolia	1610 SE 6th St	1611586.725	572990.65	41.57264	-93.6054
146669	2022/04/21	planetree, London	Platanus x acerifolia	2210 University Ave	1599897.751	583046.17	41.60019	-93.6481

146841	2022/04/22	planetree, London	Platanus x acerifolia	100 McKinley Ave	1608845.623	561472.6	41.54102	-93.6153
146903	2022/04/22	planetree, London	Platanus x acerifolia	437 E McKinley Ave	1611173.536	561404.89	41.54084	-93.6068
146910	2022/04/22	planetree, London	Platanus x acerifolia	417 E McKinley Ave	1610904.804	561413.63	41.54087	-93.6078
146911	2022/04/22	planetree, London	Platanus x acerifolia	417 E McKinley Ave	1610879.105	561413.66	41.54087	-93.6079
146917	2022/04/22	planetree, London	Platanus x acerifolia	411 E McKinley Ave	1610616.607	561416.51	41.54087	-93.6089
146919	2022/04/22	planetree, London	Platanus x acerifolia	401 E McKinley Ave	1610553.459	561416.22	41.54087	-93.6091
146920	2022/04/22	planetree, London	Platanus x acerifolia	401 E McKinley Ave	1610515.278	561416.64	41.54087	-93.6092
146922	2022/04/22	planetree, London	Platanus x acerifolia	333 E McKinley Ave	1610443.687	561417.09	41.54088	-93.6095
146931	2022/04/22	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1610025.156	561418.72	41.54088	-93.6111
146933	2022/07/07	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1609967.516	561419.52	41.54088	-93.6112
146934	2022/04/22	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1609936.309	561419.2	41.54088	-93.6113
146937	2022/04/22	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1609763.758	561420.88	41.54088	-93.612
146939	2022/04/22	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1609705.752	561421.32	41.54088	-93.6122
146940	2022/04/22	planetree, London	Platanus x acerifolia	315 E McKinley Ave	1609666.835	561421.01	41.54088	-93.6123
146942	2022/04/22	planetree, London	Platanus x acerifolia	211 E McKinley Ave	1609604.789	561421.09	41.54088	-93.6126
146943	2022/04/22	planetree, London	Platanus x acerifolia	211 E McKinley Ave	1609577.988	561421.12	41.54088	-93.6127
146947	2022/04/22	planetree, London	Platanus x acerifolia	211 E McKinley Ave	1609361.014	561423.23	41.54089	-93.6134
146950	2022/04/22	planetree, London	Platanus x acerifolia	113 E McKinley Ave	1609138.9	561424.99	41.54089	-93.6143
146951	2022/07/07	planetree, London	Platanus x acerifolia	29 E McKinley Ave	1609076.119	561423.97	41.54089	-93.6145
146952	2022/04/22	planetree, London	Platanus x acerifolia	29 E McKinley Ave	1609041.241	561423.65	41.54089	-93.6146
146956	2022/04/22	planetree, London	Platanus x acerifolia	4801 McKinley Ave	1608806.269	561419.94	41.54088	-93.6155
148496	2022/10/22	planetree, London	Platanus x acerifolia	814 Hickman Rd	1605100.651	587676.92	41.61292	-93.6291
148498	2022/11/01	planetree, London	Platanus x acerifolia	2009 9th St	1605112.524	587646.22	41.61284	-93.6291
148500	2022/09/30	planetree, London	Platanus x acerifolia	810 Hickman Rd	1605226.21	587646.05	41.61284	-93.6287
148504	2022/11/01	planetree, London	Platanus x acerifolia	806 Hickman Rd	1605342.637	587515.08	41.61248	-93.6283
148541	2022/10/08	planetree, London	Platanus x acerifolia	408 E Dunham Ave	1610742.513	573026.96	41.57274	-93.6084
148546	2022/10/08	planetree, London	Platanus x acerifolia	440 E Dunham Ave	1611027.181	572951.84	41.57253	-93.6074
148547	2022/10/08	planetree, London	Platanus x acerifolia	454 E Dunham Ave	1611175.386	572914.74	41.57243	-93.6069
148565	2022/10/08	planetree, London	Platanus x acerifolia	322 E Dunham Ave	1610318.652	573139.53	41.57305	-93.61
148568	2022/10/08	planetree, London	Platanus x acerifolia	240 E Dunham Ave	1609840.291	573254.2	41.57336	-93.6117
148571	2022/10/08	planetree, London	Platanus x acerifolia	1722 SE 2nd St	1609384.73	573399.92	41.57376	-93.6134
148575	2022/10/08	planetree, London	Platanus x acerifolia	1723 South Union St	1608853.624	573576.46	41.57424	-93.6154
148591	2022/10/08	planetree, London	Platanus x acerifolia	1511 South Union St	1609152.972	574173.23	41.57588	-93.6143
148597	2022/10/08	planetree, London	Platanus x acerifolia	1414 SW 1st St	1608821.013	574775.62	41.57753	-93.6155
148603	2022/10/08	planetree, London	Platanus x acerifolia	10 Livingston Ave	1609001.229	574535.21	41.57687	-93.6148
148608	2022/10/08	planetree, London	Platanus x acerifolia	1515 SW 1st St	1608713.353	574314.85	41.57627	-93.6159
148614	2022/10/08	planetree, London	Platanus x acerifolia	1400 SW 1st St	1608881.048	574929.75	41.57795	-93.6153
148764	2022/09/17	planetree, London	Platanus x acerifolia	1730 6th St	1605542.992	586659.58	41.61013	-93.6275
148776	2022/09/17	planetree, London	Platanus x acerifolia	1800 8th St	1605277.893	586698.7	41.61024	-93.6285
148785	2022/09/17	planetree, London	Platanus x acerifolia	1801 7th St	1605769.513	586697.32	41.61024	-93.6267
148794	2022/09/17	planetree, London	Platanus x acerifolia	1630 7th St	1605641.909	586211.57	41.6089	-93.6272
148830	2022/10/29	planetree, London	Platanus x acerifolia	5304 SE 7th St	1611862.383	559689.76	41.53614	-93.6043
148835	2022/10/29	planetree, London	Platanus x acerifolia	700 E Kenyon Ave	1611901.823	559511.58	41.53565	-93.6042
148861	2022/10/29	planetree, London	Platanus x acerifolia	713 E Spring St	1612220.52	560181.13	41.53749	-93.603
148862	2022/10/29	planetree, London	Platanus x acerifolia	5205 SE 8th St	1612262.288	560107.2	41.53729	-93.6028
148874	2022/10/29	planetree, London	Platanus x acerifolia	5317 SE 8th St	1612254.31	559567.24	41.5358	-93.6029
148888	2022/10/29	planetree, London	Platanus x acerifolia	5317 SE 9th St	1612566.771	559571.63	41.53582	-93.6017
148959	2022/10/27	planetree, London	Platanus x acerifolia	1320 E 27th Ct	1622930.371	584373.11	41.60391	-93.5639
148967	2022/10/27	planetree, London	Platanus x acerifolia	2713 Cleveland Ave	1622927.768	584822.92	41.60515	-93.5639
148971	2022/10/27	planetree, London	Platanus x acerifolia	2726 Cleveland Ave	1622927.899	585001.24	41.60563	-93.5639
148981	2022/10/27	planetree, London	Platanus x acerifolia	2724 Kinsey Ave	1622925.221	585599.78	41.60728	-93.564
148998	2022/10/15	planetree, London	Platanus x acerifolia	2708 E Market St	1622377.503	578158.71	41.58686	-93.5659
149005	2022/10/15	planetree, London	Platanus x acerifolia	2711 E Market St	1622652.664	578163.62	41.58687	-93.5649
149027	2022/10/15	planetree, London	Platanus x acerifolia	2736 Raccoon St	1623115.26	577611.26	41.58535	-93.5632
149036	2022/10/15	planetree, London	Platanus x acerifolia	2736 E Elm St	1622856.796	577867.67	41.58606	-93.5642
149062	2022/10/22	planetree, London	Platanus x acerifolia	941 8th St	1605686.141	580716.97	41.59383	-93.627
149068	2022/10/22	planetree, London	Platanus x acerifolia	401 Locust	1606824.321	578360.99	41.58736	-93.6228
149070	2022/10/22	planetree, London	Platanus x acerifolia	401 Locust	1606753.121	578342.08	41.58731	-93.6231
149075	2022/10/22	planetree, London	Platanus x acerifolia	0 Unassigned	1607116.058	578019.02	41.58643	-93.6217
149076	2022/10/22	planetree, London	Platanus x acerifolia	0 Unassigned	1607093.301	578011.74	41.58641	-93.6218
149081	2022/10/22	planetree, London	Platanus x acerifolia	420 Court Ave	1606867.904	577396.55	41.58472	-93.6226
149082	2022/10/22	planetree, London	Platanus x acerifolia	401 W Martin Luther King Jr Pk	1606985.733	576654.38	41.58268	-93.6222
149095	2022/10/22	planetree, London	Platanus x acerifolia	1303 Locust St	1603791.164	577508.73	41.58501	-93.6339
149101	2022/10/22	planetree, London	Platanus x acerifolia	0 Unassigned	1605273.585	577518.37	41.58505	-93.6285
149102	2022/10/22	planetree, London	Platanus x acerifolia	801 Walnut St	1605457.158	577606.55	41.58529	-93.6278
149121	2022/10/01	planetree, London	Platanus x acerifolia	3947 8th Pl	1605384.82	595024.07	41.63309	-93.6281
149127	2022/10/01	planetree, London	Platanus x acerifolia	3947 9th St	1605020.403	595024.61	41.63309	-93.6295
149176	2022/10/01	planetree, London	Platanus x acerifolia	1221 Madison Ave	1603386.084	595062.53	41.63319	-93.6355
149188	2022/10/01	planetree, London	Platanus x acerifolia	4000 11th Pl	1603887.565	595056.79	41.63317	-93.6336
149189	2022/10/01	planetree, London	Platanus x acerifolia	4001 11th Pl	1604059.883	595062.37	41.63319	-93.633
149192	2022/10/01	planetree, London	Platanus x acerifolia	4000 11th St	1604219.728	595062.12	41.63319	-93.6324
149200	2022/10/01	planetree, London	Platanus x acerifolia	4002 10th St	1604551.15	595063.08	41.63319	-93.6312
149205	2022/10/01	planetree, London	Platanus x acerifolia	4003 9th St	1605049.199	595063.07	41.63319	-93.6294
149279	2022/11/18	planetree, London	Platanus x acerifolia	1513 E 16th St	1614412.904	585429.09	41.60679	-93.5951
149283	2022/11/18	planetree, London	Platanus x acerifolia	1417 E 16th St	1614414.703	585061.51	41.60578	-93.5951

149297	2022/11/21	planetree, London	Platanus x acerifolia	1445 9th St	1605052.382	585028.17	41.60565	-93.6293
149300	2022/11/21	planetree, London	Platanus x acerifolia	801 Forest Ave	1605049.691	584697.85	41.60475	-93.6293
149306	2022/11/21	planetree, London	Platanus x acerifolia	1353 Forest Ave	1605048.467	584368.26	41.60384	-93.6293
149312	2022/11/21	planetree, London	Platanus x acerifolia	1345 Forest Ave	1605050.077	584217.35	41.60343	-93.6293
149315	2022/09/24	planetree, London	Platanus x acerifolia	1243 9th St	1605051.539	583566.53	41.60164	-93.6293
149324	2022/09/24	planetree, London	Platanus x acerifolia	1315 Forest Ave	1605055.539	583944.01	41.60268	-93.6293
149328	2022/09/24	planetree, London	Platanus x acerifolia	1426 9th St	1605010.51	584926.17	41.60537	-93.6295
149332	2022/09/24	planetree, London	Platanus x acerifolia	1216 9th St	1605015.27	583349.52	41.60105	-93.6294
149336	2022/09/24	planetree, London	Platanus x acerifolia	1338 9th St	1605013.029	584400.73	41.60393	-93.6295
149343	2022/09/24	planetree, London	Platanus x acerifolia	1324 9th St	1605015.049	584032.76	41.60292	-93.6294
149345	2022/09/24	planetree, London	Platanus x acerifolia	1312 9th St	1605016.704	583820.18	41.60234	-93.6294
149348	2022/09/24	planetree, London	Platanus x acerifolia	1318 9th St	1605015.927	583883.3	41.60251	-93.6294
149349	2022/09/24	planetree, London	Platanus x acerifolia	1318 9th St	1605015.328	583881.57	41.60251	-93.6294
8511	2022/10/08	redbud, eastern	Cercis canadensis	335 E Dunham Ave	1610419.42	573075.48	41.57287	-93.6096
31627	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621723.757	585915.14	41.60814	-93.5684
32158	2022/05/21	redbud, eastern	Cercis canadensis	4126 College Ave	1592680.946	585755.97	41.60759	-93.6746
32260	2022/05/21	redbud, eastern	Cercis canadensis	4120 College Ave	1592893.868	585629.86	41.60725	-93.6738
35671	2022/09/17	redbud, eastern	Cercis canadensis	821 Jefferson Ave	1605176.241	586696.25	41.61023	-93.6289
36141	2022/05/21	redbud, eastern	Cercis canadensis	1523 47th St	1590820.75	585427.57	41.60668	-93.6814
36244	2022/05/21	redbud, eastern	Cercis canadensis	1729 46th St	1591138.464	586616.89	41.60995	-93.6802
39388	2022/10/07	redbud, eastern	Cercis canadensis	319 Franklin Ave	1606654.114	587104.96	41.61136	-93.6235
39401	2022/10/07	redbud, eastern	Cercis canadensis	514 Franklin Ave	1606139.231	587070.51	41.61126	-93.6253
39402	2022/10/07	redbud, eastern	Cercis canadensis	510 Franklin Ave	1606300.574	587065.56	41.61125	-93.6248
146749	2022/04/23	redbud, eastern	Cercis canadensis	1616 SE 1st St	1609219.792	573854.57	41.57501	-93.614
146755	2022/04/23	redbud, eastern	Cercis canadensis	1708 SE 1st St	1609161.965	573689.04	41.57455	-93.6142
146763	2022/04/23	redbud, eastern	Cercis canadensis	1800 SE 1st St	1609052.943	573380.65	41.5737	-93.6146
146766	2022/04/23	redbud, eastern	Cercis canadensis	1810 SE 1st St	1609022.001	573291.49	41.57346	-93.6147
146782	2022/04/23	redbud, eastern	Cercis canadensis	225 E Edison Ave	1609685.716	572929.07	41.57247	-93.6123
146786	2022/04/23	redbud, eastern	Cercis canadensis	306 E Edison Ave	1610012.993	572890.99	41.57236	-93.6111
146788	2022/04/23	redbud, eastern	Cercis canadensis	312 E Edison Ave	1610084.893	572871.89	41.57231	-93.6109
146818	2022/05/21	redbud, eastern	Cercis canadensis	1609 46th St	1591144.116	585926.35	41.60805	-93.6802
146829	2022/05/21	redbud, eastern	Cercis canadensis	4126 College Ave	1592703.674	585757.25	41.6076	-93.6745
146844	2022/04/22	redbud, eastern	Cercis canadensis	100 McKinley Ave	1608921.253	561473.23	41.54102	-93.615
146845	2022/04/22	redbud, eastern	Cercis canadensis	100 McKinley Ave	1608941.445	561473.2	41.54102	-93.615
146869	2022/04/22	redbud, eastern	Cercis canadensis	316 E McKinley Ave	1609833.578	561470.94	41.54102	-93.6117
146878	2022/04/22	redbud, eastern	Cercis canadensis	354 E McKinley Ave	1610268.629	561468.19	41.54102	-93.6101
146889	2022/04/22	redbud, eastern	Cercis canadensis	420 E McKinley Ave	1610643.102	561465.89	41.54101	-93.6088
147302	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621758.1	585930.27	41.60818	-93.5682
147303	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621783.049	585941.94	41.60821	-93.5681
147304	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621824.872	585958.72	41.60826	-93.568
147305	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621870.365	585978.78	41.60832	-93.5678
147306	2022/06/09	redbud, eastern	Cercis canadensis	2535 Hubbell Ave	1621923.93	586001.76	41.60838	-93.5676
147696	2022/06/04	redbud, eastern	Cercis canadensis	3205 SE 25th St	1621044.288	566396.45	41.55457	-93.5708
147754	2022/05/27	redbud, eastern	Cercis canadensis	706 Virginia Ave	1606555.082	567708.21	41.55813	-93.6237
147756	2022/05/27	redbud, eastern	Cercis canadensis	3228 SW 12th Pl	1604345.451	566359.57	41.55442	-93.6318
147758	2022/05/27	redbud, eastern	Cercis canadensis	422 Bell Ave	1607382.796	569020.73	41.56173	-93.6207
147761	2022/05/27	redbud, eastern	Cercis canadensis	311 Kirkwood Ave	1607803.148	570200.69	41.56497	-93.6192
148510	2022/10/06	redbud, eastern	Cercis canadensis	300 Franklin Ave	1606892.373	587063.36	41.61125	-93.6226
148512	2022/10/07	redbud, eastern	Cercis canadensis	300 Franklin Ave	1606833.697	587064.91	41.61125	-93.6228
148513	2022/10/07	redbud, eastern	Cercis canadensis	312 Franklin Ave	1606800.69	587064.22	41.61125	-93.6229
148515	2022/10/07	redbud, eastern	Cercis canadensis	1825 Oakland Ave	1606718.542	587065.8	41.61125	-93.6232
148517	2022/10/07	redbud, eastern	Cercis canadensis	410 Franklin Ave	1606483.827	587064.67	41.61125	-93.6241
148519	2022/10/07	redbud, eastern	Cercis canadensis	410 Franklin Ave	1606411.216	587066.97	41.61125	-93.6244
148524	2022/10/07	redbud, eastern	Cercis canadensis	319 Franklin Ave	1606691.458	587104.2	41.61136	-93.6233
148526	2022/10/07	redbud, eastern	Cercis canadensis	510 Franklin Ave	1606256.452	587066.82	41.61125	-93.6249
148548	2022/10/08	redbud, eastern	Cercis canadensis	1610 SE 6th St	1611554.623	572902.94	41.5724	-93.6055
148550	2022/10/08	redbud, eastern	Cercis canadensis	1800 SE 6th St	1611529.264	572871.53	41.57232	-93.6056
148552	2022/10/08	redbud, eastern	Cercis canadensis	505 E Dunham Ave	1611352.39	572871.02	41.57231	-93.6062
148556	2022/10/08	redbud, eastern	Cercis canadensis	429 E Dunham Ave	1610991.379	572927.03	41.57247	-93.6075
148558	2022/10/08	redbud, eastern	Cercis canadensis	425 E Dunham Ave	1610922.413	572944.66	41.57251	-93.6078
148561	2022/10/08	redbud, eastern	Cercis canadensis	411 E Dunham Ave	1610763.942	572987.99	41.57263	-93.6084
148564	2022/10/08	redbud, eastern	Cercis canadensis	1803 SE 4th St	1610620.874	573024	41.57273	-93.6089
148576	2022/10/08	redbud, eastern	Cercis canadensis	7 E Dunham Ave	1608903.265	573516.26	41.57408	-93.6152
148578	2022/10/08	redbud, eastern	Cercis canadensis	1800 SE 1st St	1609059.517	573464.87	41.57394	-93.6146
148579	2022/10/08	redbud, eastern	Cercis canadensis	123 E Dunham Ave	1609330.577	573376.05	41.57369	-93.6136
148581	2022/10/08	redbud, eastern	Cercis canadensis	227 E Dunham Ave	1609756.057	573234.75	41.57331	-93.6121
148585	2022/10/08	redbud, eastern	Cercis canadensis	317 E Dunham Ave	1610146.388	573144.68	41.57306	-93.6106
148592	2022/10/08	redbud, eastern	Cercis canadensis	1516 SE 1st St	1609226.323	574145.35	41.5758	-93.614
148702	2022/11/03	redbud, eastern	Cercis canadensis	1706 Arlington Ave	1606979.591	586402.77	41.60943	-93.6223
148706	2022/11/03	redbud, eastern	Cercis canadensis	1630 Arlington Ave	1606977.18	586253.33	41.60902	-93.6223
148711	2022/11/03	redbud, eastern	Cercis canadensis	1618 Arlington Ave	1606979.835	586054.56	41.60848	-93.6223
148714	2022/11/03	redbud, eastern	Cercis canadensis	1608 Arlington Ave	1606978.625	585976.74	41.60827	-93.6223
148716	2022/11/03	redbud, eastern	Cercis canadensis	1608 Arlington Ave	1606978.915	585922.3	41.60812	-93.6223
148719	2022/11/03	redbud, eastern	Cercis canadensis	1609 Arlington Ave	1607029.463	585875.82	41.60799	-93.6221
148730	2022/11/03	redbud, eastern	Cercis canadensis	300 College Ave	1606962.441	585717.72	41.60755	-93.6223

148731	2022/11/03	redbud, eastern	Cercis canadensis	1534 Arlington Ave	1606968.074	585550.37	41.60709	-93.6223
148732	2022/11/03	redbud, eastern	Cercis canadensis	1534 Arlington Ave	1606966.573	585526.26	41.60703	-93.6223
148763	2022/09/17	redbud, eastern	Cercis canadensis	1635 6th St	1605635.411	586659.08	41.61013	-93.6272
148796	2022/09/17	redbud, eastern	Cercis canadensis	1630 7th St	1605548.753	586211.34	41.60899	-93.6275
148799	2022/09/17	redbud, eastern	Cercis canadensis	1625 8th St	1605429.929	586213.7	41.60891	-93.6279
148801	2022/09/17	redbud, eastern	Cercis canadensis	1630 8th St	1605314.033	586212.41	41.60891	-93.6284
148808	2022/09/17	redbud, eastern	Cercis canadensis	1631 9th St	1605110.856	586215.27	41.60891	-93.6291
148812	2022/09/17	redbud, eastern	Cercis canadensis	825 Washington Ave	1605148.315	586249.2	41.60901	-93.629
148819	2022/09/17	redbud, eastern	Cercis canadensis	1701 Washington Ave	1605495.993	586246.86	41.609	-93.6277
148894	2022/10/27	redbud, eastern	Cercis canadensis	1629 E 27th Ct	1622963.633	586214.95	41.60897	-93.5638
148901	2022/10/27	redbud, eastern	Cercis canadensis	2734 E Washington Ave	1622964.871	585903.64	41.60811	-93.5638
148903	2022/10/27	redbud, eastern	Cercis canadensis	2733 E Washington Ave	1622963.503	585787.85	41.60779	-93.5638
148905	2022/10/27	redbud, eastern	Cercis canadensis	2730 Kinsey Ave	1622965.609	585659.97	41.60744	-93.5638
148914	2022/10/27	redbud, eastern	Cercis canadensis	2730 Indianapolis Ave	1622965.708	585294.95	41.60644	-93.5638
148931	2022/10/27	redbud, eastern	Cercis canadensis	1251 E 27th Ct	1622970.202	583920.68	41.60267	-93.5638
148936	2022/10/27	redbud, eastern	Cercis canadensis	1231 E 27th Ct	1622968.095	583547.95	41.60165	-93.5638
148938	2022/10/27	redbud, eastern	Cercis canadensis	1213 E 27th Ct	1622970.889	583356.47	41.60112	-93.5638
148939	2022/10/27	redbud, eastern	Cercis canadensis	1208 E 27th Ct	1622931.959	583288.9	41.60094	-93.5639
148940	2022/10/27	redbud, eastern	Cercis canadensis	1208 E 27th Ct	1622930.873	583309.73	41.60099	-93.5639
148953	2022/10/27	redbud, eastern	Cercis canadensis	1302 E 27th Ct	1622930.182	584115.14	41.6032	-93.5639
148954	2022/10/27	redbud, eastern	Cercis canadensis	1302 E 27th Ct	1622930.202	584143.27	41.60328	-93.5639
148964	2022/10/27	redbud, eastern	Cercis canadensis	2727 Chicago Ave	1622927.586	584575.55	41.60447	-93.5639
148976	2022/10/27	redbud, eastern	Cercis canadensis	2720 Indianapolis Ave	1622928.102	585277.47	41.60639	-93.5639
149020	2022/10/15	redbud, eastern	Cercis canadensis	229 SE 28th St	1623157.645	577877.79	41.58609	-93.5631
149040	2022/10/15	redbud, eastern	Cercis canadensis	2716 E Elm St	1622698.669	577865.59	41.58605	-93.5648
149047	2022/10/15	redbud, eastern	Cercis canadensis	2705 E Elm St	1622418.159	577827.68	41.58595	-93.5658
149049	2022/10/15	redbud, eastern	Cercis canadensis	2713 E Elm St	1622542.166	577828.68	41.58595	-93.5653
149052	2022/10/15	redbud, eastern	Cercis canadensis	2723 E Elm St	1622694.79	577830.03	41.58595	-93.5648
149053	2022/10/15	redbud, eastern	Cercis canadensis	2731 E Elm St	1622873.097	577833.19	41.58596	-93.5641
149083	2022/10/22	redbud, eastern	Cercis canadensis	1001 Cherry St	1605119.864	576779.16	41.58302	-93.629
149104	2022/11/18	redbud, eastern	Cercis canadensis	1459 E Washington Ave	1612999.724	585755.31	41.60768	-93.6003
149105	2022/11/18	redbud, eastern	Cercis canadensis	1459 E Washington Ave	1613017.695	585754.92	41.60768	-93.6002
149106	2022/11/18	redbud, eastern	Cercis canadensis	1459 E Washington Ave	1613063.539	585754.5	41.60768	-93.6
149107	2022/11/18	redbud, eastern	Cercis canadensis	1459 E Washington Ave	1613089.947	585755.2	41.60768	-93.5999
149108	2022/11/18	redbud, eastern	Cercis canadensis	1418 E Washington Ave	1613067.621	585796.15	41.60779	-93.6
149109	2022/11/18	redbud, eastern	Cercis canadensis	1418 E Washington Ave	1613086.326	585795.77	41.60779	-93.5999
149111	2022/11/18	redbud, eastern	Cercis canadensis	1418 E Washington Ave	1613137.306	585796.44	41.60779	-93.5998
149151	2022/11/18	redbud, eastern	Cercis canadensis	1418 E Washington Ave	1613197.088	585796.37	41.60779	-93.5995
149152	2022/11/18	redbud, eastern	Cercis canadensis	1418 E Washington Ave	1613220.744	585796.6	41.60779	-93.5994
149181	2022/11/18	redbud, eastern	Cercis canadensis	1402 E 15th St	1613709.851	584847.2	41.60519	-93.5977
149182	2022/11/18	redbud, eastern	Cercis canadensis	1402 E 15th St	1613710.971	584864.74	41.60524	-93.5976
149187	2022/11/18	redbud, eastern	Cercis canadensis	1412 E 15th St	1613712.964	585006.14	41.60562	-93.5976
149224	2022/10/01	redbud, eastern	Cercis canadensis	1420 Henderson Ave	1613209.784	592084.75	41.62505	-93.5995
149232	2022/10/01	redbud, eastern	Cercis canadensis	4507 Beaver Crest Dr	1591307.565	589766.76	41.61859	-93.6796
149236	2022/10/01	redbud, eastern	Cercis canadensis	2715 Witmer St	1598216.726	586908.48	41.61078	-93.6543
149237	2022/10/01	redbud, eastern	Cercis canadensis	1517 31st St	1596741.882	585319.97	41.60642	-93.6597
149238	2022/10/12	redbud, eastern	Cercis canadensis	1536 E 15th St	1613713.042	585728.92	41.60761	-93.5976
149240	2022/10/12	redbud, eastern	Cercis canadensis	1522 E 15th St	1613713.76	585548.56	41.60711	-93.5976
149241	2022/10/12	redbud, eastern	Cercis canadensis	1516 E 15th St	1613716.947	585447.71	41.60684	-93.5976
149244	2022/10/12	redbud, eastern	Cercis canadensis	1508 E 15th St	1613712.427	585342.12	41.60655	-93.5976
149247	2022/10/12	redbud, eastern	Cercis canadensis	1508 E 15th St	1613713.058	585250.77	41.6063	-93.5976
149250	2022/11/18	redbud, eastern	Cercis canadensis	1419 E Washington Ave	1613191.339	585754.87	41.60768	-93.5996
149251	2022/11/18	redbud, eastern	Cercis canadensis	1423 E Washington Ave	1613241.952	585754.81	41.60768	-93.5994
149252	2022/11/18	redbud, eastern	Cercis canadensis	1429 E Washington Ave	1613295.132	585754.38	41.60768	-93.5992
149256	2022/11/18	redbud, eastern	Cercis canadensis	1441 E Washington Ave	1613552.596	585754.09	41.60768	-93.5982
149257	2022/11/18	redbud, eastern	Cercis canadensis	1441 E Washington Ave	1613569.101	585754.44	41.60768	-93.5982
149259	2022/11/18	redbud, eastern	Cercis canadensis	1436 E Washington Ave	1613625.582	585754.74	41.60768	-93.598
149260	2022/11/18	redbud, eastern	Cercis canadensis	1436 E Washington Ave	1613667.028	585756.15	41.60768	-93.5978
149264	2022/11/18	redbud, eastern	Cercis canadensis	1534 Mccormick St	1614682.963	585766.73	41.60772	-93.5941
149267	2022/11/18	redbud, eastern	Cercis canadensis	1534 Mccormick St	1614580.636	585766.11	41.60771	-93.5945
149272	2022/11/18	redbud, eastern	Cercis canadensis	1601 E Washington Ave	1614415.572	585745.46	41.60766	-93.5951
149276	2022/11/18	redbud, eastern	Cercis canadensis	1523 E 16th St	1614410.073	585565.19	41.60716	-93.5951
149277	2022/11/18	redbud, eastern	Cercis canadensis	1522 E 16th St	1614387.375	585602.48	41.60726	-93.5952
149288	2022/11/18	redbud, eastern	Cercis canadensis	1504 Cleveland Ave	1614386.106	584820.64	41.60512	-93.5952
149293	2022/11/18	redbud, eastern	Cercis canadensis	1424 E 16th St	1614386.065	585118.07	41.60593	-93.5952
149295	2022/11/18	redbud, eastern	Cercis canadensis	1502 E 16th St	1614382.976	585311.36	41.60646	-93.5952
149302	2022/11/21	redbud, eastern	Cercis canadensis	801 Forest Ave	1605051.442	584642.67	41.6046	-93.6293
149350	2022/10/01	redbud, eastern	Cercis canadensis	805 35th St	1595524.221	580054.48	41.59196	-93.6641
149351	2022/10/01	redbud, eastern	Cercis canadensis	513 SW 60th St	1585855.295	573635.95	41.57429	-93.6994
149352	2022/10/01	redbud, eastern	Cercis canadensis	941 45th St	1591553.66	581283.55	41.59531	-93.6786
149353	2022/10/01	redbud, eastern	Cercis canadensis	4500 Ovid Ave	1591258.116	592221.33	41.62533	-93.6798
149146	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	3946 11th Pl	1603908.457	595026.29	41.63309	-93.6335
149149	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	3945 12th St	1603732.116	595027.66	41.63309	-93.6342
149154	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	3948 12th St	1603579.973	595029.72	41.6331	-93.6348
149163	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	3950 13th St	1603242.685	595029.51	41.63309	-93.636

149166	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	3951 14th St	1603067.808	595028.69	41.63309	-93.6366
149179	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	4000 12th St	1603586.253	595060.39	41.63318	-93.6347
149195	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	4001 11th St	1604364.907	595061.9	41.63319	-93.6319
149198	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	4001 11th St	1604466.092	595061.02	41.63319	-93.6315
149207	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	4003 9th St	1605112.624	595063.7	41.6332	-93.6291
149208	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	815 Madison Ave	1605347.987	595060.07	41.63319	-93.6283
149211	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	815 Madison Ave	1605449.541	595061.38	41.63319	-93.6279
149216	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	4000 7th St	1605880.683	595061.84	41.63319	-93.6263
149223	2022/10/01	serviceberry, Allegheny	Amelanchier laevis	2126 E 13th St	1612246.682	588118.07	41.61416	-93.603
149313	2022/09/24	serviceberry, Allegheny	Amelanchier laevis	1233 9th St	1605052.557	583511.35	41.60149	-93.6293
146753	2022/04/23	serviceberry, downy	Amelanchier arborea	21 E Granger Ave	1609180.38	573740.93	41.57469	-93.6142
146756	2022/04/23	serviceberry, downy	Amelanchier arborea	1710 SE 1st St	1609149.442	573653.23	41.57445	-93.6143
146762	2022/04/23	serviceberry, downy	Amelanchier arborea	1800 SE 1st St	1609061.046	573404.03	41.57377	-93.6146
146765	2022/04/23	serviceberry, downy	Amelanchier arborea	1800 SE 1st St	1609035.266	573333.14	41.57357	-93.6147
146778	2022/04/23	serviceberry, downy	Amelanchier arborea	203 E Edison Ave	1609396.677	573023.76	41.57273	-93.6134
146779	2022/04/23	serviceberry, downy	Amelanchier arborea	203 E Edison Ave	1609420.152	573015.69	41.5727	-93.6133
146781	2022/04/23	serviceberry, downy	Amelanchier arborea	225 E Edison Ave	1609666.281	572939.33	41.5725	-93.6124
146785	2022/04/23	serviceberry, downy	Amelanchier arborea	302 E Edison Ave	1609971.54	572900.92	41.57239	-93.6113
147372	2022/05/14	serviceberry, downy	Amelanchier arborea	2620 E Watrous Ave	1623279.346	564030.64	41.54808	-93.5626
147373	2022/05/14	serviceberry, downy	Amelanchier arborea	2620 E Watrous Ave	1623309.448	564030.25	41.54808	-93.5625
147384	2022/05/14	serviceberry, downy	Amelanchier arborea	2620 E Watrous Ave	1623550.669	564027.83	41.54808	-93.5616
147385	2022/05/14	serviceberry, downy	Amelanchier arborea	2620 E Watrous Ave	1623573.062	564027.08	41.54807	-93.5615
147386	2022/05/14	serviceberry, downy	Amelanchier arborea	2620 E Watrous Ave	1623597.29	564027.79	41.54808	-93.5614
8445	2022/10/08	serviceberry, spp.	Amelanchier spp.	200 E Dunham Ave	1609490.72	573366.01	41.57367	-93.613
35730	2022/10/06	serviceberry, spp.	Amelanchier spp.	1825 7th St	1605766.956	587064.9	41.61125	-93.6267
35738	2022/10/06	serviceberry, spp.	Amelanchier spp.	1901 7th St	1605751.647	587107.55	41.61136	-93.6268
35750	2022/11/01	serviceberry, spp.	Amelanchier spp.	1900 7th St	1605626.49	587106.24	41.61136	-93.6272
148518	2022/10/07	serviceberry, spp.	Amelanchier spp.	410 Franklin Ave	1606453.025	587067.64	41.61126	-93.6242
148530	2022/10/06	serviceberry, spp.	Amelanchier spp.	1825 7th St	1605819.297	587063.8	41.61124	-93.6265
148551	2022/10/08	serviceberry, spp.	Amelanchier spp.	515 E Dunham Ave	1611493.299	572868.65	41.57231	-93.6057
148554	2022/10/08	serviceberry, spp.	Amelanchier spp.	445 E Dunham Ave	1611162.323	572885.14	41.57235	-93.6069
148557	2022/10/08	serviceberry, spp.	Amelanchier spp.	429 E Dunham Ave	1610953.961	572935.85	41.57249	-93.6077
148560	2022/10/08	serviceberry, spp.	Amelanchier spp.	417 E Dunham Ave	1610806.493	572975.51	41.5727	-93.6082
148563	2022/10/08	serviceberry, spp.	Amelanchier spp.	1803 SE 4th St	1610669.298	573012.97	41.5727	-93.6087
148566	2022/10/08	serviceberry, spp.	Amelanchier spp.	318 E Dunham Ave	1610242.346	573155.72	41.57309	-93.6103
148567	2022/10/08	serviceberry, spp.	Amelanchier spp.	314 E Dunham Ave	1610185.855	573171.87	41.57314	-93.6105
148569	2022/10/08	serviceberry, spp.	Amelanchier spp.	234 E Dunham Ave	1609792.607	573269.62	41.5734	-93.6119
148583	2022/10/08	serviceberry, spp.	Amelanchier spp.	237 E Dunham Ave	1609818.417	573214.38	41.57325	-93.6118
148584	2022/10/08	serviceberry, spp.	Amelanchier spp.	241 E Dunham Ave	1609879.671	573193.1	41.57319	-93.6116
148588	2022/10/08	serviceberry, spp.	Amelanchier spp.	335 E Dunham Ave	1610440.958	573070.46	41.57286	-93.6096
148701	2022/11/03	serviceberry, spp.	Amelanchier spp.	1706 Arlington Ave	1606977.794	586429.07	41.60951	-93.6223
148704	2022/11/03	serviceberry, spp.	Amelanchier spp.	1702 Arlington Ave	1606980.23	586335.9	41.60925	-93.6223
148707	2022/11/03	serviceberry, spp.	Amelanchier spp.	1624 Arlington Ave	1606977.491	586213.5	41.60891	-93.6223
148710	2022/11/03	serviceberry, spp.	Amelanchier spp.	1620 Arlington Ave	1606979.881	586087.45	41.60857	-93.6223
148713	2022/11/03	serviceberry, spp.	Amelanchier spp.	1608 Arlington Ave	1606978.652	585995.74	41.60832	-93.6223
148718	2022/11/03	serviceberry, spp.	Amelanchier spp.	1604 Arlington Ave	1606980.278	585847.76	41.60791	-93.6223
148735	2022/11/03	serviceberry, spp.	Amelanchier spp.	1514 Arlington Ave	1606966.214	585271.22	41.60633	-93.6223
148738	2022/11/03	serviceberry, spp.	Amelanchier spp.	309 Clark St	1606968.296	585186.44	41.6061	-93.6223
148773	2022/09/17	serviceberry, spp.	Amelanchier spp.	821 Jefferson Ave	1605084.618	586698.99	41.61024	-93.6292
148782	2022/09/17	serviceberry, spp.	Amelanchier spp.	1807 7th St	1605560.467	586696.53	41.61023	-93.6275
148797	2022/09/17	serviceberry, spp.	Amelanchier spp.	1625 8th St	1605489.708	586212.88	41.60891	-93.6277
148800	2022/09/17	serviceberry, spp.	Amelanchier spp.	1625 8th St	1605404.256	586213.74	41.60891	-93.628
148803	2022/09/17	serviceberry, spp.	Amelanchier spp.	1630 8th St	1605268.19	586213.21	41.60891	-93.6285
148806	2022/09/17	serviceberry, spp.	Amelanchier spp.	1631 9th St	1605168.804	586215.55	41.60891	-93.6289
148809	2022/09/17	serviceberry, spp.	Amelanchier spp.	1631 9th St	1605075.65	586216.42	41.60892	-93.6292
148813	2022/09/17	serviceberry, spp.	Amelanchier spp.	811 Washington Ave	1605261.273	586247.93	41.609	-93.6286
148847	2022/10/29	serviceberry, spp.	Amelanchier spp.	701 E Spring St	1611905.568	560186.43	41.5375	-93.6041
148898	2022/10/27	serviceberry, spp.	Amelanchier spp.	1621 E 27th Ct	1622963.539	586087.79	41.60862	-93.5638
148899	2022/10/27	serviceberry, spp.	Amelanchier spp.	1615 E 27th Ct	1622966.454	586061.49	41.60854	-93.5638
148902	2022/10/27	serviceberry, spp.	Amelanchier spp.	2733 E Washington Ave	1622962.423	585816.36	41.60787	-93.5638
148910	2022/10/27	serviceberry, spp.	Amelanchier spp.	2731 Kinsey Ave	1622965.851	585488.97	41.60697	-93.5638
148912	2022/10/27	serviceberry, spp.	Amelanchier spp.	2730 Indianapolis Ave	1622964.635	585331.49	41.60654	-93.5638
149018	2022/10/15	serviceberry, spp.	Amelanchier spp.	229 SE 28th St	1623158.423	577938.46	41.58625	-93.5631
149021	2022/10/15	serviceberry, spp.	Amelanchier spp.	301 SE 28th St	1623159.79	577799.57	41.58587	-93.5631
149025	2022/10/15	serviceberry, spp.	Amelanchier spp.	2800 Raccoon St	1623158.953	577657.02	41.58548	-93.5631
149029	2022/10/15	serviceberry, spp.	Amelanchier spp.	2743 E Elm St	1623006.092	577835.03	41.58597	-93.5636
149046	2022/10/15	serviceberry, spp.	Amelanchier spp.	2701 E Elm St	1622362.758	577825.16	41.58594	-93.566
149051	2022/10/15	serviceberry, spp.	Amelanchier spp.	2723 E Elm St	1622659.202	577829.32	41.58595	-93.5649
149054	2022/10/15	serviceberry, spp.	Amelanchier spp.	2733 E Elm St	1622916.021	577831.69	41.58596	-93.564
149059	2022/10/22	serviceberry, spp.	Amelanchier spp.	941 8th St	1605684.859	580844.15	41.59417	-93.627
149093	2022/10/22	serviceberry, spp.	Amelanchier spp.	1200 Locust St	1604235.473	577273.39	41.58437	-93.6323
149130	2022/10/01	serviceberry, spp.	Amelanchier spp.	3940 10th St	1604573.132	595025.28	41.63309	-93.6311
149134	2022/10/01	serviceberry, spp.	Amelanchier spp.	1020 Madison Ave	1604476.346	595026.15	41.63309	-93.6315
149138	2022/10/01	serviceberry, spp.	Amelanchier spp.	3950 11th St	1604218.254	595030.2	41.6331	-93.6324
149142	2022/10/01	serviceberry, spp.	Amelanchier spp.	1116 Madison Ave	1604077.106	595029.68	41.6331	-93.6329

149219	2022/10/01	serviceberry, spp.	Amelanchier spp.	4001 7th St	1606041.263	595063.44	41.6332	-93.6257
149263	2022/11/18	serviceberry, spp.	Amelanchier spp.	1534 Mccormick St	1614699.101	585767.44	41.60772	-93.594
149271	2022/11/18	serviceberry, spp.	Amelanchier spp.	1601 E Washington Ave	1614455.573	585767.34	41.60772	-93.5949
149278	2022/11/18	serviceberry, spp.	Amelanchier spp.	1522 E 16th St	1614386.981	585577.63	41.6072	-93.5952
149294	2022/11/18	serviceberry, spp.	Amelanchier spp.	1424 E 16th St	1614383.923	585171.05	41.60608	-93.5952
149307	2022/09/24	serviceberry, spp.	Amelanchier spp.	1215 9th St	1605051.972	583364.45	41.60109	-93.6293
149338	2022/09/24	serviceberry, spp.	Amelanchier spp.	1250 9th St	1605013.21	583690.1	41.60198	-93.6294
146904	2022/04/22	sweetgum, American	Liquidambar styraciflua	437 E McKinley Ave	1611145.27	561407.48	41.54085	-93.6069
146905	2022/04/22	sweetgum, American	Liquidambar styraciflua	437 E McKinley Ave	1611114.063	561407.15	41.54085	-93.607
146913	2022/07/07	sweetgum, American	Liquidambar styraciflua	417 E McKinley Ave	1610831.745	561413.72	41.54087	-93.6081
146914	2022/04/22	sweetgum, American	Liquidambar styraciflua	417 E McKinley Ave	1610752.81	561413.45	41.54087	-93.6084
146915	2022/07/07	sweetgum, American	Liquidambar styraciflua	411 E McKinley Ave	1610682.689	561415	41.54087	-93.6086
146918	2022/07/07	sweetgum, American	Liquidambar styraciflua	401 E McKinley Ave	1610580.627	561415.82	41.54087	-93.609
146924	2022/07/07	sweetgum, American	Liquidambar styraciflua	333 E McKinley Ave	1610317.761	561417.62	41.54088	-93.6099
146932	2022/07/07	sweetgum, American	Liquidambar styraciflua	315 E McKinley Ave	1609993.215	561418.76	41.54088	-93.6111
146936	2022/04/22	sweetgum, American	Liquidambar styraciflua	315 E McKinley Ave	1609795.331	561420.48	41.54088	-93.6119
146938	2022/07/07	sweetgum, American	Liquidambar styraciflua	315 E McKinley Ave	1609735.49	561421.65	41.54089	-93.6121
146941	2022/07/07	sweetgum, American	Liquidambar styraciflua	315 E McKinley Ave	1609640.768	561421.04	41.54088	-93.6124
146944	2022/04/22	sweetgum, American	Liquidambar styraciflua	211 E McKinley Ave	1609519.982	561421.93	41.54089	-93.6129
146948	2022/04/22	sweetgum, American	Liquidambar styraciflua	211 E McKinley Ave	1609332.746	561423.64	41.54089	-93.6135
146949	2022/04/22	sweetgum, American	Liquidambar styraciflua	113 E McKinley Ave	1609253.444	561423.01	41.54089	-93.6138
146955	2022/04/22	sweetgum, American	Liquidambar styraciflua	17 E McKinley Ave	1608850.327	561421.34	41.54088	-93.6153
146957	2022/04/22	sweetgum, American	Liquidambar styraciflua	4801 McKinley Ave	1608768.085	561417.8	41.54087	-93.6156
146958	2022/04/22	sweetgum, American	Liquidambar styraciflua	4801 McKinley Ave	1608736.143	561417.47	41.54087	-93.6157
147740	2022/05/25	sweetgum, American	Liquidambar styraciflua	1515 E Rose Ave	1614710.841	564399.54	41.54907	-93.5939
147751	2022/05/25	sweetgum, American	Liquidambar styraciflua	401 E Park Ave	1610601.695	565768.51	41.55282	-93.6089
13315	2022/04/27	sycamore, American	Platanus occidentalis	2501 Scott Ave	1621655.096	576958.45	41.58356	-93.5686
13317	2022/04/27	sycamore, American	Platanus occidentalis	2501 Scott Ave	1621737.656	577037.29	41.58378	-93.5683
13320	2022/04/27	sycamore, American	Platanus occidentalis	2501 Scott Ave	1621848.376	577092.91	41.58393	-93.5679
13336	2022/04/27	sycamore, American	Platanus occidentalis	2325 Scott Ave	1623338.44	577156.09	41.58411	-93.5624
23847	2022/04/27	sycamore, American	Platanus occidentalis	2702 Raccoon St	1622388.706	577516.31	41.58509	-93.5659
23875	2022/04/27	sycamore, American	Platanus occidentalis	2730 Raccoon St	1622952.495	577525.59	41.58512	-93.5638
23876	2022/04/27	sycamore, American	Platanus occidentalis	2726 Raccoon St	1622814.668	577523.26	41.58511	-93.5643
35751	2022/10/08	sycamore, American	Platanus occidentalis	717 Franklin Ave	1605439.416	587107.86	41.61136	-93.6279
44570	2022/04/27	sycamore, American	Platanus occidentalis	2900 Raccoon St	1623862.962	577538.64	41.58516	-93.5605
146715	2022/04/27	sycamore, American	Platanus occidentalis	2501 Scott Ave	1621982.307	577120.13	41.584	-93.5674
146724	2022/04/27	sycamore, American	Platanus occidentalis	2805 Scott Ave	1623272.327	577157.18	41.58411	-93.5627
146728	2022/04/27	sycamore, American	Platanus occidentalis	2837 Scott Ave	1623599.597	577160.97	41.58412	-93.5615
146738	2022/04/27	sycamore, American	Platanus occidentalis	2730 Raccoon St	1622983.486	577525.46	41.58512	-93.5637
146740	2022/04/27	sycamore, American	Platanus occidentalis	2726 Raccoon St	1622854.708	577523.73	41.58511	-93.5642
146744	2022/04/27	sycamore, American	Platanus occidentalis	2712 Raccoon St	1622564.131	577520.29	41.5851	-93.5653
146745	2022/04/27	sycamore, American	Platanus occidentalis	2708 Raccoon St	1622502.494	577519.97	41.5851	-93.5655
146746	2022/04/27	sycamore, American	Platanus occidentalis	2706 Raccoon St	1622463.604	577519.27	41.5851	-93.5656
147046	2022/05/19	sycamore, American	Platanus occidentalis	4000 41st St	1592759.549	595088.05	41.6332	-93.6743
147047	2022/05/19	sycamore, American	Platanus occidentalis	4001 42nd St	1592633.799	595087.93	41.6332	-93.6748
147049	2022/05/19	sycamore, American	Platanus occidentalis	4001 42nd St	1592555.707	595086.63	41.6332	-93.6751
147622	2022/05/23	sycamore, American	Platanus occidentalis	820 Des Moines St	1611129.545	580323.23	41.59276	-93.6071
147645	2022/05/23	sycamore, American	Platanus occidentalis	906 Lyon St	1611473.896	580831.9	41.59416	-93.6058
8521	2022/10/08	tuliptree	Liriodendron tulipifera	424 E Dunham Ave	1610874.24	572991.52	41.57264	-93.608
35756	2022/10/08	tuliptree	Liriodendron tulipifera	1915 8th St	1605377.745	587283.91	41.61185	-93.6281
35759	2022/10/08	tuliptree	Liriodendron tulipifera	1927 8th St	1605378.79	587438.07	41.61227	-93.6281
35762	2022/11/01	tuliptree	Liriodendron tulipifera	806 Hickman Rd	1605305.63	587647.36	41.61284	-93.6284
35768	2022/09/30	tuliptree	Liriodendron tulipifera	1912 8th St	1605342.712	587296.27	41.61188	-93.6283
52196	2022/11/14	tuliptree	Liriodendron tulipifera	1700 7th St	1605593.658	586243.02	41.60899	-93.6273
143261	2022/06/14	tuliptree	Liriodendron tulipifera	2653 Moonlight Dr	1622811.128	555040.34	41.52341	-93.5643
143666	2022/06/14	tuliptree	Liriodendron tulipifera	2653 Moonlight Dr	1622937.2	554949.32	41.52316	-93.5638
143667	2022/06/14	tuliptree	Liriodendron tulipifera	2653 Moonlight Dr	1622984.91	554907.58	41.52304	-93.5637
147023	2022/05/19	tuliptree	Liriodendron tulipifera	4059 Beaver Ave	1591830.126	595882.43	41.63538	-93.6777
147024	2022/05/19	tuliptree	Liriodendron tulipifera	4059 Beaver Ave	1591855.791	595883.84	41.63538	-93.6776
147027	2022/05/19	tuliptree	Liriodendron tulipifera	4220 Shawnee Ave	1592267.124	595885.2	41.63539	-93.6761
147028	2022/05/19	tuliptree	Liriodendron tulipifera	4055 Shawnee Ave	1592514.585	595886.52	41.63539	-93.6752
147029	2022/05/19	tuliptree	Liriodendron tulipifera	4055 Shawnee Ave	1592622.367	595886.67	41.63539	-93.6748
147030	2022/05/19	tuliptree	Liriodendron tulipifera	4110 Shawnee Ave	1592776.712	595889.28	41.6354	-93.6743
147031	2022/05/19	tuliptree	Liriodendron tulipifera	4110 Shawnee Ave	1592812.639	595888.85	41.6354	-93.6741
147036	2022/05/19	tuliptree	Liriodendron tulipifera	4010 41st St	1592836.836	595236.91	41.63361	-93.6741
147040	2022/05/19	tuliptree	Liriodendron tulipifera	4001 41st St	1592980.984	595087.6	41.6332	-93.6735
147050	2022/05/19	tuliptree	Liriodendron tulipifera	4001 42nd St	1592520.509	595085.24	41.63319	-93.6752
147051	2022/05/19	tuliptree	Liriodendron tulipifera	4207 Madison Ave	1592365.797	595085.55	41.63319	-93.6758
147054	2022/05/19	tuliptree	Liriodendron tulipifera	4001 43rd St	1592237.849	595085.81	41.63319	-93.6762
147055	2022/05/19	tuliptree	Liriodendron tulipifera	4001 43rd St	1592190.555	595085.54	41.63319	-93.6764
147057	2022/05/19	tuliptree	Liriodendron tulipifera	4303 Madison Ave	1592014.944	595085.17	41.63319	-93.6771
147059	2022/05/19	tuliptree	Liriodendron tulipifera	4005 Beaver Ave	1591927.689	595084.98	41.63319	-93.6774
147061	2022/05/19	tuliptree	Liriodendron tulipifera	4005 Beaver Ave	1591860.598	595084.75	41.63319	-93.6776
147405	2022/05/13	tuliptree	Liriodendron tulipifera	2836 Sweetwater Dr	1623143.907	555095.8	41.52356	-93.5631
147406	2022/05/13	tuliptree	Liriodendron tulipifera	2836 Sweetwater Dr	1623153.38	555118.27	41.52362	-93.563

147624	2022/05/23	tuliptree	Liriodendron tulipifera	826 Des Moines St	1611204.774	580343.97	41.59282	-93.6068
147640	2022/05/23	tuliptree	Liriodendron tulipifera	827 Lyon St	1611161.914	580691.95	41.59378	-93.607
147649	2022/05/23	tuliptree	Liriodendron tulipifera	906 Lyon St	1611554.628	580854.46	41.59422	-93.6055
147732	2022/05/27	tuliptree	Liriodendron tulipifera	4228 Leyden Ave	1632031.027	592588.52	41.62647	-93.5307
147733	2022/06/04	tuliptree	Liriodendron tulipifera	4114 Leyden Ave	1630883.859	592587.75	41.62647	-93.5349
147739	2022/05/25	tuliptree	Liriodendron tulipifera	1515 E Rose Ave	1614593.423	564446.11	41.5492	-93.5943
147743	2022/05/25	tuliptree	Liriodendron tulipifera	6104 South Union St	1608613.857	557013.17	41.52878	-93.6162
147746	2022/05/25	tuliptree	Liriodendron tulipifera	3816 SW 2nd St	1608199.861	564435.85	41.54915	-93.6177
147747	2022/05/25	tuliptree	Liriodendron tulipifera	3816 SW 2nd St	1608200.261	564460.35	41.54922	-93.6177
147760	2022/05/27	tuliptree	Liriodendron tulipifera	2519 South Union St	1608660.778	569167.81	41.56214	-93.616
147763	2022/05/27	tuliptree	Liriodendron tulipifera	2517 SE 18th St	1616939.601	568551.97	41.56048	-93.5858
147765	2022/05/25	tuliptree	Liriodendron tulipifera	2600 Leach Ave	1621776.111	563656.93	41.54705	-93.5681
147767	2022/06/03	tuliptree	Liriodendron tulipifera	2501 E Rose Ave	1621169.079	564675.04	41.54985	-93.5703
147814	2022/06/16	tuliptree	Liriodendron tulipifera	3600 SE 19th St	1617282.355	564912.44	41.55049	-93.5845
147981	2022/06/04	tuliptree	Liriodendron tulipifera	3600 SE 19th St	1617256.746	564913.09	41.55049	-93.5846
147982	2022/06/04	tuliptree	Liriodendron tulipifera	2208 Park Ave	1600216.629	566764.96	41.55551	-93.6469
148489	2022/09/30	tuliptree	Liriodendron tulipifera	717 Franklin Ave	1605473.515	587109.09	41.61137	-93.6278
148540	2022/10/08	tuliptree	Liriodendron tulipifera	408 E Dunham Ave	1610667.677	573045.33	41.57279	-93.6087
148543	2022/10/08	tuliptree	Liriodendron tulipifera	416 E Dunham Ave	1610809.279	573008.41	41.57269	-93.6082
148545	2022/10/08	tuliptree	Liriodendron tulipifera	436 E Dunham Ave	1610993.799	572960.66	41.57256	-93.6075
148570	2022/10/08	tuliptree	Liriodendron tulipifera	200 E Dunham Ave	1609516.778	573361.37	41.57365	-93.6129
148572	2022/10/08	tuliptree	Liriodendron tulipifera	1722 SE 2nd St	1609340.717	573416.07	41.5738	-93.6136
148574	2022/10/08	tuliptree	Liriodendron tulipifera	1723 South Union St	1608889.564	573563.8	41.57421	-93.6152
148594	2022/10/08	tuliptree	Liriodendron tulipifera	1416 SW 1st St	1608787.849	574669.65	41.57724	-93.6156
148598	2022/10/08	tuliptree	Liriodendron tulipifera	1406 SW 1st St	1608832.804	574812.16	41.57763	-93.6154
148604	2022/10/08	tuliptree	Liriodendron tulipifera	10 Livingston Ave	1609030.57	574524.94	41.57684	-93.6147
148620	2022/10/08	tuliptree	Liriodendron tulipifera	1400 South Union St	1609189.425	574816.74	41.57765	-93.6141
148696	2022/11/03	tuliptree	Liriodendron tulipifera	1803 Arlington Ave	1606977.881	586752.06	41.61039	-93.6223
148722	2022/11/03	tuliptree	Liriodendron tulipifera	1615 Arlington Ave	1607024.661	586113.32	41.60864	-93.6221
148788	2022/09/17	tuliptree	Liriodendron tulipifera	1700 6th St	1605916.655	586245.15	41.609	-93.6262
148815	2022/09/17	tuliptree	Liriodendron tulipifera	811 Washington Ave	1605310.784	586247.49	41.609	-93.6284
148823	2022/10/29	tuliptree	Liriodendron tulipifera	5208 SE 7th St	1611868.516	560056.5	41.53715	-93.6043
148838	2022/10/29	tuliptree	Liriodendron tulipifera	5225 SE 7th St	1611902.143	559778.96	41.53638	-93.6042
148842	2022/10/29	tuliptree	Liriodendron tulipifera	5213 SE 7th St	1611903.797	559933.69	41.53681	-93.6041
148843	2022/10/29	tuliptree	Liriodendron tulipifera	5209 SE 7th St	1611903.92	560036.83	41.53709	-93.6041
148844	2022/10/29	tuliptree	Liriodendron tulipifera	5209 SE 7th St	1611905.059	560067.92	41.53718	-93.6041
148850	2022/10/29	tuliptree	Liriodendron tulipifera	714 E Kenyon Ave	1612223.354	559473.72	41.53555	-93.603
148856	2022/10/29	tuliptree	Liriodendron tulipifera	5216 SE 8th St	1612225.379	559943.37	41.53684	-93.603
148867	2022/10/29	tuliptree	Liriodendron tulipifera	5221 SE 8th St	1612260.17	559865.71	41.53662	-93.6028
148868	2022/10/29	tuliptree	Liriodendron tulipifera	5305 SE 8th St	1612260.773	559754.52	41.53632	-93.6028
148872	2022/10/29	tuliptree	Liriodendron tulipifera	5309 SE 8th St	1612264.335	559661.6	41.53606	-93.6028
148877	2022/10/29	tuliptree	Liriodendron tulipifera	800 E Kenyon Ave	1612286.853	559453.08	41.53549	-93.6027
148878	2022/10/29	tuliptree	Liriodendron tulipifera	812 E Kenyon Ave	1612529.576	559476.57	41.53556	-93.6019
148879	2022/10/29	tuliptree	Liriodendron tulipifera	5316 SE 9th St	1612527.819	559543.51	41.53574	-93.6019
148880	2022/10/29	tuliptree	Liriodendron tulipifera	5312 SE 9th St	1612527.559	559634.96	41.53599	-93.6019
148889	2022/10/29	tuliptree	Liriodendron tulipifera	5317 SE 9th St	1612568.568	559538.71	41.53573	-93.6017
148890	2022/10/29	tuliptree	Liriodendron tulipifera	5321 SE 9th St	1612605.55	559451.24	41.53549	-93.6016
148999	2022/10/15	tuliptree	Liriodendron tulipifera	2708 E Market St	1622407.586	578157.95	41.58685	-93.5658
149006	2022/10/15	tuliptree	Liriodendron tulipifera	2723 E Market St	1622687.883	578161.4	41.58686	-93.5648
149012	2022/10/15	tuliptree	Liriodendron tulipifera	2733 E Market St	1622962.308	578164.12	41.58687	-93.5638
149016	2022/10/15	tuliptree	Liriodendron tulipifera	2754 E Elm St	1623096.736	577868.33	41.58606	-93.5633
149065	2022/10/22	tuliptree	Liriodendron tulipifera	303 Locust	1607145.651	578717.81	41.58834	-93.6216
149074	2022/10/22	tuliptree	Liriodendron tulipifera	0 Unassigned	1607147.62	578027.02	41.58645	-93.6216
149079	2022/10/22	tuliptree	Liriodendron tulipifera	520 Walnut St	1606367.274	577774.46	41.58575	-93.6245
149116	2022/10/01	tuliptree	Liriodendron tulipifera	3947 8th St	1605779.301	595024.95	41.63309	-93.6267
149119	2022/10/01	tuliptree	Liriodendron tulipifera	808 Madison Ave	1605499.937	595023.9	41.63309	-93.6277
149171	2022/10/01	tuliptree	Liriodendron tulipifera	4001 14th St	1603116.615	595058.93	41.63317	-93.6364
149178	2022/10/01	tuliptree	Liriodendron tulipifera	1207 Madison Ave	1603440.341	595060.98	41.63318	-93.6353
149201	2022/10/01	tuliptree	Liriodendron tulipifera	4002 10th St	1604612.007	595062.26	41.63319	-93.631
149202	2022/10/01	tuliptree	Liriodendron tulipifera	921 Madison Ave	1604703.66	595061.39	41.63319	-93.6306
149206	2022/10/01	tuliptree	Liriodendron tulipifera	4003 9th St	1605081.093	595062.29	41.63319	-93.6293
13319	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2501 Scott Ave	1621781.88	577065.36	41.58385	-93.5681
13330	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	512 SE 27th Ct	1622744.518	577149.46	41.58409	-93.5646
23874	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2736 Raccoon St	1623016.622	577525.21	41.58512	-93.5636
31613	2022/06/09	rubbertree, Hardy	Eucommia ulmoides	1612 E 28th St	1623299.567	586033.98	41.60847	-93.5626
146713	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2501 Scott Ave	1621929.101	577111.77	41.58398	-93.5676
146719	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2729 Scott Ave	1622903.962	577150.14	41.58409	-93.564
146731	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2907 Scott Ave	1623908.154	577163.31	41.58413	-93.5603
146735	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2847 Raccoon St	1623672.872	577535.2	41.58515	-93.5612
146737	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2814 Raccoon St	1623298.277	577529.25	41.58513	-93.5626
146741	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2726 Raccoon St	1622771.423	577521.59	41.58511	-93.5645
146742	2022/04/27	rubbertree, Hardy	Eucommia ulmoides	2720 Raccoon St	1622668.327	577520.58	41.5851	-93.5649
146906	2022/04/22	rubbertree, Hardy	Eucommia ulmoides	437 E McKinley Ave	1611077.352	561408.66	41.54085	-93.6072
146916	2022/04/22	rubbertree, Hardy	Eucommia ulmoides	411 E McKinley Ave	1610647.811	561414.68	41.54087	-93.6087
146935	2022/04/22	rubbertree, Hardy	Eucommia ulmoides	315 E McKinley Ave	1609904.368	561418.51	41.54088	-93.6115

146945	2022/07/07	rubbertree, Hardy	Eucommia ulmoides	211 E McKinley Ave	1609476.294	561422.72	41.54089	-93.613
146946	2022/04/22	rubbertree, Hardy	Eucommia ulmoides	211 E McKinley Ave	1609447.29	561422.02	41.54089	-93.6131
147322	2022/06/09	rubbertree, Hardy	Eucommia ulmoides	1628 E 28th St	1623298.255	586130.8	41.60874	-93.5626

Social Impacts

City Forest Carbon Project

Social Impacts



UN Sustainable Development Goals

The 17 United Nations Sustainable Development Goals (SDGs) are an urgent call for action and global partnership among all countries, representing key benchmarks for creating a better world and environment for everyone. Well-designed and managed urban forests make significant contributions to the environmental sustainability, economic viability and livability of cities. They help mitigate climate change and natural disasters, reduce energy costs, poverty and malnutrition, and provide ecosystem services and public benefits. See more details in the CFC Carbon Project Social Impact Reference Guide.

Instructions

This template sets out all relevant SDGs and lists various urban forest project activities that fall within each SDG. Evaluate the SDGs to determine how your carbon project provides social impacts that may contribute towards achievement of the global goals. Check the box(es) that contain one of your project activities and describe in no fewer than two sentences how your project activities align with the corresponding SDG. On page 12, select the icon for three to five of the most relevant SDGs to your project and provide any additional information.

SDG 3 - Good Health and Well Being

Goal: Ensure healthy lives and promote well-being for all at all ages.

Examples of project activities include, but are not limited to:

- Plant or protect trees to reduce or remove air pollutants
- If planting trees, select trees for reduced pollen counts and irritant production
- Plant or protect trees to create shade, provide UV exposure protection, reduce extreme heat negative effects, and/or reduce temperatures to relieve urban heat effects
- Design project to buffer sounds, optimize biodiversity, or create nature experiences
- Locate project near vulnerable populations, such as children or elderly
- Locate project near high volume roads to screen pollutants
- Locate project near people to encourage recreation, provide new parks or green space, or otherwise promote an active lifestyle
- Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- Reduce stormwater runoff or improve infiltration rates
- Design project to reduce human exposure to specific pollutants or toxins
- Other

Trees Forever plants trees in low canopy areas and open spaces, with a focus on broad leaf species, which have better capacity to sequester air pollutants. Planting trees in open spaces provides shade and protection from UV exposure as well as helping to reduce urban heat effects. Biodiversity is taken into consideration when selecting species that are best suited for the Des Moines urban environment. Trees are planted around schools and along busy streets to help slow traffic, as buffers along the regional trail system, and near streets to help with stormwater runoff. As part of the planting planning process, Trees Forever identifies areas with high tree inequity, particularly in formerly redlined neighborhoods, and focuses on incorporating these areas into the overall annual plan.

Trees Forever encourages nature experiences through educational tree tags that link individual trees with a City of Des Moines hosted database in order to learn more about benefits of trees and individual species.

SDG 6 - Clean Water and Sanitation

Goal: Ensure availability and sustainable management of water and sanitation for all

Examples of project activities include, but are not limited to:

- Research and assess environmental injustices related to water in project area
- Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes near water
- Protect or plant trees to improve historically or culturally important sites related to water that have been degraded and/or neglected
- Reduce stormwater by planting or protecting trees
- Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- Prevent soil erosion by protect steep slopes
- Improve infiltration rates
- Improve, mitigate, or remediate toxic landscapes and human exposure to risk
- Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- Other

In 2022, Trees Forever executed several plantings along the regional trail system, including the Spine Trail and Three Lakes Trail, which was a forested buffer along a wetland. A focus is placed on appropriate tree selection, particularly as it relates to drought tolerance. Trees also reduce stormwater runoff.

SDG 8 - Decent Work and Economic Growth

Goal: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Examples of project activities include, but are not limited to:

- Community participation in project implementation, including such things as providing access to financial resources for ongoing community-based care
- Emphasize local hiring and support small businesses
- Promote local economic opportunities through workforce training, career pathway development, or other employment
- Other

A series of community meeting held in conjunction with the Riverbend Neighborhood in Des Moines. Residents were engaged in the creation of a neighborhood planting map, and a plan for tree care that included volunteer watering by community members. Trees Forever prioritizes hiring students from local high schools for the Growing Futures employment program, and works with local contractors for additional watering needs.

SDG 10 - Reduced Inequalities

Goal: Reduce inequalities within and among countries

Examples of project activities include, but are not limited to:

- Provide connections and cohesion for social health, such as create or reinforce places that promote informal interactions, engage local residents and users in tree management, include symbolic or cultural elements, or other events
- Research, understand, and design to address understand historic and current sociocultural inequities, community health conditions, environmental injustices, or prior local greening efforts in community
- Locate project near vulnerable populations, such as children or elderly, to provide air quality improvements or buffer against extreme heat effects
- Locate project in high-density residential areas or where there is a lack of trees to improve access and promote an active lifestyle
- Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes
- Protect or plant trees to improve historically or culturally important sites that have been degraded and/or neglected
- Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- Emphasize local hiring and support small businesses
- Research and consider potential for gentrification and displacements
- Promote local economic opportunities through workforce training, career pathway development, or other employment
- Other

Trees Forever intends to reduce inequalities through engaging in community partnerships, planting trees in low-income areas (particularly previously redlined areas of the city), and organizing plantings around schools, affordable housing development, and in areas with low tree canopy. Staff engage residents and community leaders with project design when possible, including the implementation of tree corridors for walking between facilities like the grocery store, gym, library, and hospital. A three-session TreeKeeper course for community volunteers is offered twice a year. Participants learn to plant, prune, and care for trees in the community, and are relied upon as skilled volunteers for subsequent plantings and community engagement events.

SDG 11 - Sustainable Cities and Communities

Overall: Make cities inclusive, safe, resilient, and sustainable.

Examples of project activities include, but are not limited to:

- Plant or protect trees to reduce or remove air pollutants
- If planting trees, select trees for reduced pollen counts and irritant production
- Locate project near high volume roads to screen pollutants
- Locate project near vulnerable populations, such as children or elderly
- Plant or protect trees to create shade, provide UV exposure protection, reduce extreme heat negative effects, and/or reduce temperatures to relieve urban heat effects
- Locate project near people to encourage recreation, provide new parks or green space, or otherwise promote an active lifestyle
- Design project to improve wellness and mental health, such as planting trees to buffer sounds, optimize biodiversity, optimize views from buildings, or create nature experiences
- Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- Provide connections and cohesion for social health, such as create or reinforce places that promote informal interactions, engage local residents and users in tree management, include symbolic or cultural elements, or other events
- Research, understand, and design to address understand historic and current sociocultural inequities, community health conditions, environmental injustices, or prior local greening efforts in community
- Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- Other

Trees Forever plants trees in low canopy areas and open spaces, with a focus on broad leaf species, which have better capacity to sequester air pollutants. Planting trees in open spaces provides shade and protection from UV exposure as well as helping to reduce urban heat effects. Biodiversity is taken into consideration when selecting species that are best suited for the Des Moines urban environment. Trees are planted around schools and along busy streets to help slow traffic, as buffers along the regional trail system, and near streets to help with stormwater runoff. As part of the planting planning process, Trees Forever identifies areas with high tree inequity, particularly in formerly redlined neighborhoods, and focuses on incorporating these areas into the overall annual plan.

Trees Forever encourages nature experiences through educational tree tags that link individual trees with a City of Des Moines hosted database in order to learn more about benefits of trees and individual

species. TreeKeepers, volunteers trained in tree planting and care, are engaged through plantings and community engagement events focused on continuing education

SDG 12 - Responsible Production and Consumption

Goal: Ensure sustainable consumption and production patterns

Examples of project activities include, but are not limited to:

- Plant or protect trees to create shade or reduce temperatures to relieve urban heat effects
- Provide cooling benefits and energy savings by shading impervious surfaces such as streets or parking lots, or planting trees on south and west sides of buildings
- Other

Trees are planted in areas with low canopy and along streets to create shade and address urban heat effects. Understory and overstory trees are planting in specific places in order to provide the most shade and cooling benefits possible.

SDG 13 - Climate Action

Goal: Take urgent action to combat climate change and its impacts.

Examples of project activities include, but are not limited to:

- Plant or protect trees to reduce or remove air pollutants
- Plant or protect trees to create shade or reduce temperatures to relieve urban heat effects
- Promote community capacity for social and climate resilience by engaging local residents or users in tree management, or other events to connect people to the project
- Reflect cultural traditions and inclusive engagement for climate resilience
- Design project to improve soil health
- Provide cooling benefits and energy savings by shading impervious surfaces such as streets or parking lots, or planting trees on south and west sides of buildings
- Plant or protect trees to reduce stormwater runoff
- Select water-efficient trees for climate zone and drought resistance
- Create and/or enhance wildlife habitat
- Other

Trees Forever prioritizes planting native species that are appropriate for the climate zone and adding mulch and soil amendments to improve soil health. Planting trees in the right of way helps to reduce stormwater runoff. TreeKeepers, volunteers trained in tree planting and care, are engaged through plantings and community engagement events focused on continuing education. Trees Forever plants trees in low canopy areas and open spaces, with a focus on broad leaf species, which have better capacity to sequester air pollutants. Planting trees in open spaces provides shade and protection from UV exposure as well as helping to reduce urban heat effects.

SDG 14 - Life Below Water

Goal: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Examples of project activities located in areas with marine ecosystems include, but are not limited to:

- Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes near water
- Plant or protect trees in project areas to reduce stormwater runoff
- Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- Prevent soil erosion into by protecting steep slopes
- Improve infiltration rates
- Improve, mitigate, or remediate toxic landscapes and human exposure to risk
- Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- Enhance wildlife habitat, such as riparian habitat for fish, birds, and other animals
- Other

In 2022, Trees Forever executed several plantings along the regional trail system, including the Spine Trail and Three Lakes Trail, which was a forested buffer along a wetland. A focus is placed on appropriate tree selection, particularly as it relates to drought tolerance. Trees also reduce stormwater runoff.

SDG 15 - Life on Land

Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Examples of project activities include, but are not limited to the following with increased functionality of green infrastructure:

- Plant or protect trees to reduce stormwater runoff
- Select water-efficient trees for climate zone and drought resistance
- Create and/or enhance wildlife habitat to improve local biodiversity
- Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- Prevent soil erosion by protect steep slopes
- Improve infiltration rates
- Other

In 2022, Trees Forever executed several plantings along the regional trail system, including the Spine Trail and Three Lakes Trail, which was a forested buffer along a wetland. A focus is placed on appropriate tree selection, particularly as it relates to drought tolerance. Trees also reduce stormwater runoff.

Trees Forever focuses on planting a diversity of species, which includes considerations for local wildlife habitat. The organization also engages in education and advocacy work surrounding green infrastructure, protecting biodiversity, and supporting policy that respectfully combats climate change.

SDG 17 - Partnerships for the Goals

Overall: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Examples of project activities include, but are not limited to:

- Promote community connections and capacity for social resilience by engaging local residents or users in tree management, or other events to connect people to the project
- Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- Other

The Trees Forever team in the Des Moines metro area has engaged in a renewed focus on community engagement at all levels. The intent of the TreeKeepers education program is to train skilled volunteers that can supplement full-time staff in the community as tree advocates, connect to community stakeholders, and create partnerships. One of the goals of Trees Forever in the Des Moines metro area is to tap into existing partnerships, honor organizational expertise, and engage community members, government officials, local non-profits, and area businesses in meaningful ways. Education of all communities—especially historically redlined areas—on the benefits of trees is essential to success.

Summary of Project Social Impacts

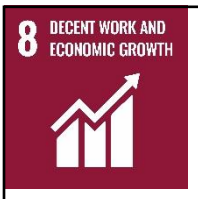


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Trees Forever intends to reduce inequalities through engaging in community partnerships, planting trees in low-income areas (particularly previously redlined areas of the city), and organizing plantings around schools, affordable housing development, and in areas with low tree canopy. Staff engage residents and community leaders with project design when possible, including the implementation of tree corridors for walking between facilities like the grocery store, gym, library, and hospital. A three-session TreeKeeper course for community volunteers is offered twice a year. Participants learn to plant, prune, and care for trees in the community, and are relied upon as skilled volunteers for subsequent plantings and community engagement events.



A series of community meeting held in conjunction with the Riverbend Neighborhood in Des Moines. Residents were engaged in the creation of a neighborhood planting map, and a plan for tree care that included volunteer watering by community members. Trees Forever prioritizes hiring students from local high schools for the Growing Futures employment program, and works with local contractors for additional watering needs.

