

TREASURE VALLEY MUNICIPAL PARKS PLANTING PROJECT Initial Credit Project Design Document

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INSTRUCTIONS

Project Operators complete and submit this Initial Credit Project Design Document (PDD) after planting has been completed. City Forest Credits then reviews this PDD for validation with all other required project documents. An approved third-party verifier then conducts verification. A separate amendment to the Project Design Document will need to be submitted for future verification at years 4, 6, and after year 25.

Please complete sections starting on page 5 where you find "[Enter text here]" as thoroughly as possible.

PROTOCOL REQUIREMENTS

Below are a list of the eligibility requirements in the City Forest Credits (CFC) Tree Planting Protocol Version 9, dated February 7, 2021. Begin your responses on page 4 under PROJECT OVERVIEW.

Project Operator (Section 1.1)

Identify a Project Operator for the project. This is the person or entity who takes responsibility for the project for the 25-year duration.

Commit to 25-year Project Duration in the Project Implementation Agreement (Section 1.2 and Section 5)

Sign the Project Implementation Agreement – this is the 25-year agreement between the Project Operator and CFC for an urban forest carbon project.

Location Eligibility (Section 1.3)

Project Areas must be located in parcels within or along the boundary of at least one of the following criteria.

- A. The Urban Area boundary ("Urban Area"), defined by the most recent publication of the United States Census Bureau
- 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. Examples include the Metropolitan Area Planning Council in Boston and the Chicago Metropolitan Planning Agency;
- E. The boundary of land owned, designated, and used by a municipal or quasi-municipal entity such as a utility 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 A through E above.

Ownership Eligibility (Section 2)

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.

Additionality (Section 4.1 and Appendix D)

Legally Required Trees <u>NOT</u> Eligible - Project trees cannot be required by law or ordinance to be planted.

Performance Standard Baseline (Appendix D)

Project trees must be additional based on the performance standard baseline attached.

Multiple planting sites may be aggregated into one project (Section 8)

Planting sites can be on public and private land, in different cities, and aggregated into one project, provided that planting on all properties occurs within a 36-month period and that all properties comply with protocol requirements.

Carbon Quantification (Section 12 and Appendix B)

CFC has developed spreadsheets and methods for quantifying carbon stored and credited. The project design including tree spacing and goals will determine the quantification and monitoring requirements. Project Operators will quantify CO₂ using the method appropriate for the project type. CFC supplies all quantification tools. The three main project designs are:

- Single Tree trees are scattered and spaced apart more than 10 feet, as in streets, yards, some parks, and schools, individual trees are tracked and randomly sampled
- Clustered Parks trees are relatively contiguous in park-like settings and change in canopy is tracked
- Canopy trees are planted very close together, often but not required to be in riparian areas, significant mortality is expected, and change in canopy is tracked. The two main goals are to create a forest ecosystem and generate canopy

Verification by third-party verifiers (Section 13)

All projects must be verified before receiving credits.

Imaging Requirements (based on planting method)

In order to receive credits, additional information is required at Years 4, 6, and 26. Below are the imaging requirements by planting method:

- 1) Single Tree (spaced 10' or more apart, i.e. street trees or linear plantings)
 - a. <u>Initial Credit:</u> The carbon quantification tool for your project contains a worksheet called "Data Collection" for use in tracking each tree. In that file, document the GPS coordinates for each tree planted.
 - b. <u>Years 4, 6, and 26:</u> Geocoded photos or imaging of a minimum sample of 20% of the trees is required at Years 4, 6, and 26. 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.
- 2) Clustered Parks (spaced 10' apart but continuously so to generate canopy over time, i.e. natural areas)

- a. <u>Initial Credit</u>: Projects 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. <u>At Years 4, 6, and 26</u>: Project provides 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.
- 3) Canopy (closely planted with spacing less than 10' apart so to generate canopy and forest ecosystem, high tree mortality expected, i.e. riparian areas)
 - a. <u>Initial Credit</u>: Projects 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. <u>At Years 4, 6, and 26</u>: Project provides 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.

PROJECT OVERVIEW

Basic Project Details

Project Name: Treasure Valley Municipal Parks Planting
Project Number (CFC to provide): 004
Project Type: Planting Project (under the Planting Protocol – version 9, dated February 7, 2021)
Project Start Date: June 9, 2021
Project Location (city, town, or jurisdiction): Boise, ID

Project Operator Name: Treasure Valley Canopy Network Project Operator Contact Information: Lance Davisson – 208-994-1135, <u>Idavisson@thekeystoneconcept.com</u>

Project Description

Describe overall project goals, where the project will take place, what method of planting (per Protocol), partners, time period of when the trees have been or will be planted, and any other relevant information. (minimum of 2 paragraphs)

The Treasure Valley Municipal Parks Planting Project is a partnership between the City of Boise and the Treasure Valley Canopy Network (Network). This project will plant approximately 454 trees in 9 municipal parks throughout the Treasure Valley (see vicinity map). Over the course of the next 25 years, these trees will produce over \$535,000 in ecosystem services that will benefit our region's environment and its citizens.

The City of Boise is at the heart of Idaho's Treasure Valley, one of the fastest growing metropolitan areas in the United States. As our region grows, its city is committed to building healthy and vibrant public spaces for all citizens to enjoy. The trees planted in these parks will provide residents of various socioeconomic categories with recreational opportunities resulting in healthier environments and people.

This project is the first pilot in the Treasure Valley City Forest Credits Program, administered by the Treasure Valley Canopy Network. As the Network continues to build collaborative partners and planting projects, we anticipate many more opportunities for financial support of our regional City Forest Credits Program. Ultimately, this program will generate funding to significantly increase tree planting efforts throughout the region and raise awareness about the social, environmental, and economic benefits that these trees are providing to our region.

Trees will be planted as scattered single trees throughout the parks as outlined in each municipal park planting plan and planting list.

The Treasure Valley City Forest Credits Program is supported by the diverse public and private member partners of the Treasure Valley Canopy Network (http://www.tvcanopy.net/partners/).

LOCATION AND OWNERSHIP OF PROJECT AREA (Section 1.3 and Section 2)

Project Area Location

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

The plantings are located in the following urban areas:

- Boise, ID (Urban Area Code: 08785 Boise City, ID)
 - o Franklin Park, 310 S Hilton St, Boise, ID 83705
 - o Magnolia Park, 7136 N Bogart Ln, Boise, ID 83714
 - Pine Grove Park, 750 S Maple Grove Rd, Boise, ID 83709
 - Hyatt Hidden Lakes, 5301 N Maple Grove Rd, Boise, ID 83704
 - Sterling Park Pond (Mariposa Park), 9851 W Irving St, Boise, ID 83704
 - Harrison Hollow (Hillside Hollow Reserve), 2455 Harrison Hollow Lane, Boise, ID 83702
 - o Bernadine Quinn Riverside Park, 3150 W. Pleasanton Ave, Boise, ID 83702
 - Westside Downtown (Cherie Buckner-Webb) Park, 1100 W Bannock St, Boise, ID 83702
 - o Bowler Park, 4403 S Surprise Way, Boise, ID 83706

Project Area Ownership and Right to Receive Credits

Describe the property ownership and include relevant documentation including numbered title/filename as an attachment (Ex: 1 - Attestation of Land Ownership, or 1 - Agreement from Owner to Transfer Credits).

Park property ownership, by city:

- Boise, ID
 - Franklin Park owned by City of Boise
 - Magnolia owned by City of Boise
 - Pine Grove Park owned by City of Boise
 - Hyatt Hidden Lakes owned by City of Boise
 - Mariposa Park (formerly Sterling Park) owned by City of Boise
 - Harrison Hollow owned by City of Boise
 - Bernadine Quinn Riverside Park owned by City of Boise
 - Cherie Buckner-Webb (formerly Westside Downtown) Park owned by City of Boise
 - Bowler Park owned by City of Boise

Prior to credit issuance, the property owner and Treasure Valley Canopy Network will sign an agreement outlining the Treasure Valley Canopy Network's right to receive credits from the property owner. Copies will be provided to CFC. – *Refer to attached Agreement to Transfer Credits between TV Canopy Network and City of Boise*

Maps

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

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1) Map of Project Area

Title/filename of relevant attachment(s): 01 Bernadine Quinn Park.pdf 02 Bowler Park.pdf 03 Cherie Buckner-Webb (Westside Downtown) Park.pdf 04 Franklin Park.pdf 05 Harrison Hollow Park.pdf 06 Hyatt Hidden Lakes Park.pdf 07 Magnolia Park.pdf 08 Mariposa Park.pdf 09 Pine Grove Park.pdf

2) Regional-scale map of Project Area

Title/filename of relevant attachment(s): Treasure Valley Municipal Parks Project Maps.pdf

Additional Notes

PROJECT DURATION

Project Operator commits to the 25-year project duration requirement through a signed Project Implementation Agreement with City Forest Credits.

ATTESTATIONS

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

All completed and signed attestations are attached.

ADDITIONALITY

Legally required trees NOT eligible - Project trees are not required by law or ordinance to be planted. See Attestation of Planting.

PERFORMANCE STANDARD BASELINE

Project trees are additional based on the performance standard baseline attached.

PLANTING DESIGN

Describe detailed planting design, including spacing between trees. Will the trees be planted as scattered individual trees, clustered in groups like in natural areas, or tightly clustered to restore a forest ecosystem?

- Single Tree trees are scattered and spaced apart more than 10 feet, as in streets, yards, some parks, and schools, individual trees are tracked and randomly sampled
- Clustered Parks trees are relatively contiguous in park-like settings and change in canopy is tracked
- Canopy trees are planted very close together, often but not required to be in riparian areas, significant mortality is expected, and change in canopy is tracked. The two main goals are to create a forest ecosystem and generate canopy

Describe your data collection on Project Trees and show it in the quantification section below. For example, Project Operator can use the data collection sheet contained in the CFC quantification tool or your own approved method.

This project will plant 454 trees using the single tree method in nine parks in Boise, ID. All trees in all parks will be irrigated and maintained by city parks staff, including pruning and replacement as needed. The expected survival rate for this project is 90%. This is based on a regional average for trees planted in

new parks. Any tree that dies will be replaced that year over the course of the next 25 years while the project is included in the registry.

All project trees were planted within 2016 - 2021.

CARBON QUANTIFICATION DOCUMENTATION (Section 12 and Appendix B)

Describe which quantification approach you anticipate using, list the project's climate zone, and outline the estimated total number of credits to be issued to the project as well as the amount to be issued upon successful verification. When requesting credits after planting, attach one of the three quantification tool documents below and provide the data you have collected for Project Trees.

- Single Tree trees are scattered and spaced apart more than 10 feet, as in streets, yards, some parks, and schools, individual trees are tracked and randomly sampled
- Clustered Parks trees are relatively contiguous in park-like settings and change in canopy is tracked
- Canopy trees are planted very close together, often but not required to be in riparian areas, significant mortality is expected, and change in canopy is tracked. The two main goals are to create a forest ecosystem and generate canopy

Total number of trees planted	454
Project area (acres), if applicable	N/A
Total number of trees per acre, if applicable	N/A
Credits attributed to the project (tCO2e)	663.9
Credits after mortality deduction (10%)	597.51
Contribution to Registry Reversal Pool (5%) (tCO2e)	29.88
Total credits to be issued to the Project Operator (tCO2e)	567.7
Total credits requested to be issued in Year 1 (10% of above)	57

The single tree quantification approach was used to calculate the estimated carbon credits to be issued and co-benefit information. Each park has its own tool and copies are included in CFC records. Below is a summary of the number of trees, total credits, and co-benefits for all parks. The total number of credits being requested at this first issuance is: **57**.

Attachment 8 - 02 Temperate Interior West Single Tree Initial Credit Tool_20211202 Attachment 10 - 01 Tree Inventory from City of Boise

Row Labels	Sum of Quantity
American hornbeam	1
Austrian pine	32
black spruce	3
blue spruce	28
bur oak	2
Callery pear	2
common chokecherr	y 30
crabapple	54
downy serviceberry	3
eastern redbud	1
elm	2
European hornbeam	6
giant sequoia	10
hawthorn	5
honeylocust	54
Japanese pagoda tre	e 9
Kentucky coffeetree	4
littleleaf linden	35
London planetree	10
maple	21
northern hackberry	3
northern red oak	21
Norway maple	3
Norway spruce	3
pine	5
red maple	2
river birch	13
Scotch pine	13
spruce	1
sugar maple	3
swamp white oak	5
sweetgum	7
tulip tree	24
Vanderwolf Pine	3
white ash	5
white spruce	23
willow	8
Grand Total	454

CARBON CO-BENEFITS QUANTIFICATION DOCUMENTATION (Section 12 and Appendix B)

Summarize co-benefit results based on the project's planting method and provide supporting documentation. CFC can provide co-benefits quantification for Project Operator for rainfall interception, air quality improvements, and energy savings.

- Single Tree trees are scattered and spaced apart more than 10 feet, as in streets, yards, some parks, and schools, individual trees are tracked and randomly sampled
- Clustered Parks trees are relatively contiguous in park-like settings and change in canopy is tracked
- Canopy trees are planted very close together, often but not required to be in riparian areas, significant mortality is expected, and change in canopy is tracked. The two main goals are to create a forest ecosystem and generate canopy

Ecosystem Services	Resource Units	Value
Rainfall Interception (m3/yr)	2,523.31	\$5,199.38
Air Quality (t/yr)	0.0600	\$1,445.61
CO2 Avoided from Energy Savings	2.43	\$48.57
Cooling – Electricity (kWh/yr)	84,571.85	\$9,861.08
Heating – Natural Gas (kBtu/yr)	390,109.87	\$4,854.67
Grand Total (\$/yr)		\$21,409.31

Attachment 9 - 02 Temperate Interior West Single Tree Initial Credit Tool_20211202

MONITORING AND REPORTING PLANS (Appendix A)

Project Operator is required to submit an annual monitoring report by the anniversary of the first approved verification report. For example, if the verification report is dated January 1, 2021, the first monitoring report will be due by January 1, 2022 and each January 1st thereafter for the duration of the project.

Anticipated Reporting Schedul	C		
Monitoring Report – Year 2	2022	Monitoring Report – Year 15	2035
Monitoring Report – Year 3	2023	Monitoring Report – Year 16	2036
Monitoring Report – Year 4*	2024	Monitoring Report – Year 17	2037
Monitoring Report – Year 5	2025	Monitoring Report – Year 18	2038
Monitoring Report – Year 6*	2026	Monitoring Report – Year 19	2039
Monitoring Report – Year 7	2027	Monitoring Report – Year 20	2040
Monitoring Report – Year 8	2028	Monitoring Report – Year 21	2041
Monitoring Report – Year 9	2029	Monitoring Report – Year 22	2042
Monitoring Report – Year 10	2030	Monitoring Report – Year 23	2043
Monitoring Report – Year 11	2031	Monitoring Report – Year 24	2044
Monitoring Report – Year 12	2032	Monitoring Report – Year 25	2045
Monitoring Report – Year 13	2033	Monitoring Report – Year 26*	2046
Monitoring Report – Year 14	2034		

Anticipated Reporting Schedule

* Denotes a year where additional information is required in order to receive credits

Monitoring Reports

The report must contain any changes in eligibility status of the Project Operator and any significant tree loss. Monitoring report questions are listed below. The following are questions 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 of 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?
- 7. Any other significant elements to report?

Confirm and describe your plans for annual monitoring of this project and specifics on how imaging (see Imaging Requirements in the Protocol Requirements section above) will be conducted based on your project's planting method.

Treasure Valley Canopy Network and City of Boise Parks and Recreation Staff will conduct annual on-site monitoring of the condition of the trees, in addition to the monitoring requirements of the CFC protocols. Monitoring will include photos and condition inspections by an ISA Certified Arborist.

ADDITIONAL INFORMATION

Include additional noteworthy aspects of the project. Examples include collaborative partnerships, community engagement, or project funders.

This is a highly collaborative project, led by Treasure Valley Canopy Network and City of Boise Parks and Recreation. To learn more about this project, its history and background, visit https://www.tvcanopy.net/city-forest-credits.

PROJECT OPERATOR SIGNATURE

Signed by Lance Davisson, Executive Director for Treasure Valley Canopy Network.

Lance Davisson

Signature

(208) 994-1135

Phone

coordinator@tvcanopy.net

Email

ATTACHMENTS

1 - Agreement to Transfer Credits and/or Attestation of Land Ownership

- 2 Regional Area Map (in PDD)
- 3 Project Area Map (in PDD)
- 4 Attestation of No Double Counting of Credits
- 5 Attestation of No Net Harm
- 6 Attestation of Planting
- 7 Attestation of Planting Affirmation

8 - Carbon Quantification Initial Credits Tool (02 Temperate Interior West Single Tree Initial Credit Tool_20211202)

9 - Co-Benefit Quantification Initial Credits Tool (02 Temperate Interior West Single Tree Initial Credit Tool_20211202)

10 - Tree Data (01 Tree Inventory from City of Boise)

PERFORMANCE STANDARD BASELINE METHODOLOGY (Appendix D)

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 this case, the developers of the protocol, to create a performance standard baseline using the data from similar activities over geographic and temporal ranges.

A common perception, particularly in the U.S., is that projects must meet a project specific test. Projectspecific 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 <u>either</u> 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:

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

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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

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:

² See Nowak, et al. *"Tree and Impervious Cover Change in U.S. Cities,"* Urban Forestry and Urban Greening, 11 (2012), 21-30 Copyright © 2021 City Forest Credits. All rights reserved.

Abs Relative Ann. Rate Ann. Rate (m2 Data Years City Change Change (ha UTC/cap/yr) UTC (%) UTC (%) UTC/yr) 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)-0.8 (2004 - 2008)Pittsburgh, PA -0.3 -10 -0.3 Syracuse, NY 4.0 0.7 (2003 - 2009)1.0 10 Mean changes -0.7 -2.4 -60.0 -0.3 Std Error 0.5 1.9 35.4 0.3 SOUTH Atlanta, GA -3.4 -150 -3.1 (2005 - 2009)-1.8 Houston, TX -3.0 -9.8 -890 -4.3 (2004 - 2009)Miami, FL -1.7 -7.1 -30 -0.8 (2003 - 2009)-2.4 -300 Nashville, TN -1.2 -5.3 (2003 - 2008)New Orleans, LA -9.6 -29.2 -1120 -24.6 (2005 - 2009)-3.5 -10.4 -160.0 -7.6 Mean changes 4.3 Std Error 1.6 4.9 60.5 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)Minneapolis, MN -3.1 -30 -0.8 (2003 - 2008)-1.1 Mean changes -0.9 -3.3 -80.0 -1.3 0.7 Std Error 0.2 0.3 28.0 WEST Albuquerque, -2.7 -6.6 -420 -8.3 (2006 - 2009)NM Denver, CO -0.3 -3.1 -30 -0.5 (2005 - 2009)-4.2 Los Angeles, CA -0.9 -270 -0.7 (2005 - 2009)Portland, OR -1.9 -0.9 -0.6 -50 (2005 - 2009)Spokane, WA -0.6 -2.5 -20 -1.0 (2002 - 2007)Tacoma, WA -50 -2.6 (2001 - 2005)-1.4 -5.8 -4.0 -140.0 -2.3 Mean changes -1.1 **Std Error** 0.4 0.8 67.8 1.2

Table 2.2 Changes in Urban Tree Canopy (UTC) by region (Nowak and Greenfield, 2012)

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 (Oregon), 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 Tree 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;
- 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.

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

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.

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

Introduction

Ecoservices provided by trees to human beneficiaries are classified according to their spatial scale as global and local (Costanza 2008) (citations in Part 1 are listed in References at page 16). 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 cobenefits 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

There are three different methods for quantifying carbon dioxide (CO₂) storage in urban forest carbon projects:

- Single Tree Method planted trees are scattered among many existing trees, as in street, yard, some parks, and school plantings, individual trees are tracked and randomly sampled
- Clustered Parks Planting Method planted trees are relatively contiguous in park-like settings and change in canopy is tracked
- Canopy Method trees are planted very close together, often but not required to be in riparian areas, significant mortality is expected, and change in canopy is tracked. The two main goals are to create a forest ecosystem and generate canopy
- Area Reforestation Method large areas are planted to generate a forest ecosystem, for example converting from agriculture and in upland areas. This quantification method is under development

In all cases, the estimated amount of CO₂ stored 25-years after planting is calculated. The forecasted amount of CO₂ stored during this time is the value from which the Registry issues credits in the amounts of 10%, 40% and 30% at Years 1, 4, and 6 after planting, respectively. A 20% mortality deduction is applied before calculation of Year 1 Credits in the Single Tree and Clustered Parks Planting Methods. A 5% buffer pool deduction is applied in all three methods before calculation of any crediting, with these funds going into a program-wide pool to insure against catastrophic loss of trees. At the end of the project, in year 25, Operators will receive credits for all CO₂ stored, minus credits already issued.

In the Single Tree Method, the amount of CO_2 stored in project trees 25-years after planting is calculated as the product of tree numbers and the 25-year CO_2 index (kg/tree) for each tree-type (e.g., Broadleaf Deciduous Large = BDL). The Registry requires the user to apply a 20% tree mortality deduction before calculation of Year 1 Credits. Year 4 and Year 6 Credits depend on sampling and mortality data. A 5% buffer pool deduction is applied as well before calculation at any stage.

In the Clustered Parks Planting Method, the amount of CO_2 stored after 25-years by planted project trees is based on the anticipated amount of tree canopy area (TC). Because different tree-types store different amounts of CO_2 based on their size and wood density, TC is weighted based on species mix. The estimated amount of TC area occupied by each tree-type is the product of the total TC and each tree-type's percentage TC. This calculation distributes the TC area among tree-types based on the percentage of trees planted and each tree-type's crown projection area. Subsequent calculations reduce the amount of CO_2 estimated to be stored after 25 years based on the 20% anticipated mortality rate and the 5% buffer pool deduction.

In the Canopy Method, the forecasted amount of CO₂ stored at 25-years is the product of the amount of TC and the CO₂ Index (CI, t CO₂ per acre). This approach recognizes that forest dynamics for riparian projects are different than for park projects. In many cases, native species are planted close together and early competition results in high mortality and rapid canopy closure. Unlike urban park plantings, substantial amounts of carbon can be stored in the riparian understory vegetation and forest floor. To provide an accurate and complete accounting, we use the USDA Forest Service General Technical Report NE-343, with biometric data for 51 forest ecosystems derived from U.S. Forest Inventory and Assessment plots (Smith et al., 2006). The tables provide carbon stored per hectare for each of six carbon pools as a function of stand age. We use values for 25-year old stands that account for carbon in down dead wood and forest floor material, as well as the understory vegetation and soil. If local plot data are provided, values for live wood, dead standing and dead down wood are adjusted following guidance in GTR NE-343. More information on methods used to prepare the tables and make adjustments can be found in Smith et al., 2006. See Attachment A at the end of this Appendix for more information on the Canopy Method.

Source Materials for Single Tree Method and Clustered Parks Planting Methods

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 CO_2 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.

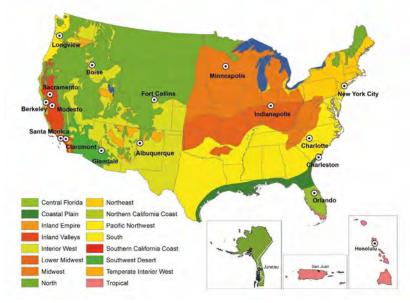


Fig. 1. Climate zones of the United States and Puerto Rico were aggregated from 45 Sunset climate zones into 16 zones. Each zone has a reference city where tree data were collected. Sacramento, California was added as a second reference city (with Modesto) to the Inland Valleys zone. Zones for Alaska, 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	Quercus phellos		Quercus macrocarpa
			600	1.
Brdlf Decid Med (30-50	BDM	Pyrus calleryana		
ft)			600	UGB ^{2.}
Brdlf Decid Small (<30 ft)	BDS	Cornus florida	545	UGB ^{2.}
Brdlf Evgrn Large (>50 ft)	BEL	Quercus nigra	797	UGB ^{2.}
Brdlf Evgrn Med (30-50	BEM	Magnolia		
ft)		grandiflora	523	UGB ^{2.}
Brdlf Evgrn Small (<30 ft)	BES	Ilex opaca	580	UGB ^{2.}
Conif Evgrn Large (>50	CEL	Pinus taeda		
ft)			389	UGC ^{2.}
Conif Evgrn Med (30-50	CEM	Juniperus		
ft)		virginiana	393	UGC ^{2.}
Conif Evgrn Small (<30	CES	Pinus contorta		
ft)			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 (<u>7</u>a). 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 (<u>Cairns et al., 1997</u>; <u>Husch et al., 2003</u>; <u>Wenger, 1984</u>). Wood volume (dry weight) was converted to C by multiplying by the constant 0.50 (<u>Leith, 1975</u>), and C was converted to CO_2 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 CO_2 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 CO_2 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 CO_2 stored as an indicator of precision.

It should be noted that estimates of CO₂ stored using the Tree Canopy Approach have several limitations that may reduce their accuracy. They rely on allometric relationships for open-growing trees, so storage estimates may not be as accurate when trees are closely spaced. Also, they assume that the distribution of tree canopy cover among tree-types remains constant, when in fact mortality may afflict certain species more than others. For these reasons, periodic "truing-up" of estimates by field sampling is suggested.

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: CO₂ Avoided

Energy savings result in reduced emissions of CO₂ and criteria air pollutants (volatile organic hydrocarbons [VOCs], NO₂, SO₂, PM₁₀) from power plants and space-heating equipment. Cooling savings reduce emissions from power plants that produce electricity, the amount depending on the fuel mix. Electricity emissions reductions were based on the fuel mixes and emission factors for each utility in the 16 reference cities/climate zones across the U.S. The dollar values of electrical energy and natural gas were based on retail residential electricity and natural gas prices obtained from each utility. Utility-specific emission factors, fuel prices and other data are available in the Community Tree Guides for each region (https://www.fs.fed.us/psw/topics/urban_forestry/products/tree_guides.shtml). To convert the amount of CO₂ avoided to a dollar amount in the spreadsheet tools, City Forest Credits uses the price of \$20 per metric ton of CO₂.

Error Estimates and Limitations

Estimates of avoided CO_2 emissions have the same uncertainties that are associated with modeling effects of trees on building energy use. Also, utility-specific emission factors are changing as many utilities incorporate renewable fuels sources into their portfolios. Values reported in CFC tools may overestimate actual benefits in areas where emission factors have become lower.

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 foliation 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 (<u>Derkzen et al., 2015</u>; <u>Nowak et al., 2014</u>). However, pollutant concentrations can be increased if the tree canopy restricts polluted air from mixing with the surrounding atmosphere (<u>Vos et al., 2013</u>). 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 (<u>Scott et al., 1998</u>). 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 (<u>Schulp et al., 2014</u>). 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 (<u>Anderson & Cordell, 1988</u>). Previous analyses modeled these "other" benefits of trees by applying the contribution to residential sales prices of a large front yard tree (0.88%) (<u>McPherson et al., 2005</u>). 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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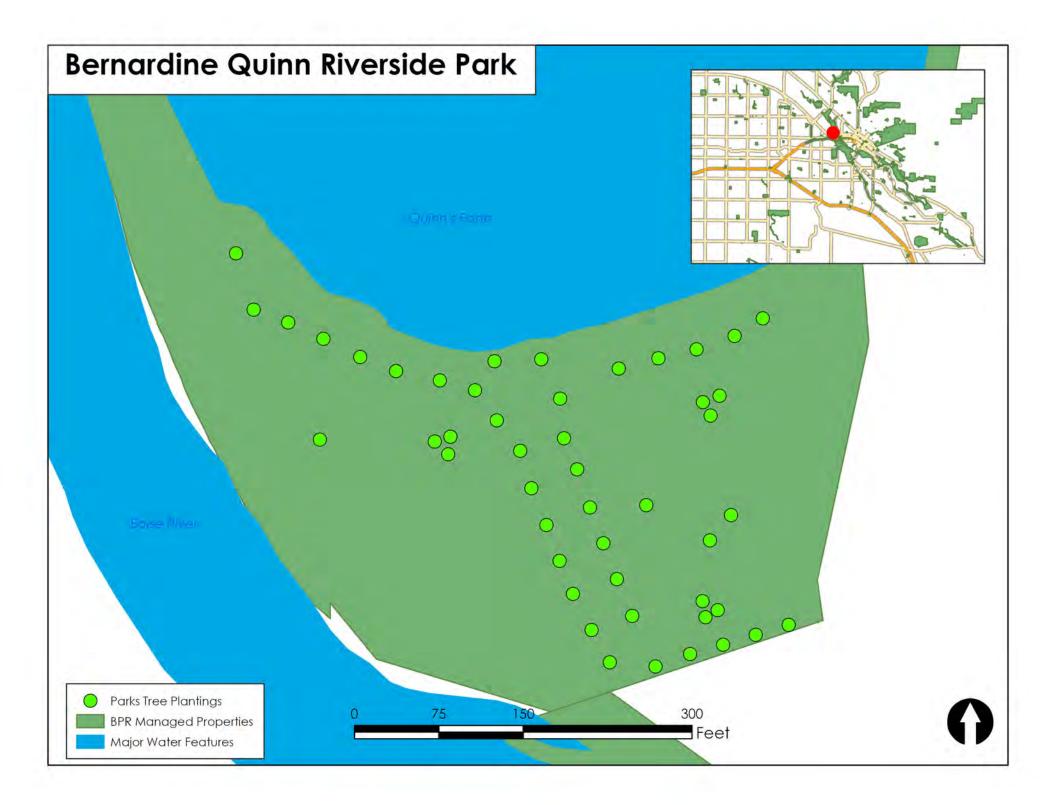
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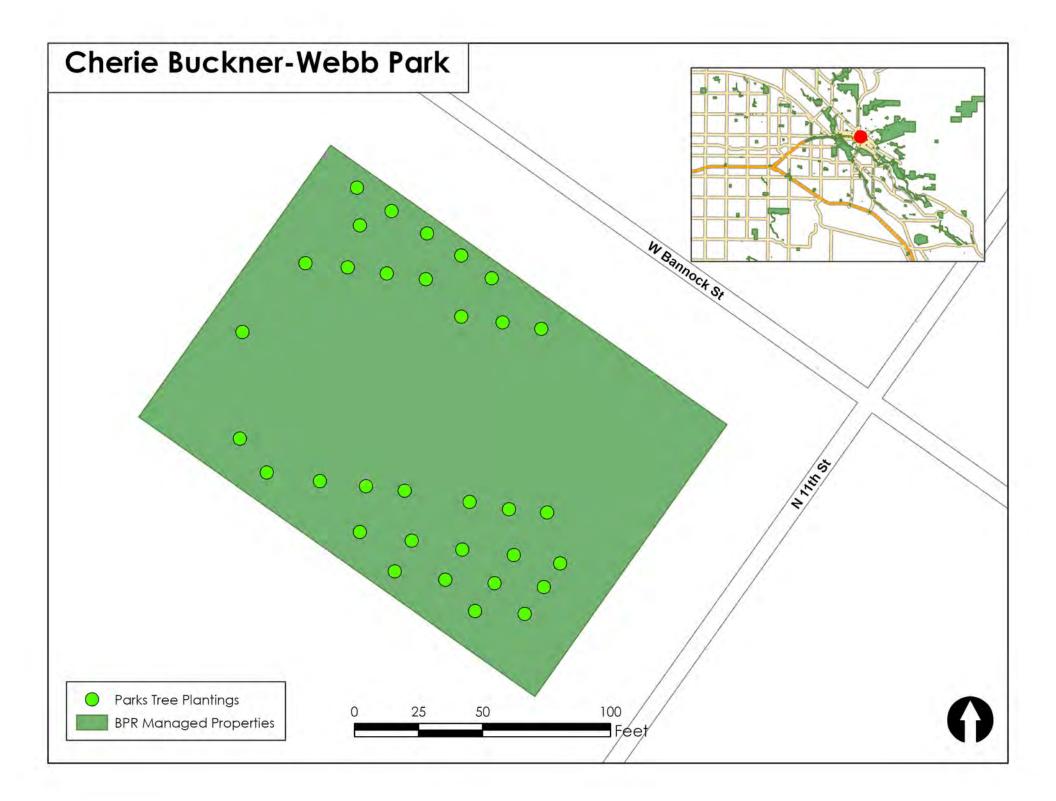
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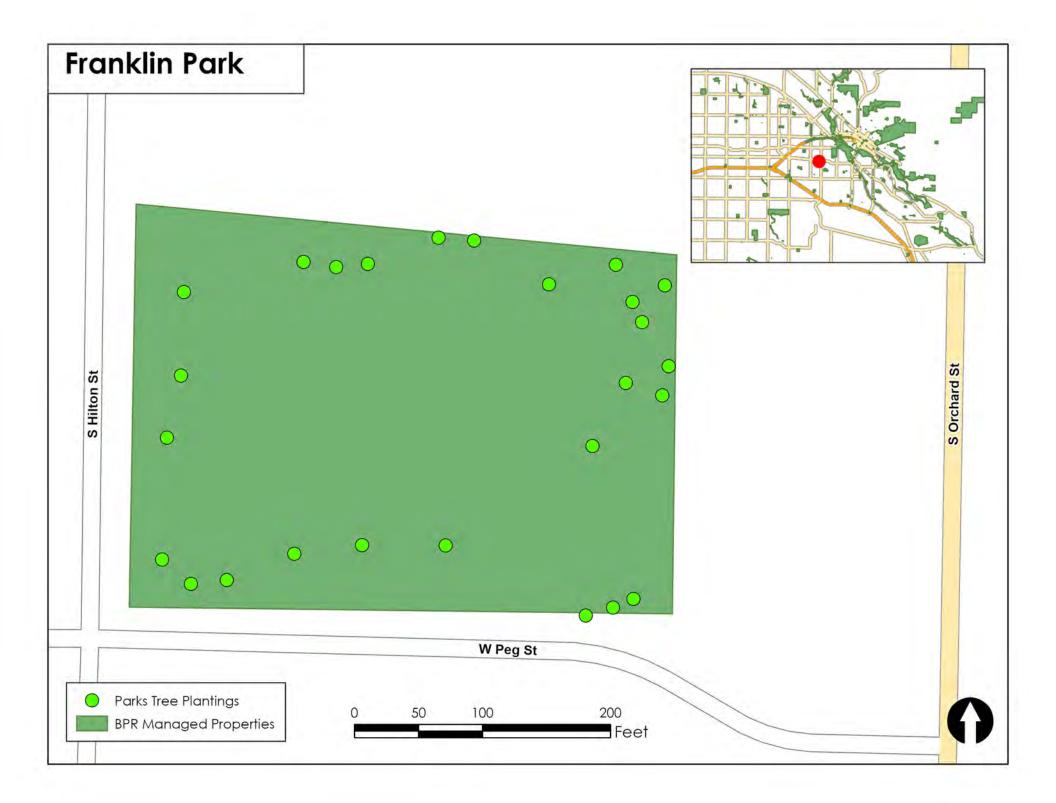
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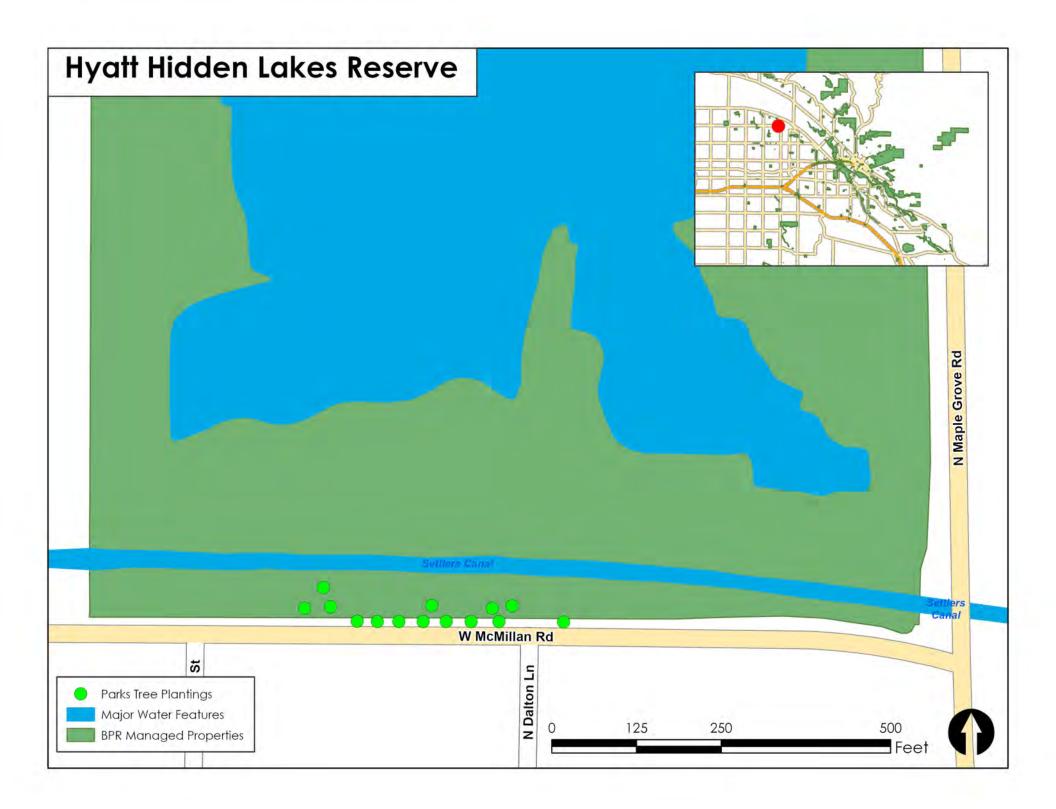




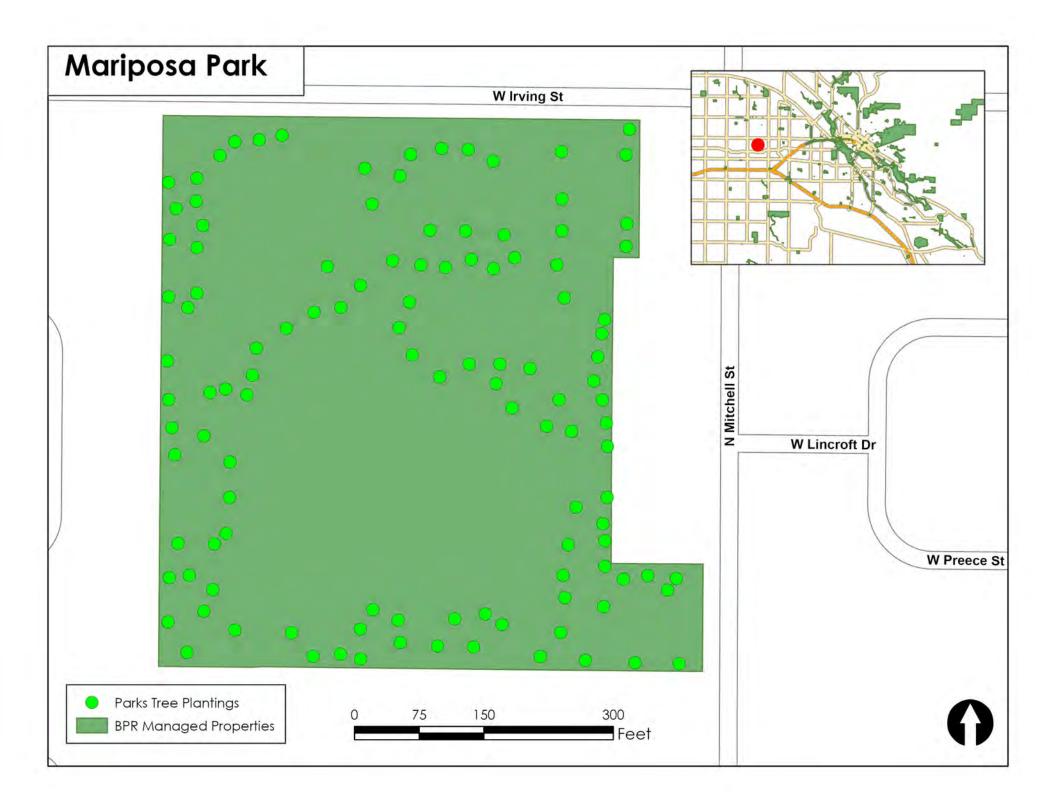


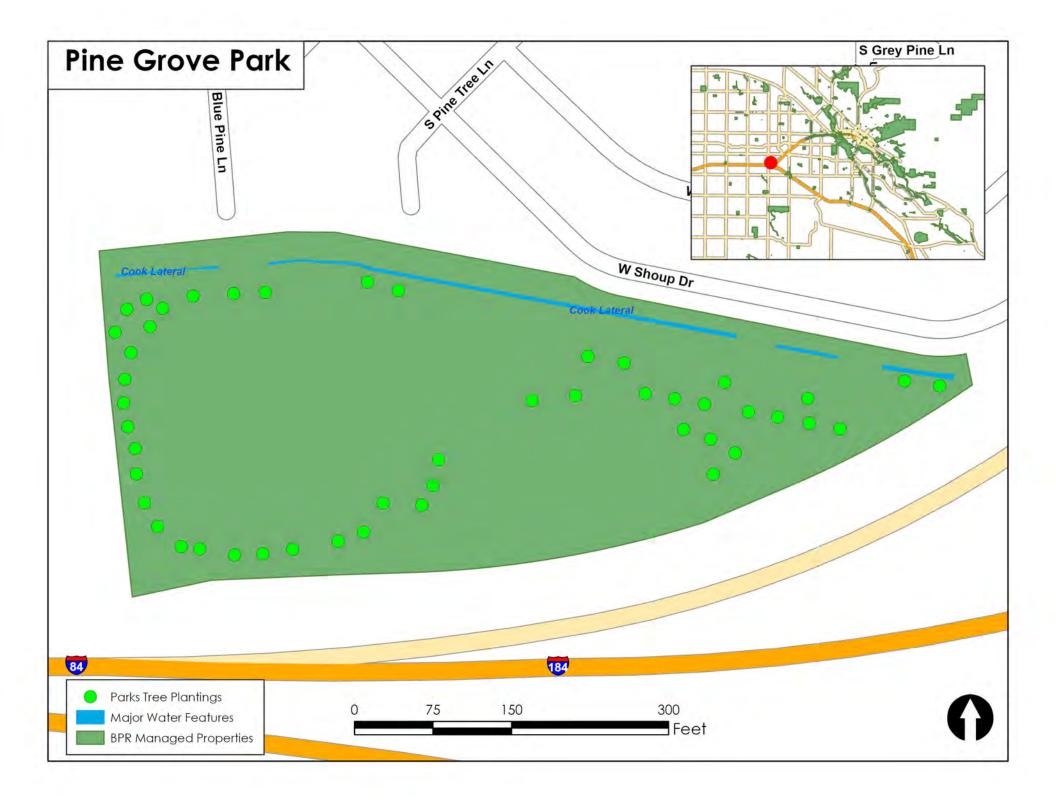


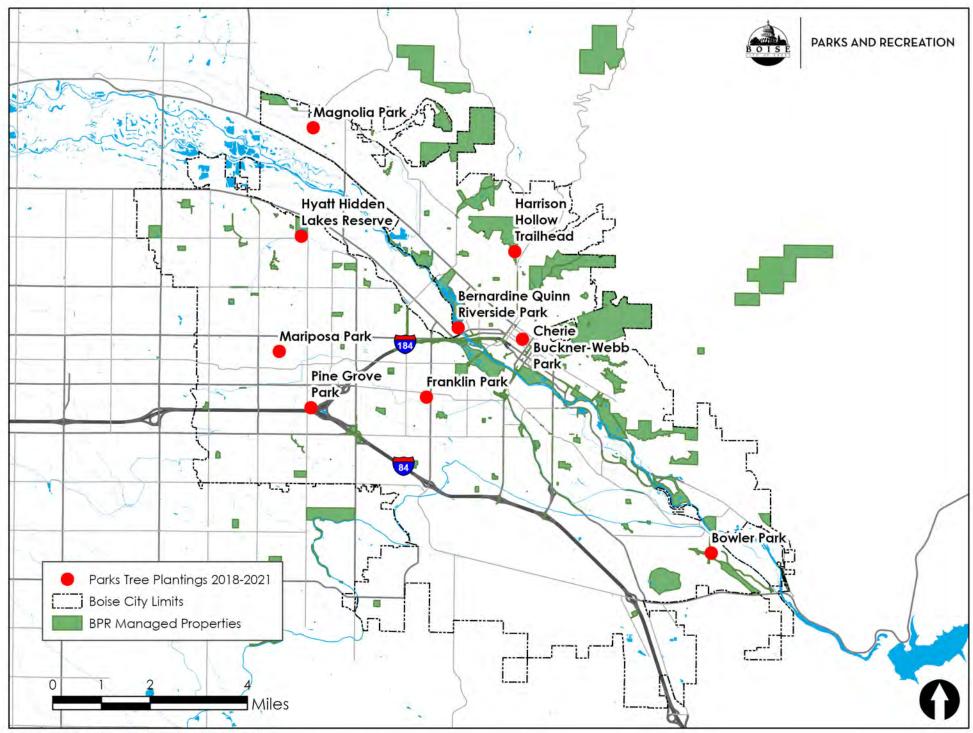




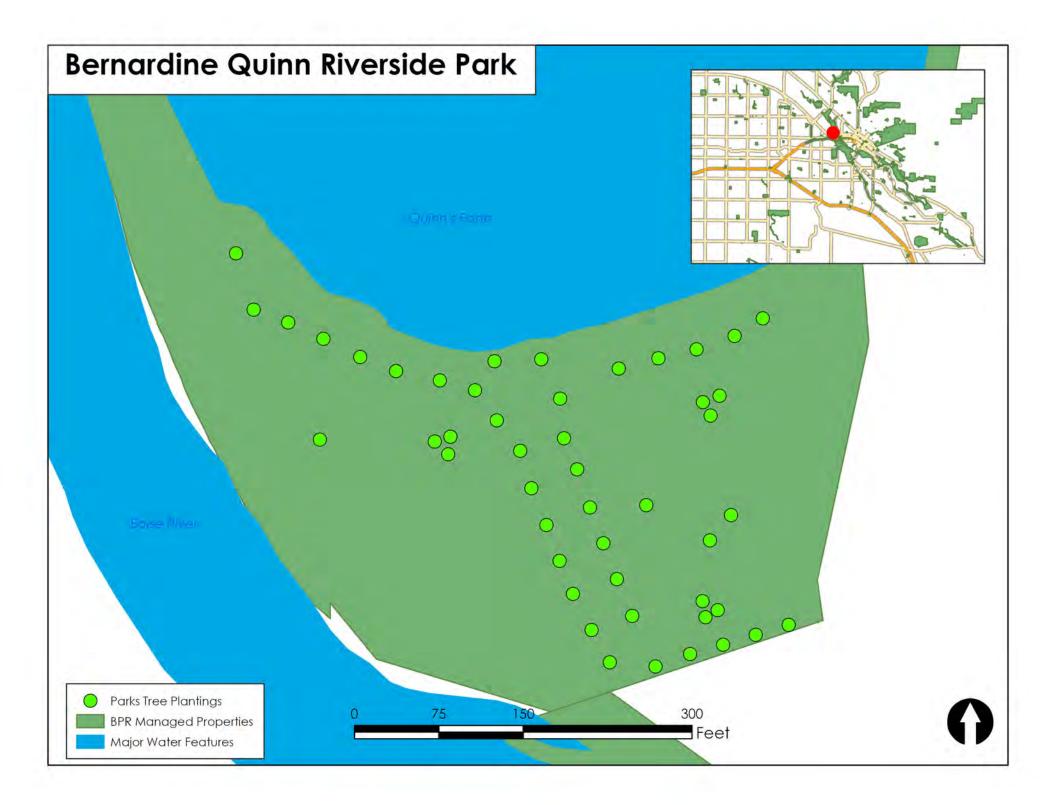




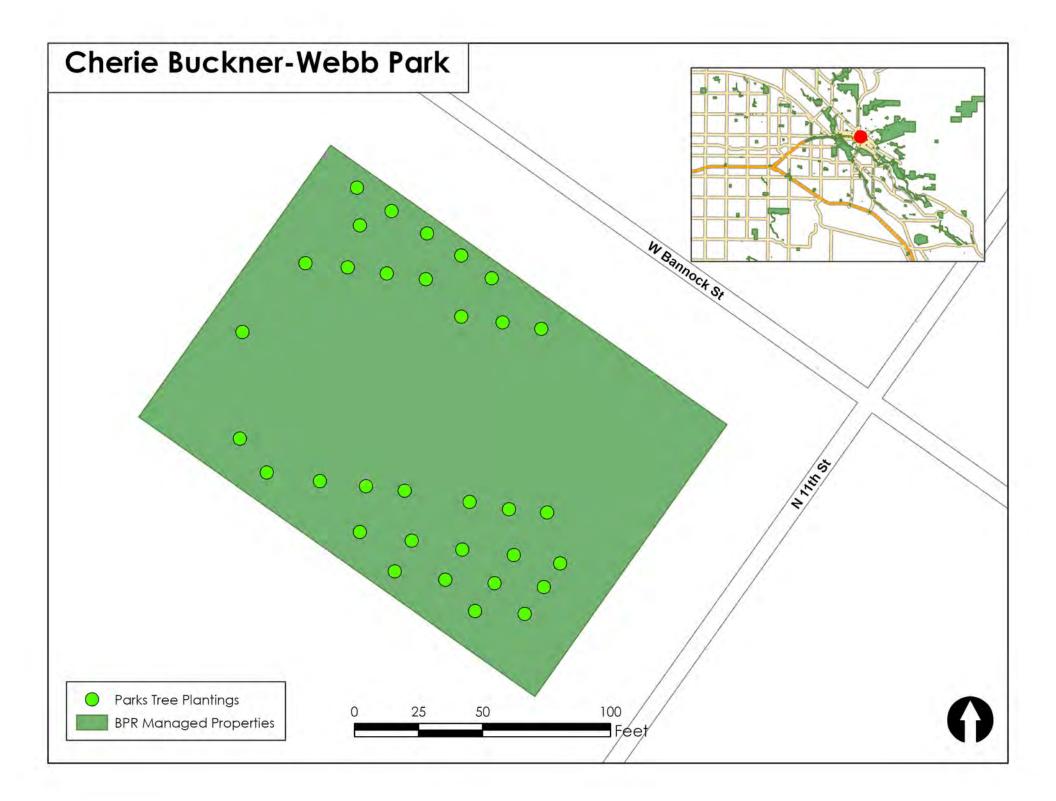


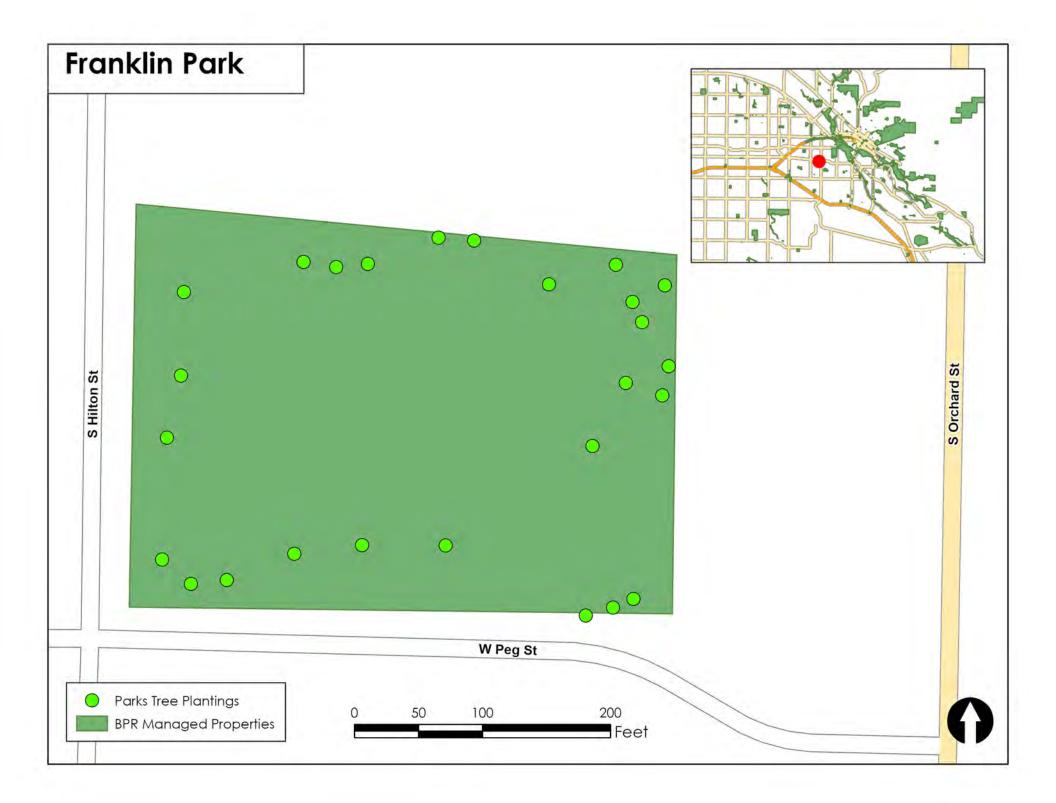


N:\Workspaces\Parks\Projects\StacyS\CityForestCredits This drawing is to be used only for reference purposes: Boise City is not responsible for any inaccuracies herein contained.





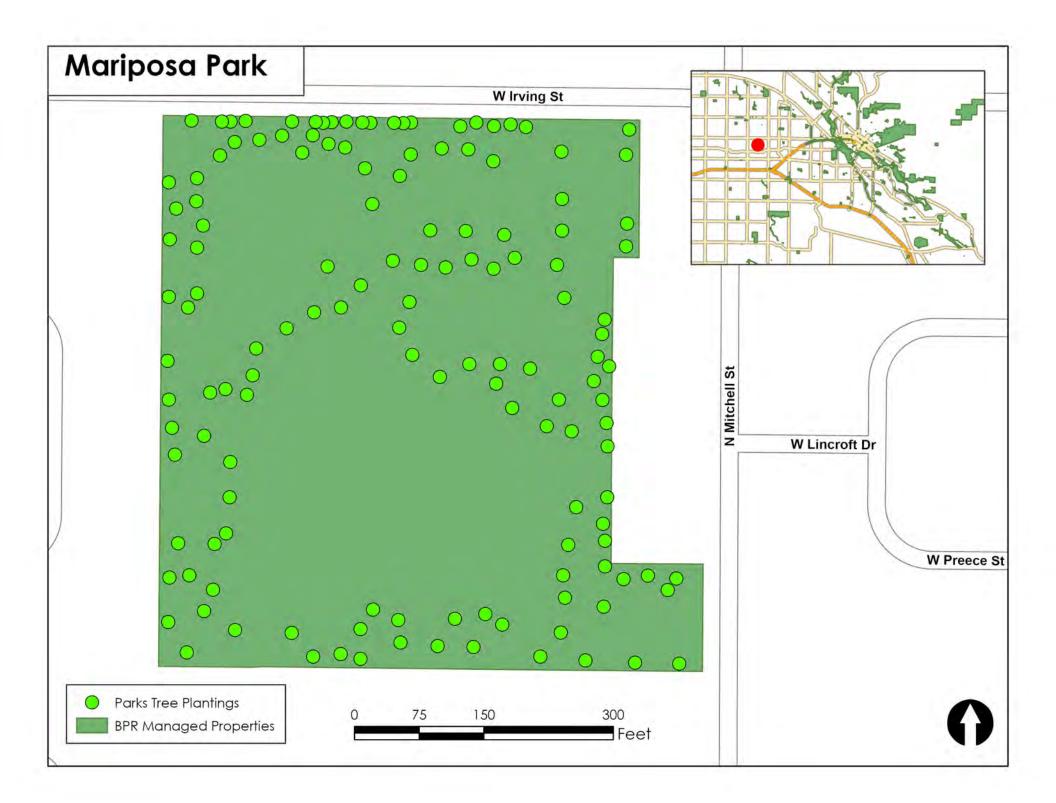


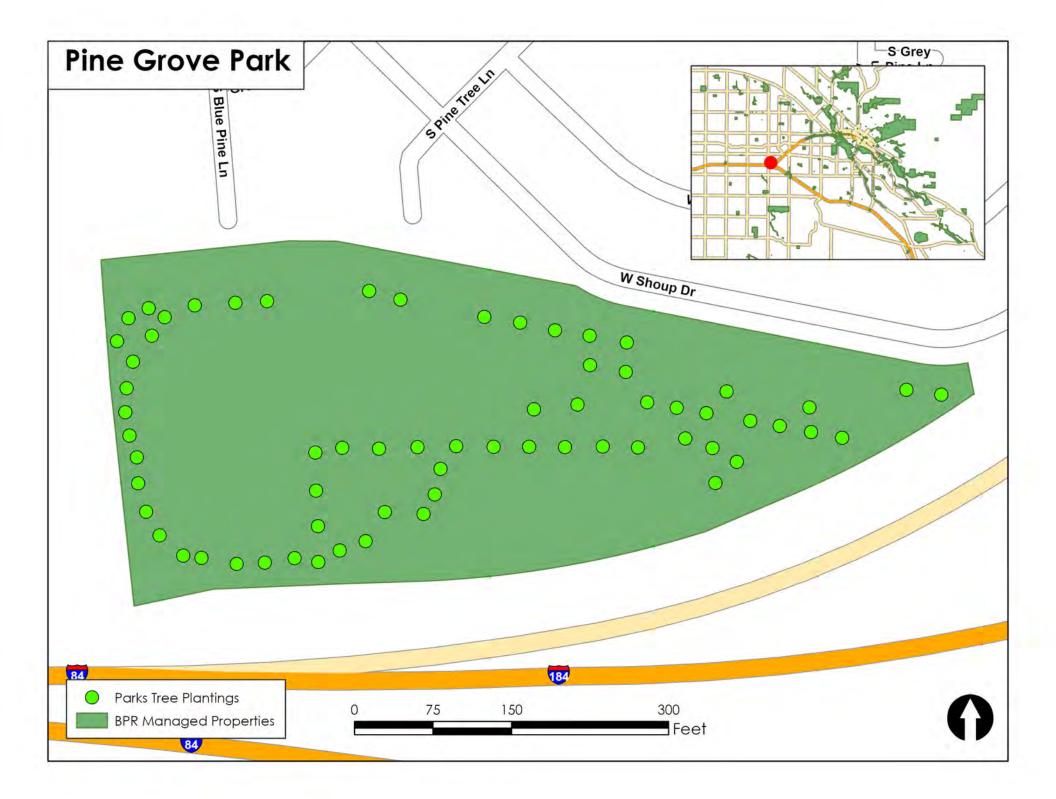


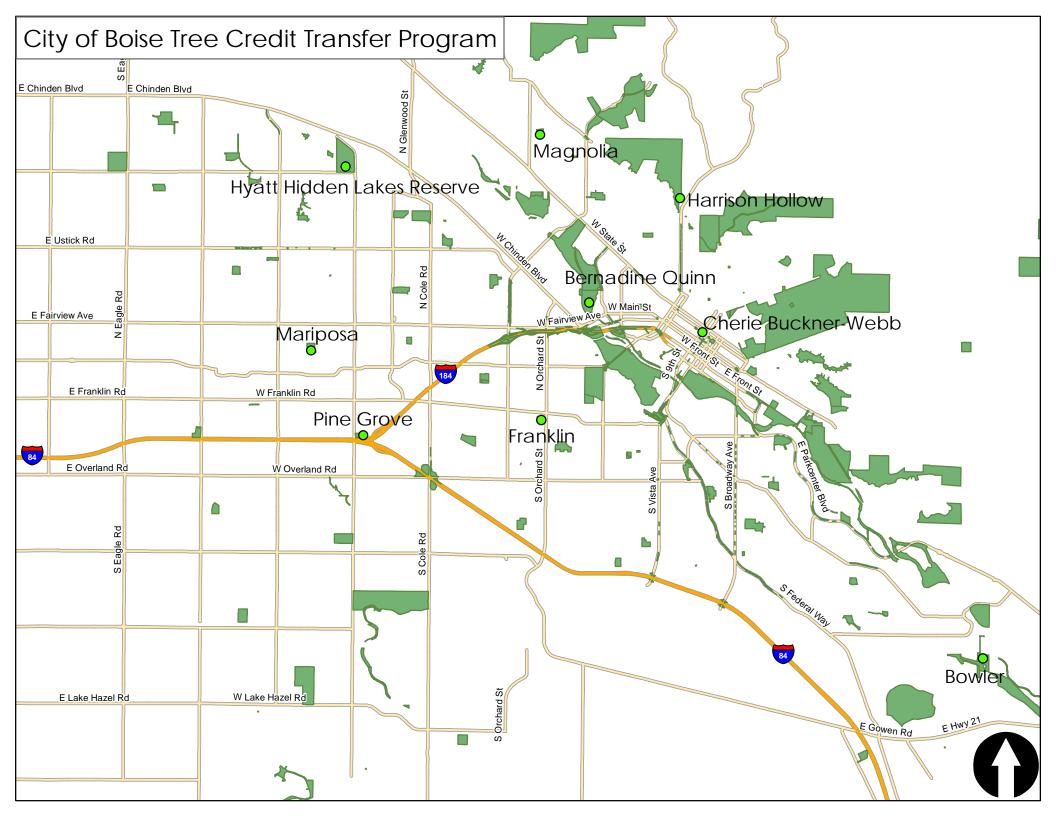












The Single Tree Initial Credit Tool for the Temperate Interior West Climate Zone

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The analyst can use this method to forecast the amount of CO2 (in metric tonnes, t) estimated to be stored by live project trees after 25 years for crediting. Credits based on the estimated CO2 storage can be issued at three points in time – 10% within one year after planting, 40% after year 3, and 30% after year 5, minus 5% that will go into a program-wide pool to insure against catastrophic loss of trees. At the end of the project, in year 25, Operators will receive credits for all CO2 stored, minus Credits already issued.

Project Operators will follow the Steps listed below to obtain an initial forecast. Basic tree planting data on all trees planted needs to be collected at the time of planting. When a user wishes to seek Credits at one of the first points in time after planting, they will use this tool to calculate credit amounts and to supply verification data to the Registry. Users will submit this spreadsheet to the Registry with other documentation so the Registry can verify the planting. Sampled data will be used to obtain Credits at subsequent points in time.

Steps

1) Plant project trees and collect the following data on each planted tree using the data collection table included in this workbook: species, site id#, tree id# and location (latitude and longitude). We use the term "site" instead of "tree" because some planted trees may no longer be present in the sites where they were planted.

2) Compile data on the numbers of trees planted by species to fill in the Planting List (Table 1).

3) Enter data on the anticipted mortality rate (% of planted sites without trees in 25 years) into row 6 on the Credits sheet.

4) Credits will be automatically calculated in Table 6, incorporating tree losses and the 5% buffer pool deduction.

5) Table 4 automatically infers the amount of CO_2 stored after 25 years from the sample to the population of live trees.

6) For planning purposes only, users can enter a low and high price of CO₂ (\$ per t) in Table 5. Table 6 incorporates error estimates of ±15% to calculate low and high amounts of CO₂ stored.

7) Table 7 automatically provides estimates of co-benefits for live trees after 25 years in Resource Units (e.g., kWh) per year and \$ per year.

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

Table 1. Planting List		Tree-Type	No. Sites
Scientific Name	Common Name	Abbreviation	Planted
Tilia americana	American basswood	BDL	
Tilia americana	American basswood	BDL	
Castanea dentata	American chestnut	BDL	
Ulmus americana	American elm American elm	BDL	
Ulmus americana	American eim American holly	BDL BES	-
llex opaca Carpinus caroliniana	American hornbeam	BDM	1
Sorbus americana	American mountain ash	BDS	
Cotinus obovatus	American smoketree	BDS	-
Platanus occidentalis	American sycamore	BDL	-
Phellodendron amurense	Amur corktree	BDM	
Maackia amurensis	Amur maackia	BDM	
Acer ginnala	Amur maple	BDS	
Prunus armeniaca	apricot	BDS	
Fraxinus species	ash	BDL	
Cedrus atlantica	Atlas cedar	CEL	
Pinus nigra	Austrian pine	CEL	32
Taxodium distichum	bald cypress	BDL	
Taxodium distichum	bald cypress	BDL	
Populus balsamifera	balsam poplar	BDL	
Rosa banksiae	banksian rose; Lady Bank's rose	BDS	
Tilia species	basswood	BDL	
Fagus species	beech	BDL	
Populus grandidentata	bigtooth aspen	BDL	
Acer grandidentatum	bigtooth maple	BDM	
Betula species	birch	BDM	
Fraxinus nigra	black ash	BDL	
Populus trichocarpa	black cottonwood	BDL	
Robinia pseudoacacia	black locust	BDL	
Robinia pseudoacacia	black locust	BDL	
Acer nigrum	black maple	BDL	
Quercus velutina	black oak	BDL	
Quercus velutina	black oak	BDL	
Populus nigra Picea mariana	black poplar	BDL CEL	3
	black spruce	BDL	3
luglans nigra Salix nigra	black walnut black willow	BDM	
Salix nigra	black willow	BDM	
/iburnum prunifolium	blackhaw	BDS	-
Quercus marilandica	blackjack oak	BDM	
Prunus blireiana	Blierana plum	BDS	
Fraxinus quadrangulata	blue ash	BDL	
Picea pungens	blue spruce	CEL	28
Acer negundo	boxelder	BDL	
Broadleaf Deciduous Large Other	broadleaf deciduous large	BDL	
Broadleaf Deciduous Medium Other	broadleaf deciduous medium	BDM	
Broadleaf Deciduous Small Other	broadleaf deciduous small	BDS	
Rhamnus species	buckthorn	BDS	
Quercus macrocarpa	bur oak	BDL	2
Quercus macrocarpa	bur oak	BDL	
Sabal palmetto	cabbage palmetto	PEM	
Quercus kelloggii	California black oak	BDL	
Washingtonia filifera	California palm	PES	
Pyrus calleryana	Callery pear	BDM BDL	2
Populus x canadensis	Carolina poplar	BDM	
Gleditsia caspica Fraxinus oxycarpa	Caspian locust Caucasian ash	BDM	-
Cedrus species	cedar	CEL	-
/itex agnus-castus	chaste tree	BDS	-
Prunus cerasifera	cherry plum	BDS	
Ulmus parvifolia	Chinese elm	BDJ	
Ulmus parvifolia	Chinese elm	BDL	
Picea asperata	Chinese spruce	CEL	
Quercus muehlenbergii	chinkapin oak	BDL	
Quercus muehlenbergii	chinkapin oak	BDL	
Prunus virginiana	common chokecherry	BDS	30
Ptelea trifoliata	common hoptree	BDS	
Pyrus communis	common pear	BDM	
Diospyros virginiana	common persimmon	BDM	
Conifer Evergreen Large Other	conifer evergreen large other	CEL	
Conifer Evergreen Medium Other	conifer evergreen medium other	CEM	
Conifer Evergreen Small Other	conifer evergreen small other	CES	
Salix matsudana	corkscrew willow	BDS	
Salix matsudana	corkscrew willow	BDS	
Populus species	cottonwood	BDL	
Pinus coulteri	Coulter pine	CEL	
Malus species	crabapple	BDS	54
Magnolia acuminata	cucumber tree	BDL	
Cupressus species	cypress	CEL	_
Cedrus deodara	deodar cedar	CEL	
Cornus species	dogwood	BDS	_
Pseudotsuga menziesii	Douglas fir	CEL	
Amelanchier arborea	downy serviceberry	BDM	3
Populus deltoides	eastern cottonwood	BDL	
Tsuga canadensis	eastern hemlock	CEL	-
	eastern hemlock	CEL	
	eastern red cedar	CEM	
uniperus virginiana		BDS	1
uniperus virginiana Cercis canadensis	eastern redbud		
uniperus virginiana Cercis canadensis Pinus strobus	eastern white pine	CEL	
uniperus virginiana Cercis canadensis Pinus strobus JImus species	eastern white pine elm	CEL BDL	2
uniperus virginiana Eercis canadensis Pinus strobus JImus species JImus species	eastern white pine elm elm	CEL BDL BDL	2
Tsuga canadensis Iuniperus virginiana Cercis canadensis Pinus strobus Ulmus species Ulmus species Picea engelmannii Ulmus procera	eastern white pine elm	CEL BDL	2

Table 2. Summary of Planting Sites

Tree-Type	Tree-Type Abbreviation	No. Sites Planted
Brdlf Decid Large (>50 ft)	BDL	184
Brdlf Decid Med (30-50 ft)	BDM	59
Brdlf Decid Small (<30 ft)	BDS	90
Brdlf Evgrn Large (>50 ft)	BEL	0
Brdlf Evgrn Med (30-50 ft)	BEM	0
Brdlf Evgrn Small (<30 ft)	BES	0
Conif Evgrn Large (>50 ft)	CEL	105
Conif Evgrn Med (30-50 ft)	CEM	16
Conif Evgrn Small (<30 ft)	CES	0
	Total Sites Planted	454

For black hills-densata spruce

For common chokecherry and common-canada red chokecherry

For crabapply, tschonoskii crabapple, and crabapple-spring snow

For serviceberry

For elm-prospector

Quercus robur Juglans regia Alnus glutinosa				
Alnus glutinosa	English oak English walnut	BDL BDL		
	European alder	BDL		
axinus excelsior	European ash	BDL		
agus sylvatica	European beech	BDL		
rpinus betulus	European hornbeam	BDM	6	
rix decidua rhus aucuparia	European larch	BDL BDM		
orbus aucuparia orbus aucuparia	European mountain ash European mountain ash	BDM		
etula pendula	European white birch	BDM		
bies species	fir	CEL		
orreya taxifolia	Florida torreya	CES		
axinus ornus	flowering ash	BDM		
ornus florida	flowering dogwood	BDS		
unus triloba quoiadendron giganteum	flowering plum giant sequoia	BDS CEL	10	For dawn redwood
ikgo biloba	ginkgo	BDL	10	For dawn redwood
burnum x watereri	golden chain tree	BDS		
elreuteria paniculata	goldenrain tree	BDM		
axinus pennsylvanica	green ash	BDL		
ataegus viridis	green hawthorn	BDM		
commia ulmoides	hardy rubber tree	BDL	5	For any state of the state of the state of the state of
itaegus species rylus species	hawthorn hazelnut	BDS BDS	5	For crusader-cruzam hawthorn and suksdorf's hawthorn
er campestre	hedge maple	BDS		
rya species	hickory	BDL		
nus wallichiana	Himalayan pine	CEM		
ditsia triacanthos	honeylocust	BDL	54	For honeylocust and shademaster honeylocust
sculus hippocastanum	horsechestnut	BDL		
us cordata	Italian alder Japanese fir	BDM CEL		
ies homolepis phora japonica	Japanese fir Japanese pagoda tree	BDM	٥	
phora japonica	Japanese pagoda tree	BDM	9	
rax japonicus	Japanese snowbell	BDS		
inga reticulata	Japanese tree lilac	BDM		
ringa reticulata	Japanese tree lilac	BDS		
kova serrata	Japanese zelkova	BDL		
iperus species	juniper	CEM		
cidiphyllum japonicum	katsura tree	BDM		
mnocladus dioicus	Kentucky coffeetree	BDL CEL	4	
us attenuata ercus glandulifera	knobcone pine Konara oak	BDM		
rus fauriei	Korean sun pear	BDS		
unus serrulata	Kwanzan cherry	BDS		
ercus laurifolia	laurel oak	BDL		
Cupressocyparis leylandii	Leyland cypress	CEL		
ringa species	lilac	BDS		
erostyrax corymbosa	little Epaulette tree	BDS		Free encodings Barden and a state of the state of the
lia cordata lia cordata	littleleaf linden littleleaf linden	BDM BDM	35	For american linden, american-redmond linden, littleleaf linder
ia cordata Jercus virginiana	littleleaf linden live oak	BDM		
iercus virginiana	live oak	BEL		
atanus acerifolia	London planetree	BDL	10	For london planetree and london-bloodgood planetree
agnolia species	magnolia	BDM	10	
axinus mandshurica	Manchurian ash	BDL		
ies holophylla	Manchurian fir	CEL		
er species	maple	BDL	21	For maple, crimson sunset maple, and pacific sunset maple
ashingtonia robusta bizia julibrissin	Mexican fan palm mimosa	PEM BDM		
talpa speciosa	northern catalpa	BDL		
tis occidentalis	northern hackberry	BDL	3	For hackberry
ercus rubra	northern red oak	BDL		· ····,
ercus rubra	northern red oak	BDL	21	
uja occidentalis				
	northern white cedar	CEL		
uja occidentalis	northern white cedar	CEL CEL		
uja occidentalis er platanoides	northern white cedar Norway maple	CEL CEL BDM	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides rea abies	northern white cedar Norway maple Norway spruce	CEL CEL BDM CEL	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides ea abies ercus species	northern white cedar Norway maple Norway spruce oak	CEL CEL BDM CEL BDL	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides ea abies iercus species isculus glabra	northern white cedar Norway maple Norway spruce Oak Ohio buckeye	CEL CEL BDM CEL BDL BDL BDL	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides ea abies ercus species sculus glabra taegus monogyna	northern white cedar Norway maple Norway spruce oak Ohio buckeye oneseed hawthorn	CEL CEL BDM CEL BDL BDL BDL BDS	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides ea abies ercus species sculus glabra ataegus monogyna iea orientalis	northern white cedar Norway maple Norway spruce Oak Ohio buckeye	CEL CEL BDM CEL BDL BDL BDL	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides ea abies ercus species sculus glabra tategus monogyna ea orientalis ercus aliena	northern white cedar Norway maple Norway spruce Oak Ohio buckeye oneseed hawthorn Oriental spruce	CEL CEL BDM CEL BDL BDL BDS CEL	3 3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platanoides era abies seculos glabra stadegus monogyna zea orientalis iercus aliena her species	northern white cedar Norway maple Norway spruce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak	CEL EL BDM CEL BDL BDL BDS CEL BDL	3	For Norway-crimson king maple and norwegian sunset maple
uja occidentalis er platnoides ea abies ercus species sculus glabra tategus mongyna ea orientalis ercus aliena her species tula papyrifera	northern white cedar Norway proue oak Ohio buckye oneseed hawthorn Oriental spruce Oriental white oak other species	CEL CEL BDM CEL BDL BDL BDS CEL BDL BDM	333	For Norway-crimson king maple and norwegian sunset maple
nuja occidentalis ere platanoides eca obies uercus species esculus glabra ataegus mongyna cea orientalis uercus aliena ther species etula papyrifera eser griseum alus pumila	northern white cedar Norway maple Norway spruce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental spruce Oriental white oak other species paper birch	CEL CEL BDM CEL BDL BDL CEL BDS CEL BDL BDL BDS CEL BDL BDL	3 3	For Norway-crimson king maple and norwegian sunset maple
huja occidentalis cer platanoides icea obies seculus globra atategus monogyna icea orientalis uercus aliena ther species etula papyrifera cer griseum Italus pumila runus persica	northern white cedar Norway proce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental spruce Oriental white oak other species paper birch paperbark maple paradise apple peach	CEL CEL BDM CEL BDL BDL BDS CEL BDL BDL BDL BDL BDL BDL BDL BDS BDS BDS BDS BDS BDS BDS BDM BDS	3 3 3	For Norway-crimson king maple and norwegian sunset maple
huja occidentalis cer platanoides (cea obies uercus species esculus glabra esculus glabra esculus glabra etalos monogyna tere or entalis uercus allena ther species etula papyrifera cer griseum talus pumila talus pumila urunus persica uercus palustris	northern white cedar Norway gruce Oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak other species paper birch paperbark maple pardise apple peach pin oak	CEL CEL BDM CEL BDL BDS BDL BDM BDL BDM BDL BDM BDL	33	For Norway-crimson king maple and norwegian sunset maple
huja occidentalis cer platanoides cer platanoides leca obies esculus glabra esculus glabra atategus monogyna cieco orientalis uercus aliena uercus aliena etula papyrifera cer griseum falus pumila runus persica uercus palustris	northern white cedar Norway proue oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak other species paper birch paper birch paper bark maple paradise apple peach pin oak pin oak	CEL CEL BDM CEL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDS BDS BDS BDS BDS BDS BDL BDS BDS BDL BDL BDL BDL BDL BDL BDL	333	
huja occidentalis cer platanoides icea abies seculus glabra atategus monogyna icea orientalis uercus aliena uercus aliena etula papyrifera cer griseum talus pumila runus persica uercus polustris uercus polustris inus species	northern white cedar Norway proce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental spruce Oriental white oak other species paper birch paperbark maple paradise apple peach pin oak pin oak	CEL CEL BDM CEL BDL BDS BDM BDS BDM BDS BDL BDS BDL BDS BDL BDS BDL BDS BDL	333	For Norway-crimson king maple and norwegian sunset maple
huja occidentalis cer platanoides (cer abies leca obies esculus glabra rataegus monogyno icea orientalis utercus alena tuther species etula papyrifera cer griseum falus pumila runus persica utercus polustris tuercus polustris inus seguis	northern white cedar Norway yraple Norway spruce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak other species paper birch paperbark maple pardise apple peach pin oak pin oak pine	CEL CEL BDM CEL BDL BDS BDM BDL BDL BDS BDM BDS BDL BDS BDL BDL BDL BDL CEL CEL	333	
huja occidentalis cer platanoides icea obies escalus glabra rataegus mongyna rataegus mongyna ricea orientalis tuercus aliena tuercus aliena etula papyrifera cer griseum falus pumila runus persica tuercus palustris tuercus palustris inus species inus edulis	northern white cedar Norway proue oak Ohio buckeye oneseed hawthorn Oriental white oak Others buckeye Oriental white oak other species paper birch paper birch paper birch paper bark maple paradise apple peach pin oak pin oak pine pinyon pine plum	CEL CEL BDM CEL BDL BDL BDL BDL BDS BDL BDL BDL BDL BDL BDL BDL BDM BDS BDM BDS BDM BDS BDL CEL CEL CEL CEL BDL CEL BDS BDL CEL CES BDS	3 3 3	
huja occidentalis cer platanoides (cea obies leca obies escalus glabra rataegus monogyna icea orientalis utercus aliena ther species etula papyrifera cer griseum dalus pumila runus persica utercus palustris inus species inus dulis muns species inus species	northern white cedar Norway maple Norway spruce aak Ohio buckeye oneseed hawthorn Oriental white oak other species paper birch paper birch paper birch paper birch paper birch pin cak pin cak pin cak pin cak pine pine pine pinyon pine pond pine	CEL CEL BDM CEL BDL BDL BDL BDL BDM BDM BDM BDM BDN BDL CEL BDS BDS BDS CEL	3 3 3	
huja occidentalis ccer platanoides ccer platanoides ccer abies Juercus species vesculus glabra Trataegus mongyna Trataegus mongyna Utercus plaina Uther species tetula papyrifera Accer grisseum Adus pumila Juercus palustris Duercus palustris Duercus palustris Duercus palustris Trunus species	northern white cedar Norway proue oak Ohio buckeye oneseed hawthorn Oriental white oak Others buckeye Oriental white oak other species paper birch paper birch paper birch paper bark maple paradise apple peach pin oak pin oak pine pinyon pine plum	CEL CEL BDM CEL BDL BDL BDL BDL BDS BDL BDL BDL BDL BDL BDL BDL BDM BDS BDM BDS BDM BDS BDL CEL CEL CEL CEL BDL CEL BDS BDL CEL CES BDS	333	
huja occidentalis ccer plotanoides icea obies luercus species esculus glabra rataegus mongyna ricea orientalis duercus aliena ticea orientalis duercus aliena tetula papyrifera ccer griseum Adus pumila trunus persica luercus palustris luercus palustris luercus palustris inus species inus sectina inus sectina inus sectina inus species inus sectina linus sponterosa luercus paluta	northern white cedar Norway yraple Norway spruce oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak other species opaper birch paperbark maple paradise apple peach pin oak pin oak pin oak pine pum pond pine ponderosa pine	CEL CEL BDM CEL BDL BDS CEL BDL BDS BDL CEL CES BDS CEL	3 3 3	
huja occidentalis cer platanoides cer platanoides cer abies cer abies seculus glabra rataegus monogyna icea orientalis tercus glena tuber species etula papyrifera cer griseum falus pumila tuercus plaustris tuercus polustris tuercus polustris inus species inus dulis mus species inus species tura species	northern white cedar Norway maple Norway spruce oak Ohio buckeye oneseed hawthorn Oriental white oak other species paper birch paper birch paper birch paper birch paradise apple peach pin oak pin oak pine pine pinyon pine plum pond pine ponderosa pine post oak	CEL CEL BDM CEL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDS BDM BDS BDM BDS BDL BDS BDL BDS BDL CEL CEL CEL CEL BDS BDS BDS CEL BDS CEL BDL	3 3 3	
nuja occidentalis ere platanoides ere platanoides ere ables uercus species autogus mongyna cea orientalis uercus allena ther species tula papyrifera cer griseum alaus pumila uruus persica uercus palustris uuercus palustris uus species nus species nus species nus specifica uns ponderosa uercus stellata lalus ioensis cer truncatum	northern white cedar Norway gruce Oak Ohio buckeye oak Ohio buckeye Oneseed hawthorn Oriental spruce Oriental white oak other species paper birch paperbark maple pardise apple peach pin oak pin oak pin oak pino ak pine pong pine pond pine ponderosa pine post oak praine crabapple	CEL CEL BDM CEL BDL CEL CEL CEL CEL CEL CEL BDS BDL BDL BDL BDS BDS BDS BDL BDS BDS BDS BDL	3 3 3	
huja occidentalis cer platanoides cer platanoides cea obies escalus glabra rataegus monogyna icea orientalis utercus aliena tuther species etula papyrifera cer griseum Aalus pumila tutercus palustris utercus palustris inus sedulis runus species inus species inus species inus species alus ionesis dues tellata Alus ionesis cer runcatum opulus tremuloides cer rubrum	northern white cedar Norway proje Okio buckeye oak Ohio buckeye oneseed hawthorn Oriental spruce Oriental white oak other species paper birch paperbark maple paradise apple peach pin oak pin oak pin oak pin oak pine ponderosa pine ponderosa pine ponderosa pine porter cabapple paratise cabapple peach pine pine pine pine ponderosa pine ponderosa pine porter cabapple purpleblow maple quaking aspen	CEL CEL BDM CEL BDL BDS CEL BDL BDS CEL BDL BDS BDM BDM BDN BDL BDS BDL BDS BDS BDS BDS BDS BDS BDS BDS CEL CEL CEL CEL BDS BDL BDL BDL		
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Tilia tomentosa	silver linden	BDM	
Acer saccharinum	silver maple	BDL	
Ulmus rubra	slippery elm	BDL	
Cotinus coggygria	smoke tree	BDS	
Crataegus laevigata	smooth hawthorn	BDS	
Catalpa bignonioides	southern catalpa	BDM	
Quercus falcata	southern red oak	BDL	
Picea species	spruce	CEL	1
Pinus glabra	spruce pine	CEL	
Rhus typhina	staghorn sumac	BDS	
Acer saccharum	sugar maple	BDL	3
Rhus species	sumac	BDS	
Rhus species	sumac	BDS	
Quercus michauxii	swamp chestnut oak	BDL	
Quercus bicolor	swamp white oak	BDL	5
Pinus mugo	sweet mountain pine	CES	
Liquidambar styraciflua	sweetgum	BDL	7
Pinus cembra	Swiss stone pine	CEL	
Acer pseudoplatanus	sycamore maple	BDL	
Sapium sebiferum	tallowtree	BDM	
Ailanthus altissima	tree of heaven	BDM	
Liriodendron tulipifera	tulip tree	BDL	24
Nyssa sylvatica	Tupelo tree	BDM	
Corylus colurna	Turkish hazelnut	BDL	
Sciadopitys verticillata	umbrella pine	CEM	
Shrub	unknown shrub	BDS	
Unknown	unknown tree	BDM	
Viburnum species	viburnum	BDS	
Crataegus phaenopyrum	Washington hawthorn	BDM	
Quercus nigra	water oak	BEL	
Thuja plicata	western red cedar	CEL	
Thuja plicata	western red cedar	CEL	
Pinus monticola	western white pine	CEL	
Fraxinus americana	white ash	BDL	5
Abies concolor	white fir	CEL	
Morus alba	white mulberry	BDM	
Quercus alba	white oak	BDL	
Populus alba	white poplar	BDL	
Picea glauca	white spruce	CEL	23
Salix species	willow	BDL	8
Salix species	willow	BDL	
Quercus phellos	willow oak	BDL	
Quercus phellos	willow oak	BDL	
Ulmus alata	winged elm	BDL	
Salix x pendulina Wenderoth	Wisconsin weeping willow	BDL	
Ulmus glabra	Wych elm	BDL	
Cladrastis lutea	yellowwood	BDM	
Yucca species	yucca	PES	
Pinus flexilis 'Vanderwolf's'	Vanderwolf Pine	CEM	3
		CC.III	

For white ash and white-autumn purple ash

For willow, weeping willow, and weeping or peking-pendula willow

For Limber-Vanderwolfs Pyramid Pine

Directions

Using the information you provide and background data, the tool calculates the amount of Credits that could be issued at years 1 (10%), 3 (40%), and 5 (30%) after planting. A mortality deductions (% loss) is applied to account for anticipated tree losses (Cell D6). A 5% buffer pool deduction is applied that will go into a program-wide pool to insure against catastrophic loss of trees. This tool is used to determine credits issued after planting (Intial Crediting). A different tool is used for credit issuance in Years 4 and 6. The tool in those years requires calculation of a sample and collection of data on tree status in the sample sites.

Mortality Deduction (%):	10%

Table 3. Credits are based on 10%, 40%, and 30% at Years 1, 3, and 5 after planting, respectively, of the projected CO₂ stored by live trees 25-years after planting. These values account for anticipated tree losses and the 5% buffer pool deduction.

						10%	40%	30%	20%
	No. Sites Planted	No. Live Trees	Mortality Deduction (%)	25-yr CO₂ stored (kg/tree)	Tot. 25-yr CO ₂ stored w/ losses and 5% deduction (t)	10% CO ₂ (t)	40% CO ₂ (t)	30% CO ₂ (t)	20% CO ₂ (t)
BDL	184	166	0.10	2,587.18	407.0	40.70	162.81	122.10	81.40
BDM	59	53	0.10	1,224.19	61.8	6.18	24.70	18.53	12.35
BDS	90	81	0.10	658.91	50.7	5.07	20.28	15.21	10.14
BEL	0	0	0.10	0.00	0.0	0.00	0.00	0.00	0.00
BEM	0	0	0.10	0.00	0.0	0.00	0.00	0.00	0.00
BES	0	0	0.10	0.00	0.0	0.00	0.00	0.00	0.00
CEL	105	95	0.10	472.49	42.4	4.24	16.97	12.73	8.48
CEM	16	14	0.10	421.75	5.8	0.58	2.31	1.73	1.15
CES	0	0	0.10	0.00	0.0	0.00	0.00	0.00	0.00
	454	409	0.10		567.7	56.77	227.06	170.30	113.53

In Table 4 the tool infers the amount of CO_2 stored after 25 years from the sample to the population of live trees. Values in column H account for anticipated tree losses and the 5% buffer pool deduction.

Tree-Type	No. Sites Planted	Mortality Deduction (%)	Total Live Trees After Mortality	25-yr CO₂ stored (kg/tree)	CO ₂ Tot No Deductions (t)	Grand Total CO ₂ w/ Deductions (t)
Brdlf Decid Large (>50 ft)	184	0.10	166	2,587.18	476.0	407.0
Brdlf Decid Med (30-50 ft)	59	0.10	53	1,224.19	72.2	61.8
Brdlf Decid Small (<30 ft)	90	0.10	81	658.91	59.3	50.7
Brdlf Evgrn Large (>50 ft)	0	0.10	0	0.00	0.0	0.0
Brdlf Evgrn Med (30-50 ft)	0	0.10	0	0.00	0.0	0.0
Brdlf Evgrn Small (<30 ft)	0	0.10	0	0.00	0.0	0.0
Conif Evgrn Large (>50 ft)	105	0.10	95	472.49	49.6	42.4
Conif Evgrn Med (30-50 ft)	16	0.10	14	421.75	6.7	5.8
Conif Evgrn Small (<30 ft)	0	0.10	0	0.00	0.0	0.0
	454		409		663.9	567.7

Table 4. Grand Total CO₂ Stored after 25 years (all live trees, includes tree losses and buffer pool deduction)

Directions

In Table 5, enter the low and high price of CO_2 in \$ per tonne (t).

This table incorporates error estimates of $\pm 15\%$ to the high and low estimates of the total CO₂ (t) stored by the live tree population after 25 years. For planning purposes only, it calculates dollar values.

Table 5. CO₂ value

	CO ₂ \$ per tonne
Low	\$19.00
High	\$34.00

Table 6. Summary of CO₂ stored after 25 years (all live trees, includes tree losses)

Tree-Type	Total CO ₂ (t) at 25 years	Low \$ value	High \$ value
Brdlf Decid	519.5	\$9,870.00	\$17,662.10
Brdlf Evgrn	0.0	\$0.00	\$0.00
Conif Evgrn	48.2	\$1,638.37	
Total	567.7	\$10,785.55	\$19,300.47
	CO ₂ (t)	Total \$	Total \$
Grand Total CO ₂			
(t) at 25 years:	567.7	\$10,785.55	\$19,300.47
High Est. with			
Error:	652.8	\$12,403.39	\$22,195.54
Low Est. with			
Error:	482.5	\$9,167.72	\$9,167.72
± 15% error = ± 10%	% formulaic ± 3% san	npling	
± 2% measurement	:		

Using the information you provide and background data, the tool provides estimates of co-benefits after 25 years in Resource Units per year and \$ per year.

	Resource Units	Resource		
Ecosystem Services	Totals	Unit/site	Total \$	\$/site
Rainfall Interception (m3/yr)	2,523.31	5.56	\$5,199.38	\$11.452
CO ₂ Avoided (t, \$20/t/yr)	2.43	0.01	\$48.57	\$0.107
Air Quality (t/yr)				
03	0.1172	0.0003	\$1,293.28	\$2.849
NOx	0.0126	0.0000	\$353.95	\$0.780
PM10	0.0500	0.0001	\$1,037.52	\$2.285
Net VOCs	-0.1198	-0.0003	-\$1,239.13	-\$2.729
Air Quality Total	0.0600	0.0001	\$1,445.61	\$3.18
Energy (kWh/yr & kBtu/yr)				
Cooling - Electricity	84,571.85	186.28	\$9,861.08	\$21.72
Heating - Natural Gas	390,109.87	859.27	\$4,854.67	\$10.69
Energy Total (\$/yr)			\$14,715.75	\$32.41
Grand Total (\$/yr)			\$21,409.31	\$47.16

Table 7. Co-Benefits PER YEAR after 25 years (all live trees, includes tree losses)

\$535,232.87

IECTIE Park Mariposa Park	Department_ID MARI-TR-P-83025	Installation_Dat 2018-10-16	te Status Pa Active		Street Tree_Cel Mariposa Park	Tree_Condition	Tree_Diameter T		ee_Site_Tyr	Comment Comment I Comment		Common_Name Ash, White	Genus FRAXINUS	Species AMERICANA	Pruning_Code	Last_Verified 2021-05-24 17:26	Verified_By Pruned_1 Cbranning	Verify_Date Latitude 43.61516831	Longitude -116.3049476
Magnolia Park	MAGN-TR-P-82272	2016-10-15	Active	N	MAGNOLIA	Good Good	3 3 2 2	Pari Pari	ark	ma - added to planting list		Ash White-Autumn Purnle	FRAXINUS	AMERICANA		2021-03-12 19:57	Cbranning	43.68164479	-116.2933244
Magnolia Park Magnolia Park	MAGN-TR-P-82326 MAGN-TR-P-82360	2016-10-15 2016-10-15	Active Active		MAGNOLIA MAGNOLIA	Good Good	4 2	Pari Pari		•	1	Ash, White-Autumn Purple Ash, White-Autumn Purple	FRAXINUS	AMERICANA AMERICANA		2021-03-15 17:01 2021-03-15 17:16	Cbranning Cbranning	43.68204483 43.68207197	-116.2926898 -116.2920738
Magnolia Park	MAGN-TR-P-82361	2016-10-15	Active	h	MAGNOLIA	Good Good	2 2	Par	ark		1	Ash, White-Autumn Purple	FRAXINUS	AMERICANA		2021-03-15 17:16	Cbranning	43.68194958	-116.2920325
Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	k BEQU-TR-P-82146 k BEQU-TR-P-82147	2020-07-01 2020-07-01	Active	B	Bernardine Quinn Riverside Bernardine Quinn Riverside	Good	4 4			10 ft clump 1	1	Birch Clump, Heritage River-Cully Birch Clump, Heritage River-Cully	BETULA BETULA	NIGRA		2020-11-05 2020-11-05	ssirotnak	43.62257971 43.62260194	-116.2329662 -116.2331139
Bernardine Quinn Riverside Park	k BEQU-TR-P-82148	2020-07-01	Active Active	E	Bernardine Quinn Riverside	Good Good	4 4			10 ft clump 1 10 ft clump 1	i i	Birch Clump, Heritage River-Cully	BETULA	NIGRA		2020-11-05	ssirotnak ssirotnak	43.62263572	-116.2332341
Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	k BEQU-TR-P-82149 k BEQU-TR-P-82150	2020-07-01 2020-07-01	Active		Bernardine Quinn Riverside Bernardine Quinn Riverside	Good Good	4 4			10 ft clump 1 10 ft clump 1	1	Birch Clump, Heritage River-Cully Birch Clump, Heritage River-Cully	BETULA BETULA	NIGRA		2020-11-05 2020-11-05	ssirotnak ssirotnak	43.62267949 43.62271899	-116.2333583 -116.2334767
Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	BEQU-TR-P-82151	2020-07-01	Active	B	Bernardine Quinn Riverside	Good	4 4			10 ft clump 1		Birch Clump. Heritage River-Cully	BETULA	NIGRA		2020-11-05	ssirotnak	43.62288683	-116.233653
Magnolia Park	MAGN-TR-P-82298	2016-10-15	Active	N	MAGNOLIA	Good Good	3 2		nknown	4	1	Birch Clump, Heritage River-Cully	BETULA	NIGRA		2021-03-12 19:34	Cbranning	43.68102426	-116.2921269
Magnolia Park Mariposa Park	MAGN-TR-P-82301 MARI-TR-P-83116	2016-10-15 2018-10-16	Active Active		MAGNOLIA Mariposa Park	Good Good	1 2 3	: Unk I Pari	nknown ark	ma - added to planting list 1	1	Birch Clump, Heritage River-Cully Birch Clump, Heritage River-Cully	BETULA BETULA	NIGRA		2021-03-12 19:34 2021-05-28 18:40	Cbranning Cbranning	43.68106994 43.61403286	-116.2920095 -116.3065886
Mariposa Park	MARI-TR-P-83117	2018-10-16	Active	N	Mariposa Park	Good	2 3	Par	ark i	ma - added to planting list 1	1	Birch Clump, Heritage River-Cully	BETULA	NIGRA		2021-05-28 18:40	Cbranning	43.61412958	-116.3066716
Mariposa Park Mariposa Park	MARI-TR-P-83136 MARI-TR-P-83138	2018-10-16 2018-10-16	Active		Mariposa Park Mariposa Park	Good Good	3 3	l Par Par		ma - added to planting list 1 ma - added to planting list 1	1	Birch Clump, Heritage River-Cully Birch Clump, Heritage River-Cully	BETULA BETULA	NIGRA		2021-05-28 19:12 2021-05-28 19:12	Cbranning Cbranning	43.61532046 43.61546777	-116.3065562 -116.3065603
Mariposa Park	MARI-TR-P-83139	2018-10-16	Active	N	Mariposa Park	Good	2 3	- Par		ma - added to planting list 1	1	Birch Clump, Heritage River-Cully	BETULA	NIGRA		2021-05-28 19:12	Cbranning	43.61544369	-116.3066481
Franklin Park	FRAN-TR-P-80137 FRAN-TR-P-80138	2018-06-18	Active		FRANKLIN PARK	Good Good	2 6					Chokecherry. Common	PRUNUS	VIRGINIANA		2018-10-03	mperkins	43.60151451	-116.245842
Franklin Park Franklin Park	FRAN-TR-P-80139	2018-06-18 2018-06-18	Active Active	F	FRANKLIN PARK FRANKLIN PARK	Good	2 6			2	i	Chokecherry, Common Chokecherry, Common	PRUNUS	VIRGINIANA		2018-10-03 2018-10-03	mperkins mperkins	43.60125322 43.60121003	-116.2458538 -116.2456627
Franklin Park	FRAN-TR-P-80146	2018-06-18	Active		FRANKLIN PARK	Good Good	2 6				(Chokecherry, Common	PRUNUS	VIRGINIANA		2018-10-03	mperkins	43.60117536	-116.2444629
Franklin Park Franklin Park	FRAN-TR-P-80147 FRAN-TR-P-80149	2018-06-18 2018-06-18	Active		FRANKLIN PARK FRANKLIN PARK	Good Good	2 6			1	1	Chokecherry, Common Chokecherry, Common	PRUNUS	VIRGINIANA		2018-10-03 2018-10-03	mperkins mperkins	43.60161132 43.60167399	-116.2443817 -116.2443632
Bowler	BOWL-TR-P-83608	2021-06-09	Active		Bowler Park	Good	2 7	Par		4	£	Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-10-13 16:58	Cbranning	43.55587775	-116.127848
Bowler Bowler	BOWL-TR-P-83619 BOWL-TR-P-83620	2021-06-09 2021-06-09	Active Active		Bowler Park Bowler Park	Good Good	2 7	Par Par		1		Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red		VIRGINIANA		2021-10-13 16:42 2021-10-13 16:42	Cbranning Cbranning	43.55619128 43.55619794	-116.1283323 -116.1282121
Bowler	BOWL-TR-P-83621	2021-06-09	Active	E	Bowler Park	Good Good	2 7	Par	ark		1	Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-10-13 16:42	Cbranning	43.55616714	-116.1281109
Magnolia Park Magnolia Park	MAGN-TR-P-82296 MAGN-TR-P-82297	2016-10-15 2016-10-15	Active Active	N N	Magnolia Magnolia	Good	2 2		nknown nknown	1	1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-03-12 19:34 2021-03-12 19:34	Cbranning Cbranning	43.68102797 43.68109002	-116.2923177 -116.2922569
Magnolia Park	MAGN-TR-P-82316	2016-10-15	Active	N	MAGNOLIA	Good Good	2 2	Par	ark		1	Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-03-15 16:41	Cbranning	43.68148618	-116.2921202
Magnolia Park Magnolia Park	MAGN-TR-P-82317 MAGN-TR-P-82318	2016-10-15 2016-10-15	Active		Magnolia Magnolia	Good Good	2 2	Par Par	/K		1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-03-15 16:41 2021-03-15 16:41	Cbranning Cbranning	43.6814771 43.6814573	-116.2922341 -116.2923536
Magnolia Park	MAGN-TR-P-82330	2016-10-15	Active		MAGNOLIA	Good	3 2	Pari			i i	Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-03-15 17:01	Cbranning	43.68228174	-116.2926316
Magnolia Park	MAGN-TR-P-82331	2016-10-15	Active		MAGNOLIA	Good	3 2	Par				Chokecherry, Common-Canada Red		VIRGINIANA		2021-03-15 17:01	Cbranning	43.68225361	-116.292706
Magnolia Park Mariposa Park	MAGN-TR-P-82332 MARI-TR-P-83057	2016-10-15 2018-10-16	Active Active		MAGNOLIA Mariposa Park	Good	3 2	Par Par		ma - added to planting list 1	1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-03-15 17:01 2021-05-25 17:34	Cbranning Cbranning	43.6823375 43.6155759	-116.2925741 -116.3058242
Mariposa Park	MARI-TR-P-83124	2018-10-16	Active	N	Mariposa Park	Good Fair	1 3	Par	ark i	ma - added to planting list 1	1	Chokecherry, Common-Canada Red		VIRGINIANA		2021-05-28 19:12	Cbranning	43.61511665	-116.3060418
Mariposa Park Mariposa Park	MARI-TR-P-83125 MARI-TR-P-83133	2018-10-16 2018-10-16	Active Active		Mariposa Park Mariposa Park	Fair Good	1 3	Pari Pari		ma - added to planting list 1 ma - added to planting list 1	1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red		VIRGINIANA		2021-05-28 19:12 2021-05-28 19:12	Cbranning Cbranning	43.61506535 43.61517507	-116.3061625 -116.3065552
Mariposa Park	MARI-TR-P-83137	2018-10-16	Active	N	Mariposa Park	Good	1 3	Par	ark i	ma - added to planting list 1	1	Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2021-05-28 19:12	Cbranning	43.61539007	-116.3065308
Pine Grove Park Pine Grove Park	PIGR-TR-P-82078 PIGR-TR-P-82079	2017-11-29 2017-11-29	Active Active		PINE GROVE PARK PINE GROVE PARK	Good Good	1 3		nknown nknown		1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2020-10-29 19:30 2020-10-29 19:30	Cbranning Cbranning	43.59840637 43.59835739	-116.2935858 -116.293631
Pine Grove Park Pine Grove Park	PIGR-TR-P-82080	2017-11-29	Active	P	PINE GROVE PARK	Fair	. 3		nknown nknown	1	1	Chokecherry, Common-Canada Red Chokecherry. Common-Canada Red		VIRGINIANA		2020-10-29 19:30 2020-10-29 19:30	Cbranning Cbranning	43.59828875	-116.293631 -116.2936989
Pine Grove Park	PIGR-TR-P-82092 PIGR-TR-P-82093	2017-11-29 2017-11-29	Active	P	PINE GROVE PARK PINE GROVE PARK	Fair Good	1 3	Unk	nknown		1	Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red	PRUNUS	VIRGINIANA		2020-10-29 19:30	Cbranning	43.59777658 43.59776125	-116.2934472 -116.2933207
Pine Grove Park Pine Grove Park	PIGR-TR-P-82093 PIGR-TR-P-82094	2017-11-29 2017-11-29	Active Active		PINE GROVE PARK PINE GROVE PARK	Good Good	2 3		nknown nknown	1		Chokecherry, Common-Canada Red Chokecherry, Common-Canada Red		VIRGINIANA		2020-10-29 19:30 2020-10-29 19:30	Cbranning Cbranning	43.59776519	-116.2933207
Pine Grove Park	PIGR-TR-P-82097	2017-11-29	Active	P	PINE GROVE PARK	Good	2 3	i Unk	nknown		1	Chokecherry. Common-Canada Red	PRUNUS	VIRGINIANA		2020-10-29 19:30	Cbranning	43.59782323	-116.2928561
Magnolia Park Magnolia Park	MAGN-TR-P-82246 MAGN-TR-P-82247	2016-10-15 2016-10-15	Active Active		Magnolia Magnolia	Good Good	2 2	Stri		1	-	Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-03-12 19:34 2021-03-12 19:34	Cbranning Cbranning	43.68167833 43.68160831	-116.2938815 -116.2938827
Magnolia Park	MAGN-TR-P-82248	2016-10-15	Active	N	MAGNOLIA	Fair	2 2	stri	ip	1	1	Crabapple	MALUS	SPECIES		2021-03-12 19:34	Cbranning	43.68153371	-116.2938851
Magnolia Park	MAGN-TR-P-82249 MAGN-TR-P-82250	2016-10-15 2016-10-15	Active	N	MAGNOLIA	Good	2 2	Stri				Crabapple	MALUS MALUS	SPECIES		2021-03-12 19:34 2021-03-12 19:34	Cbranning	43.6814662 43.68139845	-116.2938846 -116.293886
Magnolia Park Magnolia Park	MAGN-TR-P-82251	2016-10-15	Active Active		MAGNOLIA MAGNOLIA	Good Good	1 2 2	Stri	ip /ip	1		Crabapple Crabapple	MALUS	SPECIES SPECIES		2021-03-12 19:34 2021-03-12 19:34	Cbranning Cbranning	43.68139645 43.6813263	-116.293886 -116.2938873
Magnolia Park	MAGN-TR-P-82252	2016-10-15	Active	N	MAGNOLIA	Good Good	2 2	: Stri	rip	4	1	Crabapple	MALUS	SPECIES		2021-03-12 19:34	Cbranning	43.68124866	-116.2938876
Magnolia Park Magnolia Park	MAGN-TR-P-82321 MAGN-TR-P-82335	2016-10-15 2016-10-15	Active Active		Magnolia Magnolia	Good	1 2	Par Par		1	1	Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-03-15 16:41 2021-03-15 17:01	Cbranning Cbranning	43.68151103 43.6820681	-116.2926167 -116.292279
Magnolia Park	MAGN-TR-P-82336	2016-10-15	Active	N	MAGNOLIA	Good	1 2	Par	ark		1	Crabapple	MALUS	SPECIES		2021-03-15 17:01	Cbranning	43.68214574	-116.2922727
Magnolia Park Magnolia Park	MAGN-TR-P-82368 MAGN-TR-P-82369	2016-10-15 2016-10-15	Active		Magnolia Magnolia	Good Good	1 2	Par Par		1	1	Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-03-15 17:51 2021-03-15 17:51	Cbranning Cbranning	43.68193931 43.68199213	-116.2917831 -116.2918744
Magnolia Park	MAGN-TR-P-82370	2016-10-15	Active	N	MAGNOLIA	Good	1 2	Par	ark			Crabapple	MALUS	SPECIES		2021-03-15 17:51	Cbranning	43.68204988	-116.2918024
Magnolia Park	MAGN-TR-P-82371 MARI-TR-P-82999	2016-10-15 2018-10-16	Active		MAGNOLIA	Fair Good	1 2	Par		ma - added to planting list	1	Crabapple	MALUS MALUS	SPECIES		2021-03-15 17:51 2021-05-24 17:26	Cbranning	43.68211682 43.61400743	-116.2917309 -116.3044346
Mariposa Park Mariposa Park	MARI-TR-P-82999 MARI-TR-P-83000	2018-10-16	Active Active		Mariposa Park Mariposa Park	Good	2 3	Pari Pari	urk i	ma - added to planting list 1 ma - added to planting list 1		Crabapple Crabapple	MALUS	SPECIES SPECIES		2021-05-24 17:26	Cbranning Cbranning	43.61400743	-116.3046273
Mariposa Park	MARI-TR-P-83001	2018-10-16	Active		Mariposa Park	Good	2 3	Par	ark i	ma - added to planting list 1	1	Crabapple	MALUS	SPECIES		2021-05-24 17:26	Cbranning	43.61418705	-116.3047661
Mariposa Park Mariposa Park	MARI-TR-P-83002 MARI-TR-P-83012	2018-10-16 2018-10-16	Active		Mariposa Park Mariposa Park	Good Good	2 3	l Par Par		ma - added to planting list 1 ma - added to planting list 1	1	Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-05-24 17:26 2021-05-24 17:26	Cbranning Cbranning	43.61401623 43.61481697	-116.3048442 -116.3051729
Mariposa Park	MARI-TR-P-83013	2018-10-16	Active		Mariposa Park	Good	1 3	Par		ma - added to planting list	f	Crabapple	MALUS	SPECIES		2021-05-24 17:26	Cbranning	43.61489406	-116.3052426
Mariposa Park Mariposa Park	MARI-TR-P-83014 MARI-TR-P-83015	2018-10-16 2018-10-16	Active Active		Mariposa Park Mariposa Park	Good Good	1 3	Pari Pari		ma - added to planting list 1 ma - added to planting list 1		Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-05-24 17:26 2021-05-24 17:26	Cbranning Cbranning	43.61495593 43.61491442	-116.3053612 -116.3054896
Mariposa Park	MARI-TR-P-83016	2018-10-16	Active	N	Mariposa Park	Good Good	2 3	Par	ark i	ma - added to planting list 1	1	Crabapple	MALUS	SPECIES		2021-05-24 17:26	Cbranning	43.61498389	-116.3056109
Mariposa Park Mariposa Park	MARI-TR-P-83017 MARI-TR-P-83018	2018-10-16 2018-10-16	Active Active		Mariposa Park Mariposa Park	Good Good	1 3	l Pari Pari		ma - added to planting list 1 ma - added to planting list 1	1	Crabapple Crabapple	MALUS MALUS	SPECIES SPECIES		2021-05-24 17:26 2021-05-24 17:26	Cbranning Cbranning	43.61507006 43.61515166	-116.305669 -116.3056246
Mariposa Park	MARI-TR-P-81258	2020-01-23	Active	N	Mariposa Park	Good	3 3			ma - added to planting list 1	1	Crabapple, Tschonoskii	MALUS	TSCHONOSKII		2020-01-23	flambrecht	43.61570507	-116.3046675
Bowler Bowler	BOWL-TR-P-83603 BOWL-TR-P-83604	2021-06-09 2021-06-09	Active		Bowler Park Bowler Park	Good Good	1 7	Par Par			1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2021-10-13 16:47 2021-10-13 16:58	Cbranning Cbranning	43.55610956 43.55604694	-116.1276087 -116.1276572
Bowler	BOWL-TR-P-83606	2021-06-09	Active	B	Bowler Park	Good	1 7	' Par				Crabapple-Spring Snow	MALUS	SPECIES		2021-10-13 16:58	Cbranning	43.55613759	-116.1278449
Cherie Buckner Webb Park	CHBW-TR-P-83555	2021-04-01	Active		Cherie Buckner-Webb Park	Good Good	2 4	Par			1	Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61917666	-116.2063119
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83556 CHBW-TR-P-83557	2021-04-01 2021-04-01	Active Active		Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good	2 4 2 4	Pari Pari		1	1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61915196 43.61908058	-116.2062607 -116.2061122
Cherie Buckner Webb Park	CHBW-TR-P-83558	2021-04-01	Active		Cherie Buckner-Webb Park	Good Good	2 4	Par	ark	4	(Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61912815	-116.2062082
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83559 CHBW-TR-P-83560	2021-04-01 2021-04-01	Active		Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good Good	2 4	l Par Par		1	1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61910463 43.61903332	-116.2061571 -116.2060957
Cherie Buckner Webb Park	CHBW-TR-P-83561	2021-04-01	Active	c	Cherie Buckner-Webb Park	Fair	2 4	Par	ark		1	Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61903936	-116.206157
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83562 CHBW-TR-P-83563	2021-04-01 2021-04-01	Active Active		Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good Good	2 4	Par Par		1		Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61902685 43.61908498	-116.2060386 -116.2062672
Cherie Buckner Webb Park	CHBW-TR-P-83564	2021-04-01	Active	0	Cherie Buckner-Webb Park	Good Good	2 4	Par			i i	Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61909148	-116.2063249
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83565 CHBW-TR-P-83566	2021-04-01 2021-04-01	Active Active	0	Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good Good	2 4	Pari Pari			1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61909551 43.61907921	-116.2063871 -116.2062098
Cherie Buckner Webb Park	CHBW-TR-P-83567	2021-04-01	Active		Cherie Buckner-Webb Park	Good	2 4	Pari Pari			1	Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61913637	-116.2063074
Cherie Buckner Webb Park	CHBW-TR-P-83570	2021-04-01	Active		Cherie Buckner-Webb Park	Good	2 4	Par			1	Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.61887115	-116.2064427
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83571 CHBW-TR-P-83572	2021-04-01 2021-04-01	Active Active		Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good Good	2 4 2 4	Pari Pari		1	1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61886201 43.61885683	-116.2063639 -116.2062962
Cherie Buckner Webb Park	CHBW-TR-P-83573	2021-04-01	Active	c	Cherie Buckner-Webb Park	Good Good	2 4	Par	ark			Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.6188523	-116.2062389
Cherie Buckner Webb Park Cherie Buckner Webb Park	CHBW-TR-P-83574 CHBW-TR-P-83575	2021-04-01 2021-04-01	Active Active	0	Cherie Buckner-Webb Park Cherie Buckner-Webb Park	Good	2 4 2	Par Par	rik Irk	1	1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES		2021-10-12 16:44 2021-10-12 16:44	Cbranning Cbranning	43.61884088 43.61883298	-116.2061429 -116.2060849
Cherie Buckner Webb Park	CHBW-TR-P-83576	2021-04-01	Active	c	Cherie Buckner-Webb Park	Good Good	2 4	Pari			(Crabapple-Spring Snow	MALUS	SPECIES		2021-10-12 16:44	Cbranning	43.6188298	-116.2060289
Franklin Park Franklin Park	FRAN-TR-P-80155 FRAN-TR-P-80156	2018-06-18 2018-06-18	Active		FRANKLIN PARK FRANKLIN PARK	Good Good	2 6				1	Crabapple-Spring Snow Crabapple-Spring Snow	MALUS MALUS	SPECIES SPECIES		2018-10-03 2018-10-03	mperkins mperkins	43.60194093 43.60194687	-116.2449397 -116.2450443
Franklin Park	FRAN-TR-P-80158	2018-06-18	Active	F	FRANKLIN PARK	Good	2 6			1	1	Crabapple-Spring Snow	MALUS	SPECIES		2018-10-03	mperkins	43.60188972	-116.2452526
Franklin Park	FRAN-TR-P-80160	2018-06-18	Active		FRANKLIN PARK	Good	2 6					Crabapple-Spring Snow	MALUS	SPECIES		2018-10-03	mperkins	43.60188249	-116.2453454
Franklin Park Mariposa Park	FRAN-TR-P-80163 MARI-TR-P-81253	2018-06-18 2020-01-09	Active Active		FRANKLIN PARK Mariposa Park	Good Good	2 6 3 3			ma - added to planting list 1	1	Crabapple-Spring Snow Elm-Prospector	MALUS ULMUS	SPECIES WILSONIANA		2018-10-03 2020-01-09	mperkins flambrecht	43.60189305 43.61494246	-116.2454418 -116.3050957
Mariposa Park Hillside to Hollow Reserve	MARI-TR-P-81256 HIHO-TR-P-82972	2020-01-09 2021-01-11	Active	N	Mariposa Park Hillside to Hollow Reserve	Good	3 3			ma - added to planting list 1 Harrison Hollow Trailhead 1	1	Elm-Prospector Hackberry	ULMUS CELTIS	WILSONIANA		2020-01-09 2021-05-18 19-19	flambrecht	43.61495658 43.64479709	-116.3052275
Hillside to Hollow Reserve Hillside to Hollow Reserve	HIHO-TR-P-82972 HIHO-TR-P-82973	2021-01-11 2021-01-11	Active		Hillside to Hollow Reserve Hillside to Hollow Reserve	Good Good	2 2 2	Pari Pari		Harrison Hollow Trailhead 1 Harrison Hollow Trailhead 1	1	Hackberry	CELTIS	OCCIDENTALIS		2021-05-18 19:19 2021-05-18 19:19	Wlarimore Wlarimore	43.64470242	-116.2089541 -116.2089948
Magnolia Park	MAGN-TR-P-82289	2016-10-15	Active	N	MAGNOLIA	Fair	3 2		nknown	1	1	Hackberry	CELTIS	OCCIDENTALIS		2021-03-12 19:34	Cbranning	43.6811115	-116.2932449
Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park		2020-07-01 2020-07-01	Active Active		Bernardine Quinn Riverside Bernardine Quinn Riverside	Good Good	2 4			multi-trunk 1 multi-trunk 1	1	Hawthorn, Crusader-Cruzam Hawthorn, Crusader-Cruzam	CRATAEGUS CRATAEGUS	CRUS-GALLI CRUS-GALLI		2020-11-05 2020-11-05	ssirotnak ssirotnak	43.62249783 43.62253058	-116.232057 -116.2320828
Bernardine Quinn Riverside Park	k BEQU-TR-P-82118	2020-07-01	Active	E	Bernardine Quinn Riverside	Good	2 4			multi-trunk 1		Hawthorn, Crusader-Cruzam Hawthorn, Crusader-Cruzam	CRATAEGUS	CRUS-GALLI		2020-11-05	ssirotnak	43.62254653	-116.2320278
Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	BEQU-TR-P-82114	2020-07-01	Active	B	Bernardine Quinn Riverside	Good	2 4			multi-trunk: formerly C. doual: 1	1	Hawthorn. Suksdorf's	CRATAEGUS	SUKSDORFII		2020-11-05	ssirotnak	43.62219353	-116.2320565
Bernardine Quinn Riverside Park Hyatt Hidden Lakes Reserve	HYHI-TR-P-82480	2020-07-01 2018-07-18	Active Active		Bernardine Quinn Riverside Hyatt Hidden Lakes Reserve	Good Good	2 4 2 3	l Par	urk .	multi-trunk; formerly C. dougl: 1	1	Hawthorn, Suksdorf's Honeylocust	GLEDITSIA	TRIACANTHOS		2021-04-07 17:31	ssirotnak Cbranning	43.62225525 43.64869352	-116.2319862 -116.2978858
Hyatt Hidden Lakes Reserve	HYHI-TR-P-82481	2018-07-18	Active	H	Hyatt Hidden Lakes Reserve	Good	3 3	Par		4	1	Honeylocust	GLEDITSIA	TRIACANTHOS		2021-04-07 17:31	Cbranning	43.64860897	-116.297988
Hvatt Hidden Lakes Reserve Hvatt Hidden Lakes Reserve	HYHI-TR-P-82482 HYHI-TR-P-82491	2018-07-18 2018-07-18	Active	H	Hvatt Hidden Lakes Reserve Hvatt Hidden Lakes Reserve	Good Good	3 2 3	l Isla Isla	and and	•	1	Honevlocust Honevlocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2021-04-07 17:31 2021-04-07 17:31	Cbranning Cbranning	43.6486163 43.64862455	-116.2978442 -116.2968316
Hyatt Hidden Lakes Reserve	HYHI-TR-P-82492	2018-07-18	Active		Hyatt Hidden Lakes Reserve	Good	2 3	l Isla			£	Honeylocust	GLEDITSIA	TRIACANTHOS		2021-04-07 17:31	Cbranning	43.64861409	-116.2969431
Hyatt Hidden Lakes Reserve Magnolia Park	HYHI-TR-P-82493 MAGN-TR-P-82260	2018-07-18 2016-10-15	Active Active		Hyatt Hidden Lakes Reserve	Good	2 3	l Isla	and nknown	1	1	Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2021-04-07 17:31 2021-03-12 19:34	Cbranning Cbranning	43.64862419 43.6812008	-116.2972804 -116.2935816
Magnolia Park	MAGN-TR-P-82261	2016-10-15	Active	Ň	MAGNOLIA	Good Good	3 2	2 Unk	nknown	1		Honeylocust	GLEDITSIA	TRIACANTHOS		2021-03-12 19:34	Cbranning	43.68128745	-116.2935827
Magnolia Park Magnolia Park	MAGN-TR-P-82262 MAGN-TR-P-82263	2016-10-15 2016-10-15	Active Active	N	Magnolia Magnolia	Good Good	3 2	: Unk	nknown nknown	· · · · · · · · · · · · · · · · · · ·	1	Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2021-03-12 19:34 2021-03-12 19:34	Cbranning Cbranning	43.68138915 43.68149376	-116.2935883 -116.2935825
Magnolia Park Magnolia Park	MAGN=TR=P=82263 MAGN=TR=P=82264	2016-10-15	Active	N N	MAGNOLIA	Good	3 2		nknown		1	Honeylocust	GLEDITSIA	TRIACANTHOS		2021-03-12 19:34	Cbranning	43.68159111	-116.2935805
Mariposa Park	MARI-TR-P-83065	2018-10-16	Active	N	Mariposa Park	Good	2 3	Par	ark i	ma - added to planting list	£	Honeylocust	GLEDITSIA	TRIACANTHOS		2021-05-25 17:34	Cbranning	43.61537947	-116.3055365
Mariposa Park Mariposa Park	MARI-TR-P-83113 MARI-TR-P-83114	2018-10-16 2018-10-16	Active	h	Mariposa Park Mariposa Park	Fair Fair	2 3	l Par Par		ma - added to planting list 1 ma - added to planting list 1	1	Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2021-05-28 18:40 2021-05-28 18:40	Cbranning Cbranning	43.61410526 43.61416446	-116.3063787 -116.306515
Mariposa Park	MARI-TR-P-83115	2018-10-16	Active	N	Mariposa Park	Good	2 3	Par	ark i	ma - added to planting list 1 ma - added to planting list 1		Honevlocust	GLEDITSIA	TRIACANTHOS		2021-05-28 18:40	Cbranning	43.61423289	-116.3064763
Pine Grove Park	PIGR-TR-P-82061 PIGR-TR-P-82063	2017-11-29 2017-11-29	Active	P	PINE GROVE PARK PINE GROVE PARK	Good Good	2 3	i Isla i Isla	and	· · · · · · · · · · · · · · · · · · ·	1	Honeylocust	GLEDITSIA	TRIACANTHOS TRIACANTHOS		2020-10-29 19:03	Cbranning	43.59818103	-116.2912595
Pine Grove Park Pine Grove Park	PIGR-TR-P-82067	2017-11-29	Active Active	P	PINE GROVE PARK	Fair	3 3 2 3	i İslar İ İslar	and	1		Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS		2020-10-29 19:03 2020-10-29 19:03	Cbranning Cbranning	43.5982215 43.59827089	-116.2915588 -116.291922
Pine Grove Park	PIGR-TR-P-82068	2017-11-29	Active	P	PINE GROVE PARK	Fair Fair	2 3	l Isla	and			Honeylocust	GLEDITSIA	TRIACANTHOS		2020-10-29 19:03	Cbranning	43.59828785	-116.2920522
Pine Grove Park Pine Grove Park	PIGR-TR-P-82069 PIGR-TR-P-82071	2017-11-29 2017-11-29	Active		PINE GROVE PARK PINE GROVE PARK	Good Good	3 3 4 ?		nknown nknown	•	1	Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2020-10-29 19:12 2020-10-29 19:12	Cbranning Cbranning	43.59803667 43.59798153	-116.2915199 -116.2915973
	PIGR-TR-P-82072	2017-11-29	Active	P	PINE GROVE PARK	Good	- 3 4 3	Unk	nknown	1	1	Honeylocust	GLEDITSIA	TRIACANTHOS		2020-10-29 19:12	Cbranning	43.59809747	-116.2917059
Pine Grove Park	PIGR-TR-P-82073	2017-11-29	Active	P	PINE GROVE PARK	Good Good	2 3	l Unk	nknown	·		Honeylocust Honeylocust	GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS		2020-10-29 19:27 2020-10-29 19:27	Cbranning Cbranning	43.59845626 43.59847831	-116.2927362 -116.2928487
Pine Grove Park		2017 11 22																	
	PIGR-TR-P-82074 PIGR-TR-P-82075	2017-11-29 2017-11-29	Active	P	PINE GROVE PARK PINE GROVE PARK	Good	2 3	Unk	nknown nknown	1	1	Honeylocust	GLEDITSIA	TRIACANTHOS		2020-10-29 19:27	Cbranning	43.59845004	-116.2932166
Pine Grove Park Pine Grove Park	PIGR-TR-P-82074	2017-11-29 2017-11-29 2017-11-29 2017-11-29	Active Active Active Active	P	PINE GROVE PARK PINE GROVE PARK PINE GROVE PARK PINE GROVE PARK	Good Good Good	2 3 2 3 3 3	i Unk i Unk	nknown nknown nknown nknown	1	1	Honeylocust Honeylocust Honeylocust	GLEDITSIA GLEDITSIA GLEDITSIA	TRIACANTHOS TRIACANTHOS TRIACANTHOS TRIACANTHOS		2020-10-29 19:27 2020-10-29 19:27 2020-10-29 19:27 2020-10-29 19:51	Cbranning Cbranning Cbranning	43.59847631 43.59845004 43.59844535 43.59794672	-116.2932166 -116.2933309 -116.2926076

120 Bernardine Quinn Riverside Park	BEQU-TR-P-82122	2020-07-01	Active	Bernardine Quinn Riverside
120 Bernardine Quini Riverside Park 121 Bernardine Quinn Riverside Park	BEQU-TR-P-82123	2020-07-01	Active	Bernardine Quinn Riverside
122 Bernardine Quinn Riverside Park	BEQU-TR-P-82124	2020-07-01	Active	Bernardine Quinn Riverside
123 Bernardine Quinn Riverside Park	BEQU-TR-P-82125	2020-07-01	Active	Bernardine Quinn Riverside
124 Bernardine Quinn Riverside Park	BEQU-TR-P-82126	2020-07-01	Active	Bernardine Quinn Riverside
125 Bernardine Quinn Riverside Park	BEQU-TR-P-82127	2020-07-01	Active	Bernardine Quinn Riverside
126 Bernardine Quinn Riverside Park		2020-07-01	Active	Bernardine Quinn Riverside
127 Bernardine Quinn Riverside Park	BEQU-TR-P-82129	2020-07-01	Active	Bernardine Quinn Riverside
128 Bernardine Quinn Riverside Park	BEQU-TR-P-82130	2020-07-01	Active	Bernardine Quinn Riverside
129 Bernardine Quinn Riverside Park	BEQU-TR-P-82131	2020-07-01	Active	Bernardine Quinn Riverside
130 Bernardine Quinn Riverside Park		2020-07-01	Active	Bernardine Quinn Riverside
491 Bowler	BOWL-TR-P-83594	2021-06-09	Active	Bowler Park
492 Bowler	BOWL-TR-P-83595	2021-06-09	Active	Bowler Park
498 Bowler	BOWL-TR-P-83601	2021-06-09	Active	Bowler Park
504 Bowler	BOWL-TR-P-83607	2021-06-09	Active	Bowler Park
506 Bowler	BOWI -TR-P-83609	2021-06-09	Active	Bowler Park
510 Bowler	BOWL-TR-P-83613	2021-06-09	Active	Bowler Park
515 Bowler	BOWL-TR-P-83618	2021-06-09	Active	Bowler Park
515 Bowler 519 Bowler	BOWL-TR-P-83622	2021-06-09	Active	Bowler Park
523 Bowler	BOWL-TR-P-83626	2021-06-09	Active	Bowler Park
529 Bowler	BOWL-TR-P-83632	2021-06-09	Active	Bowler Park
308 Hillside to Hollow Reserve	HIHO-TR-P-82974	2021-01-11	Active	Hillside to Hollow Reserve
309 Hillside to Hollow Reserve	HIHO-TR-P-82975	2021-01-11	Active	Hillside to Hollow Reserve
310 Hillside to Hollow Reserve	HIHO-TR-P-82976	2021-01-11	Active	Hillside to Hollow Reserve
311 Hillside to Hollow Reserve	HIHO-TR-P-82977	2021-01-11	Active	Hillside to Hollow Reserve
312 Hillside to Hollow Reserve	HIHO-TR-P-82978	2021-01-11	Active	Hillside to Hollow Reserve
213 Magnolia Park	MAGN-TR-P-82309	2016-10-15	Active	MAGNOLIA
49 Mariposa Park	MARI-TR-P-81252	2020-01-08	Active	Mariposa Park
49 Manbosa Park 493 Bowler	BOWL-TR-P-83596	2020-01-08	Active	Bowler Park
493 Dowler 494 Bowler	BOWL-TR-P-83597	2021-06-09	Active	Bowler Park
495 Bowler	BOWL-TR-P-83598	2021-06-09	Active	Bowler Park
496 Bowler	BOWL-TR-P-83599	2021-06-09	Active	Bowler Park
497 Bowler	BOWL-TR-P-83600	2021-06-09	Active	Bowler Park
502 Bowler	BOWL-TR-P-83605	2021-06-09	Active	Bowler Park
502 Bowler 150 Bernardine Quinn Riverside Park	BEQU-TR-P-82152	2020-07-01	Active	Bernardine Quinn Riverside
151 Bernardine Quinn Riverside Park		2020-07-01	Active	Bernardine Quinn Riverside
54 Mariposa Park	MARI-TR-P-81257	2020-01-23	Active	Mariposa Park
394 Mariposa Park	MARI-TR-P-83060	2018-10-16	Active	Mariposa Park
511 Bowler	BOWL-TR-P-83614	2021-06-09	Active	Bowler Park
512 Bowler	BOWL-TR-P-83615	2021-06-09	Active	Bowler Park
513 Bowler	BOWL-TR-P-83616	2021-06-09	Active	Bowler Park
51 Mariposa Park	MARI-TR-P-81254	2020-01-08	Active	Mariposa Park
52 Mariposa Park	MARI-TR-P-81255	2020-01-08	Active	Mariposa Park
280 Hyatt Hidden Lakes Reserve	HYHI-TR-P-82483	2018-07-18	Active	Hyatt Hidden Lakes Reserve
281 Hvatt Hidden Lakes Reserve	HYHI-TR-P-82484	2018-07-18	Active	Hvatt Hidden Lakes Reserve
282 Hvatt Hidden Lakes Reserve	HYHI-TR-P-82485	2018-07-18	Active	Hyatt Hidden Lakes Reserve
283 Hyatt Hidden Lakes Reserve	HYHI-TR-P-82486	2018-07-18	Active	Hyatt Hidden Lakes Reserve
284 Hyatt Hidden Lakes Reserve	HYHI-TR-P-82487	2018-07-18	Active	Hyatt Hidden Lakes Reserve
285 Hvatt Hidden Lakes Reserve	HYHI-TR-P-82488	2018-07-18	Active	Hvatt Hidden Lakes Reserve
286 Hyatt Hidden Lakes Reserve	HYHI-TR-P-82489	2018-07-18	Active	Hyatt Hidden Lakes Reserve
287 Hyatt Hidden Lakes Reserve	HYHI-TR-P-82490	2018-07-18	Active	Hyatt Hidden Lakes Reserve
198 Magnolia Park	MAGN-TR-P-82292	2016-10-15	Active	MAGNOLIA
224 Magnolia Park	MAGN-TR-P-82320	2016-10-15	Active	MAGNOLIA
243 Magnolia Park	MAGN-TR-P-82339	2016-10-15	Active	MAGNOLIA
244 Magnolia Park	MAGN-TR-P-82340	2016-10-15	Active	MAGNOLIA
245 Magnolia Park	MAGN-TR-P-82341	2016-10-15	Active	MAGNOLIA
248 Magnolia Park	MAGN-TR-P-82344	2016-10-15	Active	MAGNOLIA
252 Magnolia Park	MAGN-TR-P-82348	2016-10-15	Active	MAGNOLIA
253 Magnolia Park	MAGN-TR-P-82340	2016-10-15	Active	MAGNOLIA
262 Magnolia Park	MAGN-TR-P-82358	2016-10-15	Active	MAGNOLIA
409 Mariposa Park	MARI-TR-P-83106	2018-10-16	Active	Mariposa Park
410 Mariposa Park	MARI-TR-P-83107	2018-10-16	Active	Mariposa Park
411 Mariposa Park	MARI-TR-P-83108	2018-10-16	Active	Mariposa Park
58 Pine Grove Park	PIGR-TR-P-82058	2017-11-29	Active	PINE GROVE PARK
59 Pine Grove Park	PIGR-TR-P-82059	2017-11-29	Active	PINE GROVE PARK
60 Pine Grove Park	PIGR-TR-P-82060	2017-11-29	Active	PINE GROVE PARK
62 Pine Grove Park	PIGR-TR-P-82062	2017-11-29	Active	PINE GROVE PARK
64 Pine Grove Park	PIGR-TR-P-82064	2017-11-29	Active	PINE GROVE PARK
65 Pine Grove Park	PIGR-TR-P-82065	2017-11-29	Active	PINE GROVE PARK
66 Pine Grove Park	PIGR-TR-P-82066	2017-11-29	Active	PINE GROVE PARK
313 Hillside to Hollow Reserve	HIHO-TR-P-82979	2021-01-11	Active	Hillside to Hollow Reserve
314 Hillside to Hollow Reserve	HIHO-TR-P-82980	2021-01-11	Active	Hillside to Hollow Reserve
315 Hillside to Hollow Reserve	HIHO-TR-P-82981	2021-01-11	Active	Hillside to Hollow Reserve
217 Magnolia Park	MAGN-TR-P-82313	2016-10-15	Active	MAGNOLIA
31 Franklin Park	FRAN-TR-P-80148	2018-06-18	Active	FRANKLIN PARK
34 Franklin Park	FRAN-TR-P-80150	2018-06-18	Active	FRANKLIN PARK
36 Franklin Park	FRAN-TR-P-80152	2018-06-18	Active	FRANKLIN PARK
37 Franklin Park	FRAN-TR-P-80153	2018-06-18	Active	FRANKLIN PARK
46 Franklin Park	FRAN-TR-P-80162	2018-06-18	Active	FRANKLIN PARK
48 Franklin Park	FRAN-TR-P-80164	2018-06-18	Active	FRANKLIN PARK
185 Magnolia Park	MAGN-TR-P-82279	2016-10-15	Active	MAGNOLIA
186 Magnolia Park	MAGN-TR-P-82280	2016-10-15	Active	MAGNOLIA
187 Magnolia Park	MAGN-TR-P-82281	2016-10-15	Active	MAGNOLIA
342 Mariposa Park	MARI-TR-P-83008	2018-10-16	Active	Mariposa Park
355 Mariposa Park	MARI-TR-P-83021	2018-10-16	Active	Mariposa Park
171 Magnolia Park	MAGN-TR-P-82265	2016-10-15	Active	MAGNOLIA
184 Magnolia Park	MAGN-TR-P-82278	2016-10-15	Active	MAGNOLIA
56 Pine Grove Park	PIGR-TR-P-82056	2017-11-29	Active	PINE GROVE PARK
57 Pine Grove Park	PIGR-TR-P-82057	2017-11-29	Active	PINE GROVE PARK
84 Pine Grove Park	PIGR-TR-P-82084	2017-11-29	Active	PINE GROVE PARK
85 Pine Grove Park	PIGR-TR-P-82085	2017-11-29	Active	PINE GROVE PARK
89 Pine Grove Park	PIGR-TR-P-82089	2017-11-29	Active	PINE GROVE PARK
90 Pine Grove Park	PIGR-TR-P-82090	2017-11-29	Active	PINE GROVE PARK
91 Pine Grove Park	PIGR-TR-P-82091	2017-11-29	Active	PINE GROVE PARK
95 Pine Grove Park	PIGR-TR-P-82095	2017-11-29	Active	PINE GROVE PARK
99 Pine Grove Park	PIGR-TR-P-82099	2017-11-29	Active	PINE GROVE PARK
101 Pine Grove Park	PIGR-TR-P-82101	2017-11-29	Active	PINE GROVE PARK
41 Franklin Park	FRAN-TR-P-80157	2018-06-18	Active	FRANKLIN PARK
160 Magnolia Park	MAGN-TR-P-82254	2016-10-15	Active	MAGNOLIA
338 Mariposa Park	MARI-TR-P-83004	2018-10-16	Active	Mariposa Park
339 Mariposa Park	MARI-TR-P-83005	2018-10-16	Active	Mariposa Park
70 Pine Grove Park	PIGR-TR-P-82070	2017-11-29	Active	PINE GROVE PARK
361 Mariposa Park	MARI-TR-P-83027	2018-10-16	Active	Mariposa Park
363 Mariposa Park	MARI-TR-P-83029	2018-10-16	Active	Mariposa Park
104 Bernardine Quinn Riverside Park	BEQU-TR-P-82106	2020-07-01	Active	Bernardine Quinn Riverside
105 Bernardine Quinn Riverside Park	BEQU-TR-P-82107	2020-07-01	Active	Bernardine Quinn Riverside
106 Bernardine Quinn Riverside Park	BEQU-TR-P-82108	2020-07-01	Active	Bernardine Quinn Riverside
107 Bernardine Quinn Riverside Park	BEQU-TR-P-82109	2020-07-01	Active	Bernardine Quinn Riverside
108 Bernardine Quinn Riverside Park	BEQU-TR-P-82110	2020-07-01	Active	Bernardine Quinn Riverside
514 Bowler	BOWL-TR-P-83617	2021-06-09	Active	Bowler Park
525 Bowler	BOWL-TR-P-83628	2021-06-09	Active	Bowler Park
	BOWL-TR-P-83631	2021-06-09	Active	Bowler Park
528 Bowler		2021-03-16	Active	Cherie Buckner-Webb Park
528 Bowler 465 Cherie Buckner Webb Park	CHBW-TR-P-83568		Active	Cherie Buckner-Webb Park
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park	CHBW-TR-P-83569	2021-03-16		
465 Cherie Buckner Webb Park		2021-03-16 2018-06-18	Active	FRANKLIN PARK
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294			MAGNOLIA
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 200 Maonolia Park 215 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311	2018-06-18 2016-10-15 2016-10-15		Magnolia Magnolia
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 200 Maonolia Park 215 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82314	2018-06-18 2016-10-15	Active Active Active	MAGNOLIA
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 200 Maonolia Park 215 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82314	2018-06-18 2016-10-15 2016-10-15	Active Active Active Active	MAGNOLIA MAGNOLIA MAGNOLIA
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 200 Magnolia Park 215 Magnolia Park 218 Magnolia Park 228 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82314 MAGN-TR-P-82324	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15	Active Active Active Active Active	MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA
465 Cherie Buckner Webb Park 468 Cherie Buckner Webb Park 27 Franklin Park 200 Magnolia Park 215 Magnolia Park 218 Magnolia Park 218 Magnolia Park 228 Magnolia Park 237 Magnolia Park 237 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82324 MAGN-TR-P-82333	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15	Active Active Active Active Active Active	Magnolia Magnolia Magnolia Magnolia Magnolia
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 20 Macnolis Park 215 Macnolis Park 218 Macnolis Park 28 Macnolis Park 237 Macnolis Park 231 Macnolis Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82324 MAGN-TR-P-82324 MAGN-TR-P-82333 MAGN-TR-P-82333	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15	Active Active Active Active Active Active Active	MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA
465 Cherie Buckner Webb Park 468 Cherie Buckner Webb Park 27 Franklin Park 200 Magnolia Park 215 Magnolia Park 218 Magnolia Park 218 Magnolia Park 228 Magnolia Park 237 Magnolia Park 237 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82324 MAGN-TR-P-82333	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15	Active Active Active Active Active Active	Magnolia Magnolia Magnolia Magnolia Magnolia
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 200 Macnolia Park 2115 Magnolia Park 2121 Magnolia Park 222 Magnolia Park 221 Magnolia Park 221 Magnolia Park 221 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-82014 MAGN-TR-P-82294 MAGN-TR-P-82314 MAGN-TR-P-82324 MAGN-TR-P-82333 MAGN-TR-P-82333 MAGN-TR-P-82337 MAGN-TR-P-82337	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15	Active Active Active Active Active Active Active Active Active Active	MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA
465 Cherie Buckner Webb Park 466 Cherie Buckner Webb Park 27 Franklin Park 2010 Magnolia Park 218 Magnolia Park 218 Magnolia Park 219 Magnolia Park 211 Magnolia Park 212 Magnolia Park 213 Magnolia Park 214 Magnolia Park 219 Magnolia Park 210 Magnolia Park	CHBW-TR-P-83569 FRAN-TR-P-80144 MAGN-TR-P-82294 MAGN-TR-P-82311 MAGN-TR-P-82314 MAGN-TR-P-82333 MAGN-TR-P-82337 MAGN-TR-P-82337	2018-06-18 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2016-10-15 2018-10-16	Active Active Active Active Active Active Active Active Active Active Active Active	MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA MAGNOLIA
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45 161	Franklin Park Magnolia Park	FRAN-TR-P-80161 MAGN-TR-P-82255	2018-06-18 2016-10-15	Active	FRANKLIN PARK MAGNOLIA	Good Good	6 5 2 Unknown	1	Pear, Callery or Flowering Pine, Austrian	PYRUS PINUS	CALLERYANA NIGRA	2018-1	10-03 03-12 19:34	mperkins Cbranning	4	43.60126744 43.68108057	-116.2454642 -116.2936367
162	Magnolia Park	MAGN-TR-P-82256	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	1	Pine. Austrian	PINUS	NIGRA	2021-0	03-12 19:34	Cbranning		43.68108343	-116.2935268
163 183	Magnolia Park Magnolia Park	MAGN-TR-P-82257 MAGN-TR-P-82277	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Good Good	5 2 Unknown 5 2 Unknown	1	Pine, Austrian Pine, Austrian	PINUS	NIGRA		03-12 19:34 03-12 19:57	Cbranning Cbranning		43.68112976 43.68182138	-116.2935768 -116.2928155
206	Magnolia Park	MAGN-TR-P-82300	2016-10-15	Active	MAGNOLIA	Good	5 2 Unknown	ł	Pine, Austrian	PINUS	NIGRA	2021-0	03-12 19:34	Cbranning	4	43.68101809	-116.2920295
209	Magnolia Park	MAGN-TR-P-82303	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	1	Pine, Austrian	PINUS	NIGRA		03-12 19:34	Cbranning		43.68106356	-116.291812
210 211	Magnolia Park Magnolia Park	MAGN-TR-P-82306 MAGN-TR-P-82307	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Fair Good	5 2 Park 5 2 Park		Pine, Austrian Pine, Austrian	PINUS	NIGRA	2021-0 2021-0	03-15 16:41 03-15 16:41	Cbranning Cbranning	4	43.68107339 43.68108572	-116.2917299 -116.2916037
226 231	Magnolia Park	MAGN-TR-P-82322 MAGN-TR-P-82327	2016-10-15	Active	MAGNOLIA MAGNOLIA	Fair Good	2 Park	1	Pine, Austrian Pine, Austrian	PINUS	NIGRA	2021-0	03-15 17:01 03-15 17:01	Cbranning	4	43.68174908 43.68213554	-116.2926265 -116.2925705
231 232	Magnolia Park Magnolia Park	MAGN-TR-P-82327 MAGN-TR-P-82328	2016-10-15	Active	MAGNOLIA	Good	i 2 Park i 2 Park		Pine, Austrian Pine, Austrian	PINUS	NIGRA		03-15 17:01 03-15 17:01	Cbranning Cbranning		43.68213554 43.68218045	-116.2925705 -116.2925059
233	Magnolia Park	MAGN-TR-P-82329	2016-10-15	Active	MAGNOLIA	Good	2 Park	1	Pine, Austrian	PINUS	NIGRA	2021-0	03-15 17:01	Cbranning	4	43.68222575	-116.2925805
254 255	Magnolia Park Magnolia Park	MAGN-TR-P-82350 MAGN-TR-P-82351	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Good Good	2 Park 2 Park	1	Pine, Austrian Pine, Austrian	PINUS	NIGRA	2021-0	03-15 17:16 03-15 17:16	Cbranning Cbranning		43.68262358 43.68268177	-116.2917758 -116.2916939
256	Magnolia Park	MAGN-TR-P-82352	2016-10-15	Active	MAGNOLIA	Good	2 Park	1	Pine. Austrian	PINUS	NIGRA	2021-0	03-15 17:16	Cbranning	4	43.68260927	-116.2916709
319 320	Mariposa Park	MARI-TR-P-82985 MARI-TR-P-82986	2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian Pine, Austrian	PINUS	NIGRA	2021-0	05-24 17:08 05-24 17:08	Cbranning	4	43.61505447 43.6149813	-116.3047811 -116.3047994
320	Mariposa Park Mariposa Park	MARI-TR-P-82986 MARI-TR-P-82988	2018-10-16	Active	Manposa Park Mariposa Park	Good	3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian Pine, Austrian	PINUS	NIGRA		05-24 17:08 05-24 17:08	Cbranning Cbranning		43.6149813 43.6148444	-116.304/994 -116.3047778
323	Mariposa Park	MARI-TR-P-82989	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list 1	Pine. Austrian	PINUS	NIGRA	2021-0	05-24 17:08	Cbranning	4	43.61477077	-116.3047587
324 329	Mariposa Park Mariposa Park	MARI-TR-P-82990 MARI-TR-P-82995	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian Pine, Austrian	PINUS	NIGRA	2021-0 2021-0	05-24 17:08 05-24 17:08	Cbranning Cbranning		43.61469705 43.61427486	-116.3047544 -116.3046797
330	Mariposa Park	MARI-TR-P-82996	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list 1	Pine, Austrian	PINUS	NIGRA	2021-0	05-24 17:08	Cbranning	4	43.61428707	-116.3045743
331 343	Mariposa Park Mariposa Park	MARI-TR-P-82997 MARI-TR-P-83009	2018-10-16	Active	Mariposa Park Mariposa Park	Fair Good	1 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine. Austrian Pine. Austrian	PINUS	NIGRA	2021-0	05-24 17:08 05-24 17:26	Cbranning	4	43.61427865 43.61474409	-116.3044496 -116.3049118
344	Mariposa Park	MARI-TR-P-83010	2018-10-16	Active	Mariposa Park	Good	2 3 Park	ma - added to planting list	Pine, Austrian	PINUS	NIGRA	2021-0	05-24 17:26	Cbranning	4	43.61484459	-116.3049676
353 354	Mariposa Park Mariposa Park	MARI-TR-P-83019 MARI-TR-P-83020	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian Pine, Austrian	PINUS	NIGRA		05-24 17:26 05-24 17:26	Cbranning Cbranning		43.61528264 43.61526942	-116.3056989 -116.3055756
395	Mariposa Park Mariposa Park	MARI-TR-P-83061	2018-10-16	Active	Mariposa Park	Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian	PINUS	NIGRA		05-25 17:34	Cbranning		43.61563784	-116.3053723
396	Mariposa Park Mariposa Park	MARI-TR-P-83062 MARI-TR-P-83063	2018-10-16 2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Fair	3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Austrian Pine, Austrian	PINUS	NIGRA		05-25 17:34 05-25 17:34	Cbranning Cbranning		43.61564091 43.61562015	-116.3054885 -116.3056237
405	Mariposa Park	MARI-TR-P-83102	2018-10-16	Active	Mariposa Park	Fair	2 3 Park	ma - added to planting list 1	Pine, Austrian	PINUS	NIGRA	2021-0	05-28 18:40	Cbranning	4	43.61416109	-116.3052842
406	Mariposa Park Magnolia Park	MARI-TR-P-83103 MAGN-TR-P-82283	2018-10-16 2016-10-15	Active Active	Mariposa Park MAGNOLIA	Good	2 3 Park 3 2 Unknown	ma - added to planting list	Pine, Austrian Pine, Bosnian	PINUS	NIGRA	2021-0	05-28 18:40 03-12 19:34	Cbranning Cbranning	4	43.61414539 43.68119273	-116.3054163 -116.2929219
404	Mariposa Park	MARI-TR-P-83101	2018-10-16	Active	Mariposa Park	Good Good	3 Park	ma - added to planting list	Pine, Limber	PINUS	FI FXILIS	2021-0	05-28 18:40	Cbranning	4	43.61405665	-116.305335
415 425	Mariposa Park Mariposa Park	MARI-TR-P-83112 MARI-TR-P-83122	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Limber Pine, Limber	PINUS	FLEXILIS FLEXILIS	2021-0	05-28 18:40 05-28 19:12	Cbranning Cbranning		43.6140973 43.61526278	-116.30613 -116.3059839
425	Mariposa Park Mariposa Park	MARI-TR-P-83122 MARI-TR-P-83123	2018-10-16	Active	Mariposa Park Mariposa Park	Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Limber	PINUS	FLEXILIS		05-28 19:12	Cbranning		43.61520276	-116.305924
28	Franklin Park Franklin Park	FRAN-TR-P-80145 FRAN-TR-P-80151	2018-06-18 2018-06-18	Active Active	FRANKLIN PARK FRANKLIN PARK	Good	6	1	Pine, Limber-Vanderwolfs Pyramid Pine, Limber-Vanderwolfs Pyramid	PINUS PINUS	FLEXILIS FLEXILIS	2018- 2018-		mperkins		43.60115607 43.60176818	-116.2445239 -116.2444432
43	Franklin Park	FRAN-TR-P-80151 FRAN-TR-P-80159	2018-06-18	Active	FRANKLIN PARK	Good Good	5 6		Pine, Limber-Vanderwolfs Pyramid Pine, Limber-Vanderwolfs Pyramid	PINUS	FLEXILIS	2018-		mperkins mperkins		43.60128688	-116.2444432
507 508	Bowler	BOWL-TR-P-83610 BOWL-TR-P-83611	2021-06-09 2021-06-09	Active	Bowler Park	Good	7 Park	1	Pine, Scotch or Scots Pine, Scotch or Scots	PINUS	SYLVESTRIS SYLVESTRIS	2021-	10-13 16:58	Cbranning	4	43.55564201 43.55556029	-116.127344 -116.1273933
509	Bowler Bowler	BOWL-TR-P-83612	2021-06-09	Active Active	Bowler Park Bowler Park	Good Good	2 7 Park 2 7 Park	1	Pine, Scotch or Scots	PINUS	SYLVESTRIS		10-13 16:58	Cbranning Cbranning		43.55551951	-116.1273933
188	Magnolia Park	MAGN-TR-P-82282	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	1	Pine. Scotch or Scots	PINUS	SYLVESTRIS	2021-0	03-12 19:34	Cbranning	4	43.68125797	-116.2929065
190 192	Magnolia Park Magnolia Park	MAGN-TR-P-82284 MAGN-TR-P-82286	2016-10-15 2016-10-15	Active Active	MAGNOLIA MAGNOLIA	Good Good	2 Unknown 2 Unknown	1	Pine, Scotch or Scots Pine, Scotch or Scots	PINUS PINUS	SYLVESTRIS SYLVESTRIS	2021-0 2021-0	03-12 19:34 03-12 19:34	Cbranning Cbranning		43.681184 43.6810274	-116.2927802 -116.2929391
205	Magnolia Park	MAGN-TR-P-82299	2016-10-15	Active	MAGNOLIA	Good	8 2 Unknown	1	Pine, Scotch or Scots	PINUS	SYLVESTRIS	2021-0	03-12 19:34	Cbranning	4	43.68108155	-116.2921032
384 385	Mariposa Park Mariposa Park	MARI-TR-P-83050 MARI-TR-P-83051	2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	8 3 Park 8 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine. Scotch or Scots Pine. Scotch or Scots	PINUS	SYLVESTRIS SYLVESTRIS	2021-0	05-25 17:34 05-25 17:34	Cbranning Cbranning	4	43.61565701 43.61566413	-116.3063935 -116.3062862
407	Mariposa Park	MARI-TR-P-83104	2018-10-16	Active	Mariposa Park	Poor	2 3 Park	ma - added to planting list 1	Pine, Scotch or Scots	PINUS	SYLVESTRIS	2021-0	05-28 18:40	Cbranning	4	43.61405896	-116.3054919
437 438	Mariposa Park Mariposa Park	MARI-TR-P-83134 MARI-TR-P-83135	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Pine, Scotch or Scots Pine, Scotch or Scots	PINUS	SYLVESTRIS SYLVESTRIS		05-28 19:12 05-28 19:12	Cbranning Cbranning		43.61516239 43.61534575	-116.3066776 -116.3066755
443	Mariposa Park	MARI-TR-P-83140	2018-10-16	Active	Mariposa Park	Good	2 3 Park	ma - added to planting list 1	Pine, Scotch or Scots	PINUS	SYLVESTRIS	2021-0	05-28 19:12	Cbranning	4	43.61552662	-116.3066812
177 421	Magnolia Park Mariposa Park	MAGN-TR-P-82271 MARI-TR-P-83118	2016-10-15 2018-10-16	Active	MAGNOLIA Mariposa Park	Good Good	8 2 Unknown 8 3 Park	ma - added to planting list	Planetree, London Planetree, London	PLATANUS PLATANUS	X ACERIFOLIA X ACERIFOLIA		03-12 19:57 05-28 18:40	Cbranning Cbranning		43.68176543 43.61427796	-116.2933018 -116.3065797
447	Mariposa Park Mariposa Park	MARI-TR-P-83144	2018-10-16	Active	Mariposa Park	Good	J 3 Park	ma - added to planting list 1	Planetree, London	PLATANUS	X ACERIFOLIA	2021-0	05-28 19:36	Cbranning	4	43.61452704	-116.3064067
77	Pine Grove Park Pine Grove Park	PIGR-TR-P-82077 PIGR-TR-P-82102	2017-11-29	Active Active	PINE GROVE PARK PINE GROVE PARK	Good	I 3 Unknown B 3 Unknown	1	Planetree, London Planetree, London	PLATANUS PLATANUS	X ACERIFOLIA X ACERIFOLIA	2020-1	10-29 19:30 10-29 19:54	Cbranning Cbranning	4	43.59843799 43.59817102	-116.2934773 -116.2922519
103	Pine Grove Park Pine Grove Park	PIGR-TR-P-82103	2017-11-29	Active	PINE GROVE PARK	Good Good	3 Unknown 3 Unknown	1	Planetree, London	PLATANUS	X ACERIFOLIA	2020-1	10-29 19:54	Cbranning	4	43.59818409	-116.2920959
118	Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	BEQU-TR-P-82120	2020-07-01	Active	Bernardine Quinn Riverside Bernardine Quinn Riverside	Good	4	1	Planetree, London-Bloodgood	PLATANUS	X ACERIFOLIA	2020-1		ssirotnak		43.62189495	-116.2323904
119 208	Bernardine Quinn Riverside Park Magnolia Park	BEQU-TR-P-82121 MAGN-TR-P-82302	2020-07-01 2016-10-15	Active	MAGNOLIA	Good Good	2 4 8 2 Park		Planetree. London-Bloodgood Planetree, London-Bloodgood	PLATANUS PLATANUS	X ACERIFOLIA X ACERIFOLIA	2020-1 2021-0	11+05 03-12 19:34	ssirotnak Cbranning		43.62200813 43.68106265	-116.2323166 -116.2919062
238	Magnolia Park	MAGN-TR-P-82334	2016-10-15	Active	MAGNOLIA	Good	8 2 Park	1	Planetree, London-Bloodgood	PLATANUS	X ACERIFOLIA	2021-0	03-15 17:01	Cbranning	4	43.68195346	-116.2923089
267 181	Magnolia Park Magnolia Park	MAGN-TR-P-82363 MAGN-TR-P-82275	2016-10-15	Active	MAGNOLIA MAGNOLIA	Good	2 Park 2 Unknown		Redbud, Eastern Redwood, Dawn	CERCIS METASFOLIOIA	CANADENSIS GLYPTOSTROBOIDES	2021-0 2021-0	03-15 17:51	Cbranning Cbranning		43.68181879 43.68179413	-116.2918958 -116.2931961
242	Magnolia Park	MAGN-TR-P-82338	2016-10-15	Active	MAGNOLIA	Good Good	2 Park	1	Redwood, Dawn	METASEQUOIA	GLYPTOSTROBOIDES	2021-0	03-15 17:01	Cbranning	4	43.68242471	-116.2926772
276 340	Magnolia Park Mariposa Park	MAGN-TR-P-82372 MARI-TR-P-83006	2016-10-15 2018-10-16	Active Active	MAGNOLIA Mariposa Park	Good Good	2 Park 2 3 Park	ma - added to planting list	Redwood, Dawn Redwood, Dawn	METASEQUOIA METASEQUOIA	GLYPTOSTROBOIDES GLYPTOSTROBOIDES		03-15 17:51 05-24 17:26	Cbranning Cbranning		43.68196758 43.61428651	-116.2916622 -116.3049453
356	Mariposa Park	MARI-TR-P-83022	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list 1	Redwood. Dawn	METASEQUOIA	GLYPTOSTROBOIDES	2021-0	05-24 17:26	Cbranning	4	43.61528832	-116.3053544
357	Mariposa Park Mariposa Park	MARI-TR-P-83023 MARI-TR-P-83024	2018-10-16 2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Redwood, Dawn Redwood, Dawn	METASEQUOIA METASEQUOIA	GLYPTOSTROBOIDES GLYPTOSTROBOIDES	2021-0 2021-0	05-24 17:26 05-24 17:26	Cbranning Cbranning		43.6152591 43.61529468	-116.3052579 -116.3051659
422	Mariposa Park	MARI-TR-P-83119	2018-10-16	Active	Mariposa Park	Good	2 3 Park	ma - added to planting list 1	Redwood, Dawn	METASEQUOIA	GLYPTOSTROBOIDES	2021-0	05-28 18:40	Cbranning	4	43.61437989	-116.3066309
446 448	Mariposa Park Mariposa Park	MARI-TR-P-83143 MARI-TR-P-83145	2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Redwood. Dawn Redwood. Dawn	METASEQUOIA METASEQUOIA	GLYPTOSTROBOIDES GLYPTOSTROBOIDES	2021-0	05-28 19:36 05-28 19:36	Cbranning Cbranning	4	43.614412 43.61463892	-116.306421 -116.306404
109	Bernardine Quinn Riverside Park	BEQU-TR-P-82111	2020-07-01	Active	Bernardine Quinn Riverside	Good	4	Landscape plan listed A. alnif 1	Serviceberry	AMELANCHIER	SPECIES	2020-1	11-05	ssirotnak	4	43.62200631	-116.2320707
110 111	Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	BEQU-TR-P-82112 BEQU-TR-P-82113	2020-07-01 2020-07-01	Active	Bernardine Quinn Riverside Bernardine Quinn Riverside	Good Good	4	Landscape plan listed A. alnif 1 Landscape plan listed A. alnif 1	Serviceberry Serviceberry	AMELANCHIER	SPECIES SPECIES	2020		ssirotnak ssirotnak		43.62204484 43.62202363	-116.2320809 -116.2320296
197	Magnolia Park	MAGN-TR-P-82291	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	1	Spruce	PICEA	SPECIES	2021-0	03-12 19:34	Cbranning	4	43.68124738	-116.2932769
141 142	Bernardine Quinn Riverside Park Bernardine Quinn Riverside Park	BEQU-TR-P-82143 BEQU-TR-P-82144	2020-07-01 2020-07-01	Active Active	Bernardine Quinn Riverside Bernardine Quinn Riverside	Good Good	4	8ft 1	Spruce, Black Hills-Densata Spruce, Black Hills-Densata	PICEA	GLAUCA GLAUCA	2020-1		ssirotnak ssirotnak		43.62239982 43.62243106	-116.2329372 -116.2329827
143	Bernardine Quinn Riverside Park	BEQU-TR-P-82145	2020-07-01	Active	Bernardine Quinn Riverside	Good	4	8 ft 1	Spruce, Black Hills-Densata	PICEA	GLAUCA	2020-1	11-05	ssirotnak	4	43.62244271	-116.2329297
520 524	Bowler Bowler	BOWL-TR-P-83623 BOWL-TR-P-83627	2021-06-09 2021-06-09	Active Active	Bowler Park Bowler Park	Good Good	3 7 Park 3 7 Park	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS	2021-1	10-13 16:42 10-13 16:42	Cbranning Cbranning	4	43.55556176 43.55534919	-116.1284747 -116.1281267
526	Bowler	BOWL-TR-P-83629	2021-06-09	Active	Bowler Park	Good	8 7 Park	i	Spruce, Colorado or Blue	PICEA	PUNGENS	2021-	10-13 16:42	Cbranning	4	43.55516089	-116.1276653
21 33	Franklin Park Franklin Park	FRAN-TR-P-80220 FRAN-TR-P-80221	2018-06-18 2018-06-18	Active	FRANKLIN PARK FRANKLIN PARK	Fair Fair	6	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS PUNGENS	2018- 2018-		mperkins mperkins		43.60120192 43.60163796	-116.2457686 -116.2444895
159	Magnolia Park	MAGN-TR-P-82253	2016-10-15	Active	MAGNOLIA	Good	8 2 Unknown	ł	Spruce, Colorado or Blue	PICEA	PUNGENS	2021-0	03-12 19:34	Cbranning	4	43.68109095	-116.293831
174 175	Magnolia Park Magnolia Park	MAGN-TR-P-82268 MAGN-TR-P-82269	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Good Good	2 Unknown 2 Unknown	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS PUNGENS	2021-0	03-12 19:57 03-12 19:57	Cbranning Cbranning		43.68180871 43.68173301	-116.2935431 -116.2934942
182	Magnolia Park	MAGN-TR-P-82276	2016-10-15	Active	MAGNOLIA	Good	3 2 Unknown	1	Soruce. Colorado or Blue	PICEA	PUNGENS	2021-0	03-12 19:57	Cbranning	4	43.68184317	-116.2929577
227 266	Magnolia Park Magnolia Park	MAGN+TR-P-82323 MAGN+TR-P-82362	2016-10-15	Active Active	MAGNOLIA MAGNOLIA	Fair Fair	2 2 Park 2 2 Park	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS	2021-0	03-15 17:01 03-15 17:51	Cbranning Cbranning	4	43.68193416 43.68171075	-116.2926601 -116.2919794
318	Mariposa Park	MARI-TR-P-82984	2018-10-16	Active	Mariposa Park	Fair	2 3 Park	ma - added to planting list	Spruce, Colorado or Blue	PICEA	PUNGENS	2021-0	05-24 17:02	Cbranning	4	43.61533364	-116.3046792
326 328	Mariposa Park Mariposa Park	MARI-TR-P-82992 MARI-TR-P-82994	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce. Colorado or Blue Spruce. Colorado or Blue	PICEA	PUNGENS PUNGENS		05-24 17:08 05-24 17:08	Cbranning Cbranning		43.61445084 43.61431563	-116.3047717 -116.304762
332	Mariposa Park	MARI-TR-P-82998	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list	Spruce, Colorado or Blue	PICEA	PUNGENS	2021-0	05-24 17:08	Cbranning	4	43.61424116	-116.3044864
400 402	Mariposa Park Mariposa Park	MARI-TR-P-83066 MARI-TR-P-83099	2018-10-16 2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce, Colorado or Blue Spruce. Colorado or Blue	PICEA	PUNGENS PUNGENS		05-25 17:34 05-28 18:40	Cbranning Cbranning		43.61537832 43.61402714	-116.3053808 -116.3050416
423	Mariposa Park	MARI-TR-P-83120	2018-10-16	Active	Mariposa Park	Good Fair	3 Park	ma - added to planting list 1	Spruce, Colorado or Blue	PICEA	PUNGENS	2021-0	05-28 18:40	Cbranning	4	43.61466135	-116.3066469
450 451	Mariposa Park Mariposa Park	MARI-TR-P-83147 MARI-TR-P-83148	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Fair Good	8 3 Park 8 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS PUNGENS	2021-0 2021-0	05-28 19:36 05-28 19:36	Cbranning Cbranning	4	43.61474637 43.61483605	-116.3066597 -116.3066745
81	Pine Grove Park	PIGR-TR-P-82081	2017-11-29	Active	PINE GROVE PARK	Good	2 3 Unknown	1	Spruce. Colorado or Blue	PICEA	PUNGENS	2020-1	10-29 19:30	Cbranning		43.59834203	-116.293757
82 83	Pine Grove Park Pine Grove Park	PIGR-TR-P-82082 PIGR-TR-P-82083	2017-11-29 2017-11-29	Active Active	PINE GROVE PARK PINE GROVE PARK	Good Good	2 3 Unknown 3 Unknown	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS PUNGENS	2020-1	10-29 19:30 10-29 19:30	Cbranning Cbranning	4	43.59840309 43.59842892	-116.2937154 -116.2936439
86 87	Pine Grove Park Pine Grove Park	PIGR-TR-P-82086 PIGR-TR-P-82087	2017-11-29 2017-11-29	Active	PINE GROVE PARK PINE GROVE PARK	Good Good	3 Unknown 3 Unknown	1	Spruce, Colorado or Blue Spruce, Colorado or Blue	PICEA	PUNGENS	2020-1	10-29 19:30 10-29 19:30	Cbranning Cbranning	4	43.59809507 43.59803827	-116.2937095 -116.2936823
87 88	Pine Grove Park	PIGR-TR-P-82088	2017-11-29	Active	PINE GROVE PARK	Good	3 Unknown 2 3 Unknown	1	Spruce, Colorado or Blue	PICEA	PUNGENS	2020-1	10-29 19:30	Cbranning	4	43.59797097	-116.2936773
96	Pine Grove Park	PIGR-TR-P-82096	2017-11-29	Active	PINE GROVE PARK	Good Good	3 Unknown	1	Spruce, Colorado or Blue	PICEA	PUNGENS	2020-1	10-29 19:30	Cbranning	4	43.5977985	-116.2929491
98 196	Pine Grove Park Magnolia Park	PIGR-TR-P-82098 MAGN-TR-P-82290	2017-11-29 2016-10-15	Active	PINE GROVE PARK MAGNOLIA	Good Good	3 Unknown 3 2 Unknown	1	Spruce, Colorado or Blue Spruce, Norway	PICEA	PUNGENS ABIES	2020+1	10-29 19:30 03-12 19:34	Cbranning Cbranning	4	43.5978994 43.68116982	-116.2927875 -116.2933298
214	Magnolia Park	MAGN-TR-P-82310	2016-10-15	Active	MAGNOLIA	Good	2 Park	1	Spruce. Norway	PICEA	ABIES	2021-0	03-15 16:41	Cbranning	4	43.68127821	-116.2915837
216	Magnolia Park Magnolia Park	MAGN-TR-P-82312 MAGN-TR-P-82258	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Good Good	2 2 Park 2 2 Unknown		Spruce, Norway Spruce, White	PICEA	GLAUCA		03-15 16:41 03-12 19:34	Cbranning Cbranning		43.68147018 43.68109753	-116.2916229 -116.2934587
172	Magnolia Park	MAGN-TR-P-82266	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	i	Spruce, White	PICEA	GLAUCA		03-12 19:34	Cbranning		43.68181605	-116.29374
173 176	Magnolia Park Magnolia Park	MAGN-TR-P-82267 MAGN-TR-P-82270	2016-10-15 2016-10-15	Active Active	MAGNOLIA MAGNOLIA	Good Good	2 2 Unknown 2 Unknown	1	Spruce. White Spruce, White	PICEA	GLAUCA GLAUCA	2021-0 2021-0	03-12 19:34 03-12 19:57	Cbranning	4	43.68182959 43.68166385	-116.2938366 -116.2934314
180	Magnolia Park	MAGN-TR-P-82274	2016-10-15	Active	MAGNOLIA	Fair	2 Unknown	1	Spruce, White	PICEA	GLAUCA	2021-0	03-12 19:57	Cbranning	4	43.6816635	-116.2931188
193 201	Magnolia Park Magnolia Park	MAGN-TR-P-82287 MAGN-TR-P-82295	2016-10-15 2016-10-15	Active	MAGNOLIA MAGNOLIA	Good Good	2 Unknown 2 2 Unknown	1	Spruce, White Spruce. White	PICEA	GLAUCA GLAUCA		03-12 19:34 03-12 19:34	Cbranning Cbranning		43.68102334 43.68101495	-116.2930598 -116.2924415
246	Magnolia Park	MAGN-TR-P-82342	2016-10-15	Active	MAGNOLIA	Good	2 Park	1	Spruce, White	PICEA	GLAUCA	2021-0	03-15 17:16	Cbranning	4	43.68267518	-116.2922947
247 263	Magnolia Park Magnolia Park	MAGN-TR-P-82343 MAGN-TR-P-82359	2016-10-15 2016-10-15	Active Active	MAGNOLIA MAGNOLIA	Good Good	i 2 Park 2 Park	1	Spruce, White Spruce, White	PICEA	GLAUCA GLAUCA	2021-0	03-15 17:16 03-15 17:16	Cbranning Cbranning		43.68271698 43.68225231	-116.2922177 -116.2916377
270	Magnolia Park	MAGN-TR-P-82366	2016-10-15	Active	MAGNOLIA	Good	2 Park	i	Spruce. White	PICEA	GLAUCA	2021-0	03-15 17:51	Cbranning	4	43.68179828	-116.2916008
271 325	Magnolia Park Mariposa Park	MAGN-TR-P-82367 MARI-TR-P-82991	2016-10-15 2018-10-16	Active	MAGNOLIA Mariposa Park	Good Good	8 2 Park 8 3 Park	ma - added to planting list	Spruce, White Spruce, White	PICEA	GLAUCA GLAUCA		03-15 17:51 05-24 17:08	Cbranning Cbranning		43.68185468 43.61453491	-116.2917143 -116.3047537
327	Mariposa Park	MARI-TR-P-82993	2018-10-16	Active	Mariposa Park	Good Poor	3 Park	ma - added to planting list	Spruce, White	PICEA	GLAUCA	2021-0	05-24 17:08	Cbranning	4	43.61439651	-116.3047623
345 386	Mariposa Park Mariposa Park	MARI-TR-P-83011 MARI-TR-P-83052	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Poor Good	2 3 Park 2 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce, White Spruce, White	PICEA	GLAUCA GLAUCA	2021-0 2021-0	05-24 17:26 05-25 17:34	Cbranning Cbranning	4	43.61476024 43.61567838	-116.3050202 -116.3061875
403	Mariposa Park	MARI-TR-P-83100	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list	Spruce. White	PICEA	GLAUCA	2021-0	05-28 18:40	Cbranning	4	43.61412808	-116.3052096
412 413	Mariposa Park Mariposa Park	MARI-TR-P-83109 MARI-TR-P-83110	2018-10-16 2018-10-16	Active	Mariposa Park Mariposa Park	Good Good	3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce, White Spruce, White	PICEA	GLAUCA GLAUCA	2021-0	05-28 18:40 05-28 18:40	Cbranning Cbranning		43.61401618 43.61403081	-116.3058281 -116.3059155
414	Mariposa Park	MARI-TR-P-83111	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list	Spruce, White	PICEA	GLAUCA	2021-0	05-28 18:40	Cbranning	4	43.61402286	-116.3060361
430 431	Mariposa Park Mariposa Park	MARI-TR-P-83127 MARI-TR-P-83128	2018-10-16 2018-10-16	Active Active	Mariposa Park Mariposa Park	Good Good	2 3 Park 3 Park	ma - added to planting list 1 ma - added to planting list 1	Spruce. White Spruce, White	PICEA	GLAUCA GLAUCA		05-28 19:12 05-28 19:12	Cbranning Cbranning		43.61491516 43.61485273	-116.3063084 -116.3063336
432	Mariposa Park	MARI-TR-P-83129 MAGN-TR-P-82259	2018-10-16	Active	Mariposa Park	Good	3 Park	ma - added to planting list	Spruce, White	PICEA	GLAUCA	2021-0	05-28 19:12	Cbranning	4	43.61487138	-116.3064269
165 191	Magnolia Park Magnolia Park	MAGN-TR-P-82259 MAGN-TR-P-82285	2016-10-15 2016-10-15	Active	MAGNOLIA	Good Good	2 2 Unknown 2 2 Unknown	1	Sweetgum Sweetgum	LIQUIDAMBAR LIQUIDAMBAR	STYRACIFLUA STYRACIFLUA		03-12 19:34 03-12 19:34	Cbranning Cbranning		43.68102198 43.68112162	-116.2934897 -116.2929585
194 249	Magnolia Park	MAGN-TR-P-82288	2016-10-15	Active	MAGNOLIA	Good	2 Unknown	1	Sweetgum	LIQUIDAMBAR	STYRACIFLUA	2021-0	03-12 19:34	Cbranning	4	43.68111679	-116.2930965
249	Magnolia Park	MAGN-TR-P-82345	2016-10-15	Active	MAGNOLIA	Good	2 Park	1	Sweetgum	LIQUIDAMBAR	STYRACIFLUA	2021-0	03-15 17:16	Cbranning	4	43.68258916	-116.2920889

250	Magnolia Park	MAGN-TR-P-82346	2016-10-15	Active	MAGNOLIA	Good			Park			Sweetgum	LIQUIDAMBAR	STYRACIFLUA	2021-03-15 17:16	Cbranning	43.68259563	-116.2919767
250	Magnola Park Mariposa Park	MAGN-TR-P-82346 MARI-TR-P-83131	2018-10-15	Active	Mariposa Park	Good	2	2	Park	ma - added to planting list	1	Sweetgum	LIQUIDAMBAR	STYRACIFLUA	2021-05-28 19:12	Cbranning	43.61495902	-116.3066821
434							2	3										
435	Mariposa Park	MARI-TR-P-83132	2018-10-16	Active	Mariposa Park	Fair	1	3	Park	ma - added to planting list	1	Sweetaum	LIQUIDAMBAR	STYRACIFLUA	2021-05-28 19:12	Cbranning	43.61512995	-116.3065936
136	Bernardine Quinn Riverside Park	BEQU-TR-P-82138	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Tuliptree	LIRIODENDRON	TULIPIFERA	2020-11-05	ssirotnak	43.62248337	-116.2327747
137	Bernardine Quinn Riverside Park	BEQU-TR-P-82139	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Tuliptree	LIRIODENDRON	TULIPIFERA	2020-11-05	ssirotnak	43.62255592	-116.232848
138	Bernardine Quinn Riverside Park	BEQU-TR-P-82140	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Tuliptree	LIRIODENDRON	TULIPIFERA	2020-11-05	ssirotnak	43.62262763	-116.2327837
139	Bernardine Quinn Riverside Park	BEQU-TR-P-82141	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Tuliptree	LIRIODENDRON	TULIPIFERA	2020-11-05	ssirotnak	43.62263258	-116.2326264
140	Bernardine Quinn Riverside Park	BEQU-TR-P-82142	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Tuliptree	LIRIODENDRON	TULIPIFERA	2020-11-05	ssirotnak	43.62253713	-116.2325627
499	Bowler	BOWL-TR-P-83602	2021-06-09	Active	Bowler Park	Good	2	7	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-13 16:47	Cbranning	43.55618893	-116.1275921
521	Bowler	BOWL-TR-P-83624	2021-06-09	Active	Bowler Park	Good	2	7	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-13 16:42	Cbranning	43.55548456	-116.1285472
522	Bowler	BOWL-TR-P-83625	2021-06-09	Active	Bowler Park	Good	2	7	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-13 16:42	Cbranning	43.55540443	-116.1284137
527	Bowler	BOWL-TR-P-83630	2021-06-09	Active	Bowler Park	Good	2	7	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-13 16:42	Cbranning	43.55502121	-116.1274206
474	Cherie Buckner Webb Park	CHBW-TR-P-83577	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61877552	-116.206009
475	Cherie Buckner Webb Park	CHBW-TR-P-83578	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61878395	-116.2060778
476	Cherie Buckner Webb Park	CHBW-TR-P-83579	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61878955	-116.2061537
477	Cherie Buckner Webb Park	CHBW-TR-P-83580	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61879888	-116.2062282
478	Cherie Buckner Webb Park	CHBW-TR-P-83581	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61880786	-116.2063046
479	Cherie Buckner Webb Park	CHBW-TR-P-83582	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61876592	-116.206253
480	Cherie Buckner Webb Park	CHBW-TR-P-83583	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61875731	-116.2061781
481	Cherie Buckner Webb Park	CHBW-TR-P-83584	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61875381	-116.2061056
482	Cherie Buckner Webb Park	CHBW-TR-P-83585	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61874989	-116.206033
483	Cherie Buckner Webb Park	CHBW-TR-P-83586	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61872114	-116.2060611
484	Cherie Buckner Webb Park	CHBW-TR-P-83587	2021-06-01	Active	Cherie Buckner-Webb Park	Good	2	4	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-10-12 16:44	Cbranning	43.61872387	-116.2061343
229	Magnolia Park	MAGN-TR-P-82325	2016-10-15	Active	MAGNOLIA	Good	4	2	Park		1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-03-15 17:01	Cbranning	43.68197885	-116.2925318
396	Mariposa Park	MARI-TR-P-83064	2018-10-16	Active	Mariposa Park	Good	3	3	Park	ma - added to planting list	1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-05-25 17:34	Cbranning	43.61555181	-116.30567
408	Mariposa Park	MARI-TR-P-83105	2018-10-16	Active	Mariposa Park	Fair	2	3	Park	ma - added to planting list	1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-05-28 18:40	Cbranning	43.61406933	-116.3056539
433	Mariposa Park	MARI-TR-P-83130	2018-10-16	Active	Mariposa Park	Fair	2	3	Park	ma - added to planting list	1	Tuliptree	LIRIODENDRON	TULIPIFERA	2021-05-28 19:12	Cbranning	43.61485989	-116.3064941
212	Magnolia Park	MAGN-TR-P-82308	2016-10-15	Active	MAGNOLIA	Good	3	2	Park		1	Willow	SALIX	NIGRA	2021-03-15 16:41	Cbranning	43.6811449	-116.2916762
199	Magnolia Park	MAGN-TR-P-82293	2016-10-15	Active	MAGNOLIA	Fair	4	2	Unknown		1	Willow, Weeping	SALIX	BABYLONICA	2021-03-12 19:34	Cbranning	43.68109609	-116.2926599
223	Magnolia Park	MAGN-TR-P-82319	2016-10-15	Active	MAGNOLIA	Good	5	2	Park		1	Willow, Weeping	SALIX	BABYLONICA	2021-03-15 16:41	Cbranning	43.68141032	-116.292205
383	Mariposa Park	MARI-TR-P-83049	2018-10-16	Active	Mariposa Park	Good	6	3	Park	ma - added to planting list	1	Willow, Weeping	SALIX	BABYLONICA	2021-05-25 17:34	Cbranning	43.61561376	-116.3064579
392	Mariposa Park	MARI-TR-P-83058	2018-10-16	Active	Mariposa Park	Good	5	3	Park	ma - added to planting list	1	Willow, Weeping	SALIX	BABYLONICA	2021-05-25 17:34	Cbranning	43.61546219	-116.3057898
429	Mariposa Park	MARI-TR-P-83126	2018-10-16	Active	Mariposa Park	Good	6	3	Park	ma - added to planting list	1	Willow, Weeping	SALIX	BABYLONICA	2021-05-28 19:12	Cbranning	43.61500131	-116.3062937
444	Mariposa Park	MARI-TR-P-83141	2018-10-16	Active	Mariposa Park	Good	4	3	Park	ma - added to planting list	1	Willow, Weeping	SALIX	BABYLONICA	2021-05-28 19:12	Cbranning	43.61554046	-116.3065588
117	Bernardine Quinn Riverside Park	BEQU-TR-P-82119	2020-07-01	Active	Bernardine Quinn Riverside	Good	2	4			1	Willow, Weeping or Peking-Pendula	SALIX	BABYLONICA PEKINENSIS	2020-11-05	ssirotnak	43.62227834	-116.2322715
											454							

From:	Lance Davisson
To:	Christine Cole
Cc:	Mark McPherson
Subject:	Request for Early Action Status for Treasure Valley Canopy Network's City Forest Credits application for credit verification Treasure Valley Parks Project
Date:	Monday, November 1, 2021 4:53:14 AM

Dear Ms. Cole and Mr. McPherson --

The Treasure Valley Canopy Network, as Project Operator for the Treasure Valley Municipal Parks Project, would like to request Early Action Status for our project, as outlined in City Forest Credits Tree Planting Protocol Version 9, dated 2/7/2021.

Our application for credit verification includes 504 trees planted within nine City of Boise parks between October 2016 and June 2021. This application is the product of discussions with City Forest Credits, City of Boise, and Treasure Valley Canopy Network that began since the inception of City Forest Credits Registry. All trees planted within these parks are part of a well-planned effort to pilot the efficacy of a Treasure Valley Program. The Treasure Valley Parks Project (TV Parks Project) represents a purposeful deliverable of the Treasure Valley Forest Carbon Assessment developed with The Nature Conservancy in Idaho and other regional partners. The TV Parks Project represents a key building block for a larger self-sustaining climate action program that will serve the mission of the Treasure Valley Canopy Network and the City of Boise's progressive Climate Action Plan. We appreciate the consideration of the Registry in granting this Early Action status to help us realize and grow our carbon mitigation and climate resilience strategies across the Treasure Valley.

Sincerely, Lance Davisson

Lance Davisson *President & Director, Treasure Valley Canopy Network*

Phone: (208) 994-1135 E-mail: coordinator@tvcanopy.net

Signature: Lance Davison (Dec 6 2021 13:10

Email: coordinator@tvcanopy.net

CFC Planting Initial Credit PDD_TVCN_FINAL 20211206

Final Audit Report

2021-12-06

Created:	2021-12-06
By:	Christine Cole (christine@cityforestcredits.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAA1-PTmjgt68nA1blsv5dlH6rlFBrES240

"CFC Planting Initial Credit PDD_TVCN_FINAL 20211206" Histo ry

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