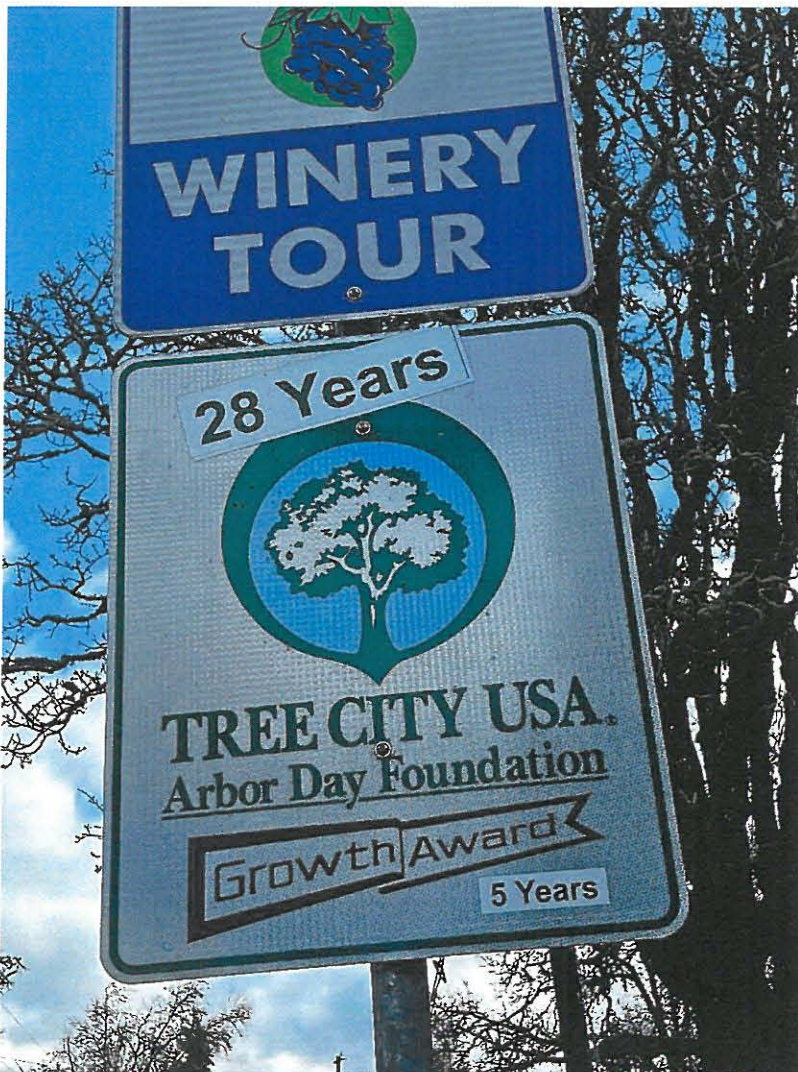


EXHIBIT A

City of Cottage Grove, OR Urban Forest Management Plan



Adopted by the City Council

November 27, 2023

City of Cottage Grove
400 East Main Street
Cottage Grove, OR 97424

This adopted Urban Forest Management Plan is dedicated to the memory and service of Susan Johnson,
member of the City of Cottage Grove Urban Forestry Committee (1994-2023).

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Vision and Mission

VISION:

In envisioning the future of the City of Cottage Grove’s urban forest, our primary goal is to establish a diverse and well-distributed tree canopy that is both healthy and resilient. We aspire for all residents of our city to take pride in the abundance of trees that grace our streets and neighborhoods, and to possess a deep understanding of the myriad of benefits that trees offer to our community.

Through our collective efforts, we aim to create an environment where every individual is well-informed about the importance of trees and actively participates in their care. By nurturing a strong sense of community ownership and responsibility, we can ensure the long-term success and sustainability of our urban forest.

With a thriving and well-maintained tree canopy, Cottage Grove will continue to be a place that residents are proud to call home. Our commitment to urban forestry will not only enhance the beauty of our city but also contribute to improved air quality, reduced urban heat island effect, and a greater sense of well-being for all who reside here.

MISSION:

Our mission is to implement the Cottage Grove Urban Forestry Management Plan, which serves as a comprehensive and responsible framework for managing and safeguarding our urban forest. We recognize that every tree, whether on public or private property, contributes to the diverse and captivating landscape of our city.

Through a combination of education, unwavering dedication, and adequate funding, we are committed to achieving our canopy goal of 28% by 2030 and 40% by 2050, actively combating climate change, and supporting historically marginalized neighborhoods and residents within the city. This Plan guides our efforts in prioritizing the preservation and expansion of our tree canopy in an equitable manner across the city.

The Cottage Grove Urban Forest Management Plan acknowledges the significant role that our tree canopy plays in addressing health and heat disparities within our community. By alleviating these disparities, we strive to enhance the overall quality of life for all residents, including humans, birds, and animals alike.

Through the implementation of our Plan, we aim to create a sustainable and thriving urban environment that fosters a deep connection between nature and our community. By valuing and protecting our urban forest, we can ensure a healthier and more vibrant future for Cottage Grove and its inhabitants.



Executive Summary

The executive summary provides an overview of the City of Cottage Grove Urban Forest Management Plan. It highlights the engagement efforts with residents, the history of the Urban Forestry Committee, and the benefits of trees in the urban environment. The summary emphasizes the need for a comprehensive plan to manage the urban forest and outlines the strategies included in the plan, such as increasing canopy coverage, conducting regular tree inventories, and implementing public outreach goals. The scope of the plan covers various types of trees found in different areas of the city, ensuring a comprehensive approach. The summary also mentions the establishment of planning horizons to keep the plan relevant over time.

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Introduction

This document will serve as the City of Cottage Grove Urban Forest Management Plan. This plan is the work of a robust effort to engage with the residents of Cottage Grove and to identify not only the Vision and Mission to guide our urban forest, but to establish the connection between the city and its trees.

The City of Cottage Grove has operated an Urban Forestry Committee since 1994 when it received its first recognition as a Tree City USA member by the Arbor Day Foundation. The City has now received that recognition 29 years in a row and has received six Growth Awards. To qualify for Tree City USA recognition the City must complete several tasks each year. They are: declaring an Arbor Day Proclamation, hold an Arbor Day related event, and spend a minimum of \$2.00 per each resident of the City of Cottage Grove. The last component of Tree City USA qualification is the establishment of a “Tree Ordinance(s).”

The City of Cottage Grove Urban Forestry Committee was established via Ordinance No. 2846. In that Ordinance Chapter 2.30 was adopted into the Cottage Grove Municipal Code. The Ordinance was amended in 2017 to its current language. The stated purpose of the Urban Forestry Committee is to “act as an advisory body to the City Council” and further to “assist with the development and implementation of an Urban Forestry Plan.”

Why an Urban Forest Management Plan?

The benefits of trees within the urban environment are well documented, from reducing carbon from the atmosphere, reducing energy use, providing habitat, and supporting the overall quality of life of those within the City.

To ensure that our urban forest remains a vital contributor providing benefits as listed above it is necessary that a plan be established for the purpose of managing our urban forest. Where other services under the umbrella of City infrastructure often require replacement plans due to aging and improvements in technology the urban forest moves in the other direction. The urban forest as it grows and adapts to our community increases in value just as it increases in size. That is not to say that there are not tree related emergencies just as there are broken water mains, but in the case of the urban forest an adopted Urban Forest Management Plan establishes a strategy for all things related to the care, maintenance, and expansion of the urban forest.



The strategies included in this plan will include the following:

- Establish goals and a plan for increasing our canopy coverage in increased resiliency in all areas of the city.
- Regular schedule for tree inventories.
- Public outreach goals and plans.

The scope of this plan will include the following types of trees:

- Street trees
- Facility trees
- Parking lot trees

- Park trees
- Registered/Heritage Trees
- Open space trees
- Hazard trees

The included tree types will allow the City to consider the multitude of situations that may be presented to the City through the course of the plan with the requirement that five-year and 20-year planning horizons be established to ensure that the plan remains relevant to the conditions of the urban forest.

Relationship to other Planning Documents

Cities and counties, as well as other public districts, typically have multiple layers of planning documents. This plan will incorporate elements from the following documents:

- Parks and recreation master plan(s)
- Urban renewal plans (none at this time)
- Specific elements of the Comprehensive Plan
- Design and landscaping guidelines and development standards (Public Works Specifications)
- Ordinances, including the local tree ordinance
- Cottage Grove Municipal Code; Titles 2, 12 and 14 (tree protection, street trees, landscaping, screening/buffering, Urban Forestry Committee)
- Vision 2037

Status of the Urban Forest

As stated in the introduction to this plan, the City of Cottage Grove has been the recipient of the Arbor Day Foundation's Tree City USA Award 29 years in a row and has earned six Growth Awards. This dedication to the maintenance and proliferation of our urban forest is evidenced through the efforts of the community to include trees as a valuable component of the city both economically and the improvement in quality of life.

Historical Context:

The City of Cottage Grove and the surrounding region have a rich and varied history. The first white man arrived in the area in 1847, and many settlers traveling by wagon train settled in the early 1850's.

Most of the first immigrants to the area were farmers and cattlemen who engaged in subsistence agricultural activities. They raised sheep and cattle and cleared the lands to cultivate fruits, vegetables, grains and grasses. Need for building materials also caused an early interest in forest products.

In August 1858, gold was discovered on Sharp's Creek - 30 miles east of the present city. The Civil War halted mining activity for a few years, but in the spring of 1863 George Ramsey and James Johnson found gold in a small vein near the headwaters of City Creek. This discovery brought many prospectors, and in 1864-65 over 100 claims were staked. Gold mining continued in the Bohemia area for many years.

In 1871, the Southern Pacific Railroad reached Cottage Grove and promoted further growth by opening up the area to distant markets.

Many sawmills were constructed between 1890 and 1910, during which time the community's population increased from 750 to 1800. Cottage Grove's City Charter was drawn up in 1899, and the City was incorporated the following year.

Cottage Grove's development from 1910 to 1950 was influenced both by national events, such as, the First and Second World Wars, the Depression, the change in the value of gold; and by regional changes, such as, the shift of lumber manufacturing from Washington to Oregon, new transportation routes and the growth of nearby Eugene-Springfield as a regional urban center.

An expanding and diversifying lumber and wood products industry has dominated the Cottage Grove economy in post-World War II years. Agricultural activities are making a minor contribution to the area's economy and mining is presently insignificant. Recreation and tourism have grown rapidly in recent years (City of Cottage Grove Comprehensive Plan, pg. 3, 1981).

Physical Characteristics:

Cottage Grove lies on the relatively level, narrow flood plain of the northward-flowing Coast Fork of the Willamette River. The Coast Fork is joined by its largest tributary, the Row River, just north of Cottage Grove. Upstream Corps of Engineers reservoirs on the Coast Fork and Row River now control most flooding on these two streams. Cottage Grove is the largest community within the 655-square mile Coast Fork watershed and serves as the area's major trade center (City of Cottage Grove Comprehensive Plan, pg. 3, 1981).

Native Vegetation:

At the time of European settlement, heavy forests covered most of the region. Stands of Douglas-fir, western hemlock, and western red cedar dominated the landscape. Deciduous big leaf maple and red alder were intermixed. Wetlands and flood plains along the river supported Oregon ash, willows, and black cottonwood. Oregon white oak and Pacific madrone grew in drier uplands. Understory upland vegetation included vine maple, western hazel, ocean spray, snowberry, thimbleberry, Oregon grape, salal, red huckleberry, ferns and forbs. Wetland species included elderberry, Douglas spirea, dogwood, sedges and rushes.

Environmental Context:

Rainfall

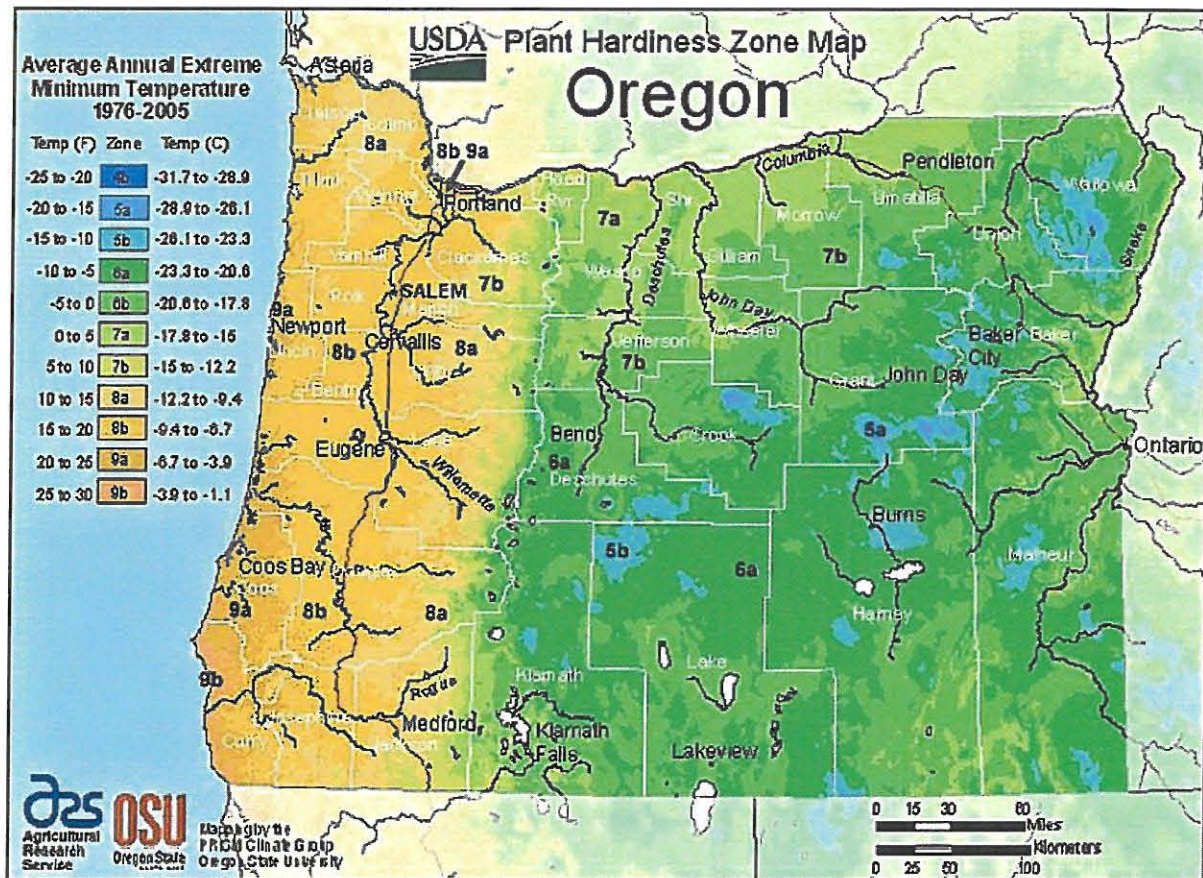
Average annual precipitation is 47.57 inches (Source: Western Regional Climate Center). Heavy rain events are not uncommon during the fall, winter and spring months. Such events pose potential risk to the urban forest, especially mature Oregon white oak trees.

Temperature

Average Max: 62.1/Average Low: 41.0 (Source: Western Regional Climate Center). Summers are characterized by warm to hot days and cool evenings. The summer months are typically dry which can cause considerable stress on certain trees, especially non-native varieties.

Climate Zone

USDA Tree hardiness zone 8. USDA developed tree hardiness zones to guide plant selection with an eye toward those which are most likely to survive at a given location. The zones are based on the average annual minimum winter temperature. As the map below indicates, Lane County is located within tree hardiness zone 8.



The Arbor Day Foundation provides information on tree species suitable for the various tree hardiness zones. Popular trees suitable for zone 8 identified by the Arbor Day Foundation include:

- Eastern white pine
- Sugar maple
- Red maple
- Yoshino cherry
- Saucer magnolia
- Dogwood
- Northern red oak
- Black walnut

Soil Conditions

Soils in this area are dominated by clays, silts, and loams partially as a result of historic flood events (Lake Missoula 15-20,000 years ago). Soil types found throughout the city have potential shrink-swell and low shear strength problems. Soil is an important factor contributing to the growth of trees, especially within urban or suburban environments. Research shows that soil compaction is a significant contributor to overall tree health.

Urban Forest Canopy

Tree canopy cover refers to the proportion of the land area covered by trees as seen from above. The ratio of canopy to bare and/or developed land is connected to many of the benefits that make up our urban forest.

Existing Canopy Condition:

The tree canopy in Cottage Grove is estimated to be around 23% (Johnson, iTree calculation, 2021). Unfortunately, this estimate of canopy is the first of its kind and therefore there is no reference to determine whether the canopy has increased or decreased over time with the development and expansion of the City.

The organization American Forests recommends tree canopy coverage for urban and suburban areas. American Forests recommends 40% as the goal for urban areas overall and 50% for suburban residential areas in the Pacific Northwest.

The Urban Forestry Committee recommends the following canopy coverage goals:

Goals/desired condition

- 28% canopy cover by 2030
- 40% canopy cover by 2050

Achieving these goals requires concentrated effort and a clear strategy. This plan provides a framework for setting our community on a path for realizing a viable and sustainable urban forest.

Street Trees:

Trees along streets are one of the most visible portions of the urban forest. Due to their location, street trees provide specific benefits not provided by other trees. Benefits include traffic calming and extending the life of roadway pavement. Streets shaded by trees contribute to "sense of place," which can also contribute to increased community pride and property values.

Street trees are often located in constrained locations that put them in conflict with pavement and utility lines that may limit growing space. Other management issues that may be important for street trees include:

- Trees are commonly subject to damage by vehicles and street construction activities.
- Conflicts with utilities, hardscape (especially sidewalks, curbs, and gutters) and other built infrastructure are common.
- Branch, trunk, and root failures commonly have a high potential to cause property damage and/or injury.
- Tree canopies typically need to be maintained for street and sidewalk clearance, visibility issues for motorists, and to minimize risk of branch failures.
- Falling leaves, seeds, and fruits may create hazards on sidewalks and contribute to storm drain clogging.
- Street trees may generate high numbers of service requests and complaints.

Because of these issues, species selection is often a primary consideration. The species used may be specified in a master planting plan or on an approved species list. The palette of potential street tree species may be limited, which can sometimes lead to low species diversity. Low species diversity can pose a risk to the urban forest if one or more common species develop serious problems.

The requirement to plant and maintain street trees is located in Title 14 of the Cottage Grove Municipal Code with other requirements included in Title 12. The standard for street tree planting is one tree per 30' linear feet with the caliper of the tree being 2" at 4' above adjacent grade. The current approved tree list includes three types for various planting locations, such as overhead wires and planting strip width. There are also trees identified on the list for wet soil conditions.

Due to changes in right-of-way cross section criteria there are several newer subdivisions in the City that do not have planting areas for street trees. In these areas there is an opportunity to create space with tree wells in the sidewalk area. However, the cost for such a program will be considerable due to the need to install the tree wells and for right-of-way acquisition and paving.

Opportunities include

- Identification of unoccupied areas as potential future planting sites.
- Include an assessment element of whether the inventoried tree is in an appropriate location (based on potential tree size, crown characteristics, overhead utility location, etc.) in future inventories.
- Identification of street trees causing problems for pedestrians or motorists.

Goals/desired condition

- Mixed age/size classes and species composition.
- Retain tree species representing character of Cottage Grove (White oak, Douglas-fir, big leaf maple).
- Resistant to insect, disease, environmental damage.
- Minimal impact to adjacent utilities (including storm sewer).
- Safe environment for pedestrians, motorists, and home owners.
- Efficient to maintain.
- Non-invasive species suitable for Cottage Grove's climate.

Facility trees:

Many urban trees fall into the "facility tree" category. These are privately owned and maintained trees around buildings and other built facilities that are not adjacent to streets. Most trees in sites such as office parks or campuses are facility trees. Shade provided by trees near buildings can greatly reduce summer cooling costs. Facility trees also modify the visual impact of structures.

Most facility trees grow where soil volume is restricted by hardscape. They commonly occur in landscape beds near structures. These landscape beds can vary widely in size. Facility trees may also occur in small planters or cutouts in sidewalks or plazas.

Some potential management issues:

- Soil near buildings may be unfavorable due to severe compaction and alkaline residues from concrete, stucco, etc.
- Planting beds may have inadequate drainage or irrigation.

- Competition from other landscape plants may be excessive.
- Reflected heat or excessive shading from structures may affect tree growth and health.
- Pruning may be needed to maintain clearance from buildings and over walkways.
- Potential for root damage to foundations and walkways needs to be considered.
- Underground utility maintenance may damage tree roots.

Goals/desired condition:

- Mixed age classes and species composition
- Resistant to insect, disease, environmental damage
- Minimal impact to adjacent buildings and utilities
- Safe environment for pedestrians, motorists, and home owners
- Efficient to maintain

Open space trees:

Open space trees are often remnants of the native forest found along creeks or on hills. In some areas, some or all of these trees may be exotic species. Management goals and needs will depend on what types of species are present, their condition, and their location.

Tree management in open spaces is usually less intensive than in other parts of the urban forest. In some areas, open space trees may be largely unmanaged. However, these stands can and will change over time. Active management may be needed to:

- Help maintain native stands that have low levels of natural regeneration.
- Suppress exotic species that may crowd out native trees in riparian areas.
- Replace flammable exotic species with lower risk trees such as native oaks.

Existing condition

- Open space areas in Cottage Grove total approximately 325 acres. Examples of open space trees include: Row River Nature Park, North Regional Park, and along the Coast Fork Willamette River.

Goals/desired condition

- Maintain native species composition.
- Maintain conditions reducing threat from wildland fires.

Opportunities

- Continue efforts with the Coast Fork Willamette Watershed Council to support the maintenance and resiliency of open space trees.

Hazard trees:

Cottage Grove is susceptible to strong wind and heavy snow weather events during the winter months. Many older iconic trees in the City are vulnerable to damage. An example of this occurred in 2019 with “Snowmageddon” when approximately 20” of snow fell overnight and caused severe damage to our urban canopy.

Many communities have developed programs to mitigate safety risks to persons and property. Some communities perform hazard tree risk assessments based on criteria developed by the International Society of Arboriculture. Such an assessment takes into account factors including history of tree failure, topography, soil conditions, tree foliage, vigor and possible defects, crown size, wind exposure, and conditions of roots. Based on these factors likelihood of failure is categorized. Categories include improbable, possible, probable and imminent. Potential impact and consequences are also assessed.

Existing condition

- Hazard trees exist throughout Cottage Grove, primarily in the older sections of town, including the Northwest Neighborhood.



Goals/desired condition

- Safe environment for residents.

Opportunities

- Develop a hazard tree mitigation program and assessment methodology.
- Perform hazard tree assessments.

Management of the Urban Forest

Almost all processes needed to sustain the urban forest – establishment, growth, decline, death, and degradation of trees – require some level of active management. Urban forest managers (City of Cottage Grove Public Works Department) typically:

- Plan and implement tree plantings.
- Maintain existing trees.
- Manage hazards associated with declining trees. To include adopting mitigation plans for pest/disease.
- Remove trees that have reached the end of their useful life span.
- Recycle or dispose of green waste and wood from pruning and removals.

Urban forest managers must also deal with problems related to the urban environment. These may include:

- Damage to sidewalks and other hardscape due to tree roots.
- Complaints from pedestrians and motorists about trees causing safety (visibility) issues.
- Construction damage to tree roots.
- Exotic species invading natural areas.
- Fire hazards at the urban-wildland interface.

Existing conditions:

Tree maintenance of publically owned trees falls on the Utilities and Facilities Divisions of the Public Works Department. Tree planting is the responsibility of the department undertaking the project, but generally led by the Community Development Department on behalf of the Urban Forestry Committee. The Community Development Department manages the street tree planting program and issues permits for pruning or removal of protected trees including street trees and trees on development sites.

Roles and Responsibilities

Facilities Division:

- Maintain trees in City parks and on City-owned property, provide tree inspections at request of other departments, and support Urban Forestry Committee.

Community Development Department:

- Manage street tree planting program; review development proposals potentially affecting trees, issue tree pruning and removal permits, enforce tree planting regulations, staff the Urban Forestry Committee.

Utilities Division:

- Address tree/sidewalk conflicts, annual fall leaf pick-up, and maintenance along rights-of-way to address tree/public way signage conflicts.
- Maintain ISA Certified Arborist on staff.

Goals/desired condition

- Have adequate ordinances, plans and policies in place to manage tree resources (tree planting standards, pruning standards, protection standards during construction, tree removal permits, street tree species planting list, invasive tree species list).
- Safe environment for pedestrians, motorists, and homeowners.
- Recycle (urban forest salvage) or dispose of green waste and wood from pruning and removals.
- Adequate training for city and private crews doing tree maintenance work.
- Adequate budgets for maintaining city trees.
- Adequate coordination between city departments involved with tree related work.

Opportunities

- Update tree planting standards.
- Adopt pest/disease mitigation plans.
- Develop pruning standards.
- Develop protection standards for underground utility, sidewalk, or other work that affects tree roots.
- Determine if there is adequate coordination between departments for tree maintenance activities.

- Identify areas available for additional planting of trees.
- Determine adequacy of budgets for current and future maintenance/removal of trees in declining health (especially large trees).
- Surveys to locate trees causing visibility issues for motorists and pedestrians.

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Strategic Plan

The strategic plan summarizes the issues, trends, goals, objectives, and actions under appropriate topic headings, e.g. Tree Resources, Management, and Community.

Issues and needs categories

Tree Needs:

- Street trees
- Facility trees
- Parking lot trees
- Register/Heritage tree program
- Park and open space trees
- Hazard trees

Management Needs:

Needs of the urban forest program and the people involved with the short- and long- term care and maintenance of the urban forest.



Community Needs:

Needs related to how the public perceives and interacts with the urban forest and the urban forest management program.

Goals

The goals in this plan are the general outcomes that are sought. Goals may address some or all of the needs identified. They can also address other concerns or desires of the community.

Objectives

Objectives provide more specificity by breaking goals into the components that make up each goal. Like goals, objectives are desired outcomes, but are more specific and limited in scope.

Actions

An action is something that is done to achieve an outcome - e.g. plant trees, conduct workshops, or enforce regulations.

Tree needs

Issue 1: *Wrong tree in the wrong location rather than right tree in the right location*

Goal

Have minimal conflict between trees and utility lines, buildings, etc.

Objective

Reduce conflicts and improve tree health.

Actions

- Expand future street tree surveys to include assessment of whether a tree is in an appropriate location (locates potential sites for correction).
- Review street tree planting list for possible conflicts.

- Increase public awareness about street tree program through expanded information placed on City website (requirement for tree removal permit and recommended list of street trees).

Issue 2: *Register/Heritage Tree Program*

Goal

Develop tree grove protection program by way of Register/Heritage tree program.

Objective

Establish a Register/Heritage tree program.

Actions

- Establish the criteria and guidelines for the City of Cottage Grove Register/Heritage Tree Program.
- Determine the mechanism that will protect registered trees.
- Nominate trees to be listed on the Register/Heritage Tree Program.

Issue 3: *Insufficient tree canopy within the city limits*

Goal

Strive to achieve an increase in tree canopy from 23% to 28% by 2030 and 40% by 2050.

Objective

Increase public and private community benefits of trees by increasing tree canopy.

Actions

- Seek funding opportunities to increase tree planting throughout the community.
- Establish partnerships between the Urban Forestry Committee and other agencies and organizations interested in planting trees in Cottage Grove.

Street trees

Issue 1: *Reduce possible impact of disease affecting street trees*

Goal

Increasing street tree diversity and reduce the potential impact of tree diseases.

Objective

Effective management of street trees.

Actions

- The Urban Forestry Committee in conjunction with appropriate City staff should develop street tree management plans for new subdivisions of the City. The management plans should address recommended tree species to plant in the neighborhood.
- Educate property owners about City policies regarding adjacent property owner responsibility for maintaining street trees.

- Prepare an estimate of cost to taxpayers if the City were to undertake complete responsibility for maintaining street trees. The estimate should address staffing levels and required expenditures. The analysis should address equity in terms of not all streets have street trees.
- Utilize grants to assess, plan, and implement tree removal and planting projects as needed.
- Develop risk/age/condition based mapping (GIS) of potential neighborhood needs.

Issue 2: *Ensure a 90% or better survival rate for newly planted street trees*

Goal

Obtain 90% or greater survival rate for newly planted street trees.

Objective

A healthy and resilient urban forest in compliance with the Development Code.

Actions

- Improved education and outreach to support healthy tree growth.
- Establish a “street tree fee” that will be collected at time of building permit issuance. The collected fees will be used to plant street trees on behalf of new development to ensure proper planting and one year of watering.

Facility trees

Issue 1: *Educate property owners about proper care of facility trees*

Goal

Promote planting of facility trees and proper facility tree care including pruning.

Objective

Improve condition of facility trees throughout the community.

Actions

- Educate property owners about proper tree care and pruning techniques.
- Educate property owners about the economic benefits trees provide.

Parking lot trees

Issue 1: *Many existing parking lots lack trees*

Goal

Increase tree canopy coverage in existing parking lots.

Objective

Bring existing parking lots into compliance with current Development Code standards.

Actions

- Educate property owners about the benefits of adding trees to parking lots including increasing pavement life cycle.

- Work with property owners to select appropriate parking lot trees to reduce ongoing maintenance costs.
- Work with property owners regarding proper tree pruning techniques.
- Study the value of establishing an incentive program to get private property owners to plant trees in private parking lots where there are not any trees.

Park and open space trees

Issue 1: *Unfulfilled opportunities for new trees plantings in parks and open spaces*

Goal

Increase tree canopy within open space areas, and insuring “right tree in the right place”.

Objective

Promote trees as an important component of the City’s open space programs.

Action

- The Urban Forestry Committee should work with the Facilities Division to ensure tree canopy is considered as an integral part of community open space programs.
- Utilize the park vegetation inventory to locate potential opportunities.

Issue 2: *Lack of park specific tree management plans*

Goal

Have plans as needed.

Objective

Develop plans as needed.

Action

- Develop a tree management plan for regional parks, Coiner Park, and Bohemia Park.

Management needs

Issue 1: *Survival of planted or maintained trees*

Goal

Have greater than 90 percent survival of planted/maintained trees.

Objective

Encourage proper tree planting and care practices to increase survival rate.

Actions

- Update the tree planting standards used by City contractors.
- Develop pruning standards/practices.
- Develop inspection schedule for maintenance of downtown street trees.
- Develop/review ordinances/standards for underground utility or other work affecting tree roots.

Issue 2: *Coordination between City departments when working near trees*

Goal

Minimize duplication of efforts and ensure proper techniques to reduce harmful impacts to trees resulting from construction activities.

Objective

Ensure survival of trees near construction areas.

Actions

- Identify lead person or department for coordination on tree related issues.
- Consolidate tree planting and management efforts among City departments.
- Designate a lead City staff person to coordinate urban forest management efforts.
- Add tree protection standards to right-of-way permit review.

Issue 3: *Affordability of City managed trees (maintenance cost)*

Goal

Have an urban forest that is sustainable with a minimal level of investment.

Objective

Reduce costs associated with tree care.

Actions

- Review program for activities that have a low cost/benefit ratio.
- Seek dedicated funding through the City budget process for tree planting efforts by documenting tree related benefits to street preservation, surface water management, and environmental sustainability.

Issue 4: *Funding*

Goal

Secure ongoing and dedicated funding for the urban forest management program.

Objective

Identify and utilize potential funding sources for urban forestry related programs.

Actions

- Identify possible funding mechanisms to support the urban forest management program.
- Seek grant opportunities to implement urban forestry initiatives.

Community needs

Issue 1: *Ensure an equal distribution of tree plantings and tree maintenance citywide and specifically in areas of the city where historically marginalized and/or those living in poverty reside*

Goal

Grow and maintain an equitable, accessible, resilient urban forest that serves all people within the city.

Objective

Provide the benefits of a healthy urban forest to all people within the city.

Actions

- Use tree inventory to identify areas of the city that have less than 20% tree canopy.
- Utilize American Community Survey Data to identify areas within the city where there are clusters of residents living below the poverty line.
- Use the gathered data to map and prioritize tree planting and maintenance efforts.
- Apply for funding to implement the tree planting and maintenance.

Issue 2: *Availability of information related to proper tree care, or tree ordinances***Goal**

Have tree related information readily available through a variety of media.

Objective

Improve the availability of tree related information.

Actions

- Post Cottage Grove tree removal permit/ordinance on City website.
- Post tree planting and pruning information on City website. (or link to OSU Extension website)
- Post recommended street tree planting list.
- Continue Urban Forestry Committee sponsored pruning and planting workshops.
- Evaluate need for a City Urban Forester.

Issue 3: *Affordability of tree maintenance as trees grow larger and older***Goal**

Having an affordable means of managing mature landscaping.

Objective

Mitigate property owner costs associated with retaining large, mature trees.

Actions

- Evaluate possibility of expanding street tree leaf pick up to also include leaves/trimmings from other trees (especially in light of possible elimination of backyard burning).
- Increase awareness of urban tree salvagers that may offset cost of total tree removal.
- Establish grant or assistance program for low income home owners for tree maintenance activities.

Issue 4: *Safety of public while recreating, driving, or living near areas with trees*

Goal

Enhance safety to persons and property by identifying and mitigating potential tree hazards.

Objective

Identify potential tree hazards.

Actions

- Develop and maintain criteria for what constitutes a tree hazard using the Tree Risk Assessment methodology available from the Pacific Northwest Chapter of the International Society of Arboriculture.
- Prior to acquisition of land for parks or public places conduct a tree hazard assessment.
- Develop and implement a formal emergency response system for tree hazards on City streets, City parks, and greenspaces.
- Develop schedule to assess and remove hazards.
- Survey to identify potential safety issues to pedestrians, motorists, or cyclists from trees (low hanging branches blocking visibility of signs or crosswalks etc.).
- Develop a hazard tree identification and abatement program.

Implementation

Funding is a critical component of successful implementation. The following section identifies current and potential sources of funding for sustaining the urban forest.

Urban Forest Funding Sources

Grants

Grants have been used by the Urban Forestry Committee to fund tree giveaways, street tree infill planting, and Arbor Day Celebration Events. Potential grant funding opportunities include:

- Oregon Community Trees
- Alliance for Community Trees
- Arbor Day Foundation
- Street Tree Fee/Fund
- Oregon Department of Forestry
- Lane County

Street Tree Fee/Fund

The City's Development Code requires all subdivisions and partitions to install street trees. To prevent trees from being damaged, street trees are not installed until construction is completed. As a result, each development is assessed for the cost of acquisition, installation and one year of maintenance for the street trees required for a project. The Street Tree Fund is the collection of these assessments. The funds will then be used for proper tree planting, watering, and maintenance for one year.

Surface Water Management Fund

The Storm Fund provides resources for the City's annual fall leaf pick up program. Approximately 1,400 cubic yards of debris is removed from the street to minimize flooding.

General Fund

A portion of the General Fund is used to provide landscaping around City facilities and some non-park areas. In addition, this fund is used for street plantings and trimming trees for street clearance.

Proposed Implementation Strategy

- Develop standards and procedures for tree code enforcement.
- Develop standards and procedures for tree protection related to public improvement projects and subdivision development.
- Develop and maintain as part of the City's GIS and permit systems a publicly accessible inventory of protected trees.
- Develop a hazard tree identification and abatement program.
- Improve coordination among City departments related to the urban forestry program.
- Identify and secure long term funding sources for urban forestry projects.
- Take advantage of the Urban Forestry Committee's area of the City's website as a way to distribute educational information about tree selection, care and permit requirements.
- Establish a Register/Heritage tree program and conduct public outreach related to the benefits of the program.
- Develop site specific park/open space plans as needed.
- Assess effectiveness of current leaf/limb removal program.
- Develop an inventory (condition & opportunity) and mapping (GIS) of potential areas for street tree improvement projects.

Monitoring plan

Monitoring is key to the success of any planning effort. Monitoring ensures desired outcomes are met or to make changes if something isn't working well.

Data will be collected as resources allow. Such resources include volunteer efforts, availability of grant resources, and how often data provided by outside organizations is updated. Whenever possible, field inventories should be conducted during the summer months.

Available tools

The City is in the process of developing an enterprise GIS system that could be used to advance the City's efforts to manage the urban forest. Integrating urban forest data with the GIS database will promote data sharing across departments and the general public. Data collection efforts should be done in a way that facilitates use of GIS.

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Appendices

Appendix A: Table of Goals with priority, cost, and timeline

Appendix B: Arbor Day Foundation information on Tree City USA and Growth Awards

Appendix C: Ordinances

Appendix D: Links to related documents

Appendix A:

CITY OF COTTAGE GROVE - URBAN FOREST MANAGEMENT PLAN (5-YEAR)				
ACTION/PRIORITY/COST				
ACTION	PRIORITY (LOW, MEDIUM, HIGH)	COST	0-6 months, 6 months-1 year, 1-2 years, 3-5 years	PARTNER ORG'S
AMEND CITY APPROVED STREET TREE LIST TO REMOVE ASH TREES AND OTHER ADJUSTMENTS RELATED TO CLIMATE	HIGH	\$	0-6 MOS	
ADOPT POLICIES RELATED TO PEST AND DISEASE MITIGATION	MEDIUM	\$	1-2 YEARS	
COMPLETE TREE SURVEY AND ESTABLISH A 5-YEAR CYCLE OF RE-SURVEYING THE CITY	MEDIUM	\$\$\$	1-2 YEARS	
CONTINUE TO PARTICIPATE IN THE TREE CITY USA PROGRAM	HIGH	\$	ANNUAL	
SEEK OPPORTUNITIES TO EARN ANNUAL GROWTH AWARDS	MEDIUM	\$	ANNUAL	
CONDUCT AN ANALYSIS OF TREE CANOPY VS. INCOME TO IDENTIFY AREAS OF THE CITY THAT WOULD BENEFIT FROM ADDITIONAL TREES	HIGH	\$\$	1-2 YEARS	
ADD NEW CATEGORY OF TREES ON THE APPROVED TREE LIST TO INCLUDE TREES APPROVED FOR STORMWATER DETENTION & TREATMENT FACILITIES	MEDIUM	\$	0-6 MOS	CFWWC
HOLD AN ANNUAL TREE PLANTING EVENT TO	LOW	\$\$	ANNUAL	ADF

COINCIDE WITH ARBOR DAY/MONTH				
EXPLORE POTENTIAL INCENTIVES AND DISCOUNTS TO ENCOURAGE PROACTIVE TREE MAINTENANCE	MEDIUM	\$	1-2 YEARS	
CONSIDER THE ESTABLISHMENT OF A LOCAL HERITAGE TREE PROGRAM WITH SUPPORT OF THE PLANNING COMMISSION AND HISTORIC PRESERVATION COMMISSION	MEDIUM	\$	3-5 YEARS	TRAVEL
ENSURE THAT ALL OUTREACH EFFORTS ARE DESIGNED TO ENGAGE WITH TRADITIONALLY UNDERREPRESENTED COMMUNITY MEMBERS	MEDIUM	\$\$	1-2 YEARS	CS

Tree City USA Standards

To qualify as a Tree City USA community, you must meet four standards established by the Arbor Day Foundation and the National Association of State Foresters. These standards were established to ensure that every qualifying community would have a viable tree management program and that no community would be excluded because of size.

Four Standards for Tree City USA Recognition

STANDARD 1

A Tree Board or Department

Someone must be legally responsible for the care of all trees on city- or town-owned property. By delegating tree care decisions to a professional forester, arborist, city department, citizen-led tree board or some combination, city leaders determine who will perform necessary tree work. The public will also know who is accountable for decisions that impact community trees. Often, both professional staff and an advisory tree board are established, which is a good goal for most communities.

The formation of a tree board often stems from a group of citizens. In some cases a mayor or city officials have started the process. Either way, the benefits are immense. Involving residents and business owners creates wide awareness of what trees do for the community and provides broad support for better tree care.

STANDARD 2

A Public Tree Care Ordinance

Cities and towns in the U.S. have both public and private property within their jurisdictional boundaries. Trees on public property are a public good, and caring for these trees is a vital element of the Tree City USA program. A public tree care ordinance or law forms the foundation of a city's tree care program; it provides an opportunity to set good policy and back it with the force of law when necessary.

A key section of a qualifying ordinance is one that **assigns authority over public trees**. This could be through the establishment of a tree board or forestry department—or both—and gives one of them the responsibility for public tree care (as reflected in Standard 1).

Qualifying ordinances will also **provide clear guidance for planting, maintaining, and/or removing trees from streets, parks, and other public spaces**.

Importantly, a public tree care ordinance protects public trees at all times, not just during the development process. In other words, the policies for tree planting, care, and removal

of trees codified in the ordinance must be continuous, not triggered by an event like landscaping requirements or the land development process.

Beyond that, the ordinance should be flexible enough to fit the needs and circumstances of the particular community. There are many ways to strengthen a tree ordinance, including the task of crafting and implementing a plan of work, a clause protecting public trees from damage, or the requirements for tree care businesses.

For tips and a checklist of important items to consider in writing or improving a tree ordinance, see Tree City USA Bulletin #9.

STANDARD 3

A Community Forestry Program With an Annual Budget of at Least \$2 Per Capita

City trees provide many benefits—clean air, clean water, shade and beauty to name a few—but they also require an investment to remain healthy and sustainable. By providing support at or above the \$2 per capita minimum, a community demonstrates its commitment to grow and tend these valuable public assets. Budgets and expenditures require planning and accountability, which are fundamental to the long-term health of the tree canopy and the Tree City USA program.

To meet this standard each year, the community must document at least \$2 per capita toward the planting, care and removal of city trees—and the planning efforts to make those things happen. At first this may seem like an impossible barrier to some communities. However, a little investigation usually reveals that more than this amount is already being spent on tree care. If not, this may signal serious neglect that will cost far more in the long run. In such a case, working toward Tree City USA recognition can be used to reexamine the community's budget priorities and redirect funds to properly care for its tree resources before it is too late.

STANDARD 4

An Arbor Day Observance and Proclamation

An effective program for community trees would not be complete without an annual Arbor Day ceremony. Citizens join together to celebrate the benefits of community trees and the work accomplished to plant and maintain them. By passing and reciting an official Arbor Day proclamation, public officials demonstrate their support for the community tree program and complete the requirements for becoming a Tree City USA!

This is the least challenging—and probably most enjoyable—standard to meet. An Arbor Day celebration can be simple and brief or an all-day or all-week observation. It can include a tree planting event, tree care activities or an award ceremony that honors leading tree planters. For children, Arbor Day may be their only exposure to the green world or a springboard to discussions about the complex issue of environmental quality.

The benefits of Arbor Day go far beyond the shade and beauty of new trees for the next generation. Arbor Day is a golden opportunity for publicity and to educate homeowners about proper tree care. Utility companies can join in to promote planting small trees beneath power lines or being careful when digging. Fire prevention messaging can also be worked into the event, as can conservation education about soil erosion or the need to protect wildlife habitat.

Tree City USA Growth Award Activities



Category A: Building the Team

Budgets

A1. Budget Increase (4 points) eligible each year

At the start of the upcoming fiscal year, the municipal forestry budget has been approved for an increase over the trailing three-year average, as reported on Tree City USA applications.

A2. Donation Account Created (4 points) one time only

A new special account was established during the year to accept public donations for tree planting and care, arboretum improvements, memorial tree groves, or other community forestry activities, to augment General Fund expenditures.

A3. Grant Applications (3 points) eligible each year

Two or more applications for grant funding were submitted (not necessarily awarded) during the year to accomplish specific community forestry projects or programs.

A4. New Funding Source (5 points) one time, per source

A new, permanent source of municipal or private funding was enacted or awarded during the year (such as tree mitigation funds generated by commercial development), resulting in a 5% or greater increase for the current municipal forestry program budget.

A5. Emergency Appropriation (2 points) eligible each year

A supplemental budget process was used during the year to prioritize forestry activities during insect/disease outbreaks, storms, drought, wildfire, or other city emergencies.

Staff

A6. City Forester (10 points) one time only

For the first time and during the year, the city hired a professional urban forester with the education (degree in forestry, urban forestry, or closely related field) and expertise (such as ISA credentials, or state certification) to provide leadership for the community forestry program.

A7. Supervising Arborist (10 points) one time only

For the first time and during the year, the city employed a staff position for an ISA or state-certified arborist or added this credential to an existing job description. The position is responsible for overseeing safety and performance standards for all tree workers in the department.

A8. Allied Professionals (5 points) **one time only, per position**

One or more individuals with urban forestry or allied professional credentials (e.g. Landscape Architect, Urban Planning, Horticulture) were added to the community forestry team during the year (could be municipal staff or consultant).

A9. Additional Credentials (5 points) **one time per individual, per credential**

Additional Certified Arborists or Certified Tree Workers were credentialed or added to the community forestry team during the year. Includes additional state board, TCIA, or ISA credentials (Municipal Specialist, Utility Specialist, Board Certified Master Arborist, Certified Treecare Safety Professional, Tree Risk Assessment Qualification, etc.) for existing staff members.

A10. Green Jobs (4 points) **eligible each year**

One or more individuals without formal experience in urban forestry—particularly youth, women, minorities, or other underserved segments of society—were provided internships, apprenticeships, job corps or other training and work opportunities within the urban forestry program. Include programs run by the community non-profit partner. Work status includes temporary, part-time, and full-time positions.

Training

A11. Tree Worker Safety Program (4 points) **eligible each year**

A safety program for city tree workers was conducted during the year, with documented meetings, topics, and training agendas. Program must conform to ANSI Z133 Safety Standard (such as the Tree Care Industry Association's Tailgate Safety Program).

A12. Continuing Education (3 points) **eligible each year**

During the year, the city supported, sponsored, or sent tree workers, professional staff, tree board members, or non-profit partner employees to state-, ISA-, or TCIA-sanctioned educational opportunities, with at least 10 hours of continuing education credits documented.

A13. Arborist Exchange (3 points) **eligible each year**

During the year, a member of the city forestry team or the community non-profit group participated in an exchange program sponsored by either the Society of Municipal Arborists or the Alliance for Community Trees. Both 'sending' and 'receiving' communities are eligible for this activity.

A14. Department Accreditation (10 points) **one time only**

During the year and for the first time, the forestry department received official accreditation from the Society of Municipal Arborists.

A15. Leadership Training (5 points) **one time per course, per individual**

During the year, a community forestry team member (city or non-profit partner) graduated from Society of Municipal Arborist's Municipal Forestry Institute program or the ISA Leadership Academy.

Category B: Measuring Trees & Forests

Tree Canopy

B1. Urban Tree Canopy Assessment (10 points) eligible every 5 years

During the year, the city conducted a high-resolution (1-meter resolution, or better) assessment of tree canopy across the entire community (public & private lands) using professional imaging software, LIDAR, multi-spectral and/or other specialized imagery. Includes updates to an earlier assessment to calculate canopy change.

B2. Canopy Sampling Estimate (5 points) eligible every 5 years

During the year, the city conducted a 'snapshot' assessment of city-wide tree canopy using sampling technique or online tools (*i-Tree Canopy*: minimum 1,000 sample points). The summary report delivers the area of 'tree canopy' and 'plantable space,' used to calculate 'potential canopy.'

B3. Land Cover Analysis (5 points) eligible every 5 years

During the year, the city performed an analysis of tree canopy, land use and/or Census data to prioritize tree planting and canopy retention programs. Analysis consistent with *i-Tree Landscape* assessments using NLCD datasets (30-meter resolution).

Tree Inventory

B4. Management Inventory (10 points) eligible every 5 years

During the year, the city completed a detailed, spatial (i.e. GPS locations) inventory of street trees (or managed park trees, or both), including planting spaces, for updating the inventory for planting, maintenance and removals.

B5. Management Inventory System (7 points) one time only, per system

During the year, the city (or partner group) purchased and installed a computerized system for tracking the municipal tree inventory and management activities for public trees. It must incorporate planting spaces, location data (i.e. GIS), and allow for maintenance updates following treatments.

B6. Tree Inventory Portion (3 points) eligible each year

During the year, a portion of the public tree-by-tree inventory was completed or updated and entered in the management system.

B7. Street Tree Survey (6 points) eligible every 5 years

During the year, the city completed a sample-based survey of street trees to guide planning efforts for public right-of-way property. Collected data must include DBH and species for each tree (conforming to *i-Tree* protocols) and include potential planting sites.

Urban Forests

B8. Natural Areas Sampling (5 points) eligible every 5 years

During the year, all the natural areas within the city (or a significant portion) were sampled (min. one sample plot/acre), including evaluations of ecological value or condition.

B9. Ecosystem Services Assessment (10 points) eligible every 10 years

During the year, the city (or partner groups) completed a sample-based survey of trees on private and public property that conforms to *i-Tree Eco* protocols. Projects include 'intensified' Urban Forest Inventory & Analysis (UFIA) sampling by state forestry personnel and must include a report on the structure, function and value of the urban forest.

B10. Periodic Update (5 points) only eligible after B9

During the year, staff, volunteers, or state agency personnel updated plot-based data for an ecosystem services assessment on a portion of sample plots and issued a report for the community.

B11. Forest Health Threat Assessment (5 points) eligible every 5 years

During the year, staff, volunteers, and/or state agency personnel conduct a tree health threat assessment in preparation for an insect or disease outbreak for a significant segment of the urban forest (managed trees or natural areas) and issue a report to the community.

Category C: Planning the Work

Policies

C1. Ordinance Clauses (5 points) eligible each year, for new clauses

During the year, one or more of the following clauses were added to the public tree care ordinance:

- a) care of street trees by adjacent owners
- b) duties of tree board
- c) nuisance trees on private property
- d) protection of public trees
- e) arborist licensing or registration
- f) interference with city officers/tree board
- g) utility practices and notification
- h) permits required to plant/remove trees
- i) prohibition against tree topping
- j) establishing tree care standards

C2. Species List (3 points) eligible each year

During the year, the city established as policy a list of tree species that are eligible (recommended) or ineligible (prohibited) for planting on public property. List should be published as a stand-alone document, appended to the tree management plan, or included in the standards & care manual (E11).

C3. Risk Management Policy (8 points) one time only

During the year and for the first time, the city adopted a written tree risk management policy for inspecting and mitigating reported tree problems, including a timetable for mitigating potential hazards.

C4. Private Tree Protection Ordinance (9 points) one time only

During the year and for the first time, the city adopted a new ordinance section within city development code that details requirements for tree protection, mitigation, and non-compliance penalties for trees on private property during the land development process. Includes standards for tree protection, trenching/boring in critical root zones (CRZs), pre-construction mulching, root or limb pruning, and watering.

C5. Canopy Cover Goal (8 points) one time only

During the year and for the first time, the city adopted a city-wide canopy goal as official policy. Goal is based on an analysis of current and potential canopy and should be scaled to the neighborhood, land use, or district level, to direct tree planting or retention programs toward areas with the lowest tree cover.

C6. Policy or Plan Update (5 points) eligible every 5 years, per title

Any of the city's policies or plans for community trees were updated during the year to reflect goals and objectives for the upcoming five-to-ten-year period.

Plans

C7. Annual Work Plan (3 points) eligible each year

City staff and/or tree board assigned appropriate targets and budget for tree planting, maintenance, and removals on public property for the upcoming fiscal year. Targets can be reported from current Management Plan (C9) if one exists.

C8. Single-Issue Plans (5 points) one time only, per title

During the year, the city adopted a written plan to address one or more tree care issues, such as:

- a) tree planting
- b) emergency/storm response
- c) insect/disease response
- d) natural areas management
- e) wildfire preparedness
- f) tree risk management
- g) species adaptability to climate change

C9. Management Plan (10 points) one time only

During the year and for the first time, the city completed a detailed, multi-year (5-10 years) scope of work, with budget targets, for the planting, care and removal of trees on public property (parks, streets, public buildings, etc.), based on data from an existing public tree inventory (meets requirements of B4).

C10. Section Plan (5 points) **one time only, per section**

During the year, a management plan (see C9) was established for a significant subset of public trees: a neighborhood (such as downtown), a major park, all streets, etc.

C11. Urban Forest Master Plan (10 points) **one time only**

During the year and for the first time, a general assessment and policy summary for the community's entire urban forest was adopted, with guidance from external partners and from city departments that impact urban trees. The Master Plan provides consistency between policies and plans of different city departments, and partner groups.

C12. Green Infrastructure Plan (10 points) **one time only**

A community, county, or regional plan for connected openspace corridors and existing natural areas was completed during the year. Plan must include description of ecological features and functions, along with some level of parcel prioritization and a discussion of funding mechanisms for protection.

Category D: Performing the Work

Planting Trees

D1. Tree Planting Program (8 points) **one time only, per program**

During the year, a new program (with funding source) was established for installing trees on public or private property (such as 'Utility Friendly Trees,' 'Trees For Anytown,' 'NeighborWoods,' etc.). Program should integrate with the city tree planting plan (C8), but may be organized, funded, and managed by a community non-profit or utility partner.

D2. Tree Planting Projects (2 points) **eligible each year**

During the year, the city, local utility, or non-profit partner continued to install new trees as part of an existing program (see D1) to plant trees on public or private property.

D3. Survival Monitoring (4 points) **eligible each year**

During the year, sponsors of community tree planting programs (see D1) conducted field inspections and reported survival data on trees planted over the past year or years.

D4. Community Tree Nursery (5 points) **one time only, per facility**

During the year and for the first time, the city or partner organization established a tree nursery to supply appropriate trees for local tree planting programs (see D1). Facility is not required to be within city limits to qualify.

D5. Planting Site Evaluation (3 points) **eligible each year**

During the year, sponsors of community tree planting programs evaluated all proposed planting sites and either:

- 1) matched tree species to planting sites based on those parameters (such as the Urban Site Index protocol), or;
- 2) mitigated space or soil conditions (removed concrete, added organic matter, etc.).

D6. Planting-to-Removals Ratio (3 points) eligible each year

During the year, the number of trees planted on public property by the city or partner organizations was greater than the number of public trees removed, for all reasons, as reported on the Tree City USA application.

Maintaining Trees

D7. Tree Reporting Process (5 points) one time only

During the year, the city established a new system or process for citizens and city staff to report tree safety issues (or other complaints) to the forestry department or manager (e.g. 3-1-1 system, online form, etc.). System (or staff) records the time between report and mitigation action.

D8. Young Tree Training (4 points) eligible each year (not with D9)

A program of care for newly planted (<5 years old) trees was performed during the year. As needed, each tree was: pruned to improve structure and eliminate root defects; mulched; watered; and/or treated for pests/disease.

D9. Systematic Maintenance (5 points) eligible each year (not with D8)

During the year, city forestry staff performed systematic preventive and restorative maintenance (as necessary) on 10% or more of public trees. Work includes insect and disease control that follows Integrated Pest Management (IPM) principles but does not include tree risk evaluations or mitigation (see D11, D12).

D10. Utility Tree Care (1 point) eligible each year

The utility responsible for maintaining trees within utility ROWs was a Tree Line USA company for the year, or the utility contractor performing work in the community qualified as a TCIA Accredited Utility Contractor.

Tree Risk Management

D11. Annual Risk Survey (4 points) eligible each year

During the year, city staff performed a 'limited visual' survey of public trees in (at least) high priority zones, as mapped in Tree Risk Management plan (see C8-f), in order to identify potential hazards (follows ANSI A300 Part 9 & ISA BMP for Tree Risk Assessment).

D12. Tree Risk Mitigation (5 points) eligible each year

During the year, city staff prioritized and performed or directed mitigation work for 100% of tree problems identified by staff (see D11) or reported by the public (see D7).

D13. Mock Exercise (4 points) eligible each year

During the year, city staff performed a mock emergency drill for all departments to simulate response to natural or manmade disasters. Scenario must include potential impacts by trees on transportation and power systems.

D14. Urban Forest Strike Team (5 points) eligible each year

During the year, city received assistance from—or sent qualified staff to—a state or national Urban Forest Strike Team to assist with public tree evaluations following a natural disaster or forest pest infestation.

Recycling & Reuse

D15. Tree Debris Recycling (4 points) eligible each year

During the year, 100% of the leaf and woody debris generated by municipal tree care activities (incl. contractors) was delivered to recycling or wood processing facilities and not sent to municipal or regional landfills.

D16. Public Installations (2 points) eligible each year

Recycled wood products from municipal operations (e.g. logs, mulch or compost) were used in landscape settings during the year. Also include using solid wood for benches, supports or other rudimentary structures, as well as public art installations.

D17. Urban Wood Utilization (4 points) eligible each year

A portion of the woody material generated from tree care operations during the year was converted to high-quality end products (e.g. furniture, cabinets, flooring, lumber, etc.) or another higher value product (e.g. fuel pellets, pallets, or pulpwood), either through city contract, public auction, or donation.

D18. Processing Facility (5 points) one time only, per facility

During the year, the city or a business partner began operating a processing plant that utilizes municipal wood residue (such as biofuel, wood pellets, lumber, etc.).

Protecting Trees

D19. Tree Protection (4 points) eligible each year

During the year, trees on public property and/or private commercial development sites were inspected and monitored by qualified staff. Required tree protection measures during the construction period conform to ANSI A300 standards and ISA BMPs, as prescribed in city code (see C1 or C4).

D20. Enforcement Proceedings (3 points) one time only, per project

During the year, violations of the tree protection code were enforced through administrative action (such as stop work orders, citations, withholding of occupancy permit, performance bond, etc.) or criminal penalties.

D21. Tree Rescue (2 points) eligible each year

One or more trees from public or private construction sites were relocated during the year to suitable sites on public property, either as part of capital improvement or commercial development project through special agreement.

Natural Areas

D22. Land Stewardship (2 points) eligible each year

One or more city-owned natural areas were inspected and maintained to facilitate recreation, other public uses, ecological health, watershed value, or carbon sequestration. Public safety measures such as waste removal, hazard tree abatement, and trail maintenance are considered primary actions for the year.

D23. Restoration Work (3 points) eligible each year

During the year, city staff or non-profit partners and volunteers conducted restoration practices (such as prescribed fire, invasive species removal, native species planting/seeding, etc.) on city-owned natural areas to improve the ecological value of the land, as prescribed in the city's natural areas plan (see C8).

D24. Forest Health Management (4 points) eligible each year

During the year, city staff or contractors performed forest stand manipulations (such as thinning, timber stand improvement, overstory removal, regeneration harvest, wildlife fencing, etc.) on city-owned natural areas to facilitate natural forest succession processes or to improve forest health, as prescribed in the city's natural areas plan (see C8). Include practices to address forest insect/disease outbreaks that follow Integrated Pest Management principles (trunk injection, pheromone inhibitors, buffer cuts, etc.).

D25. Openspace Acquisition (5 points) eligible each year

Openspace land (such as forest, woodland, prairie, riparian corridors, etc.) was acquired during the year, either through purchase, donation, or long-term agreement (such as a conservation easement) and will be made available for public use.

Category E: The Community Framework

Collaboration

E1. Citizen Tree Board (10 points) one time only

During the year, the city established by ordinance (see C1-b) an active citizen tree board, with clear duties to provide input into the city's tree management program and to contribute to policy, planning, and celebration efforts.

E2. Departmental Communication (3 points) eligible each year

During the year, the city held one or more meetings among city departments (such as city manager, engineering, planning, forestry, parks, public works, water, streets, transportation, etc.) to coordinate urban forestry policy or project activities, such as planting, moving, or protecting trees, on public or private property.

E3. Non-Profit Tree Group (10 points) one time only, per organization

During the year, an independent non-profit organization dedicated to trees was chartered in the community and began delivering programs in the community, including tree planting, tree care, and education. Efforts may be focused on public or private property.

E4. Cooperative Partnership (4 points) eligible each year

During the year, a new cooperative agreement or contract was established between two or more entities*, resulting in any of the following:

- 1) additional tree planting/establishment
- 2) improved tree care practices (cycle pruning, tree monitoring, consulting services, wood residue recycling, etc.)
- 3) shared staff position
- 4) enhanced tree procurement (grow-out contracts).

Possible entities*:

- a) city government,
- b) electric service utility,
- c) neighboring municipality,
- d) non-profit tree group,
- e) private nursery, wood processor, or arboriculture firm.

E5. Alliance for Community Trees Membership (1 point) eligible each year

During the year, the city or the community non-profit group delivering urban forestry services in the community was a member of the Alliance for Community Trees (ACT).

Volunteers

E6. New Tree Board Member (2 points) eligible each year

During the year, the Tree Board added one or more new members, due to expansion, retirement, or term limits.

E7. Service Organizations (2 points) eligible each year (not with E8)

During the year, community service organizations conducted one or more community forestry projects, such as tree planting, pruning, mulching, or education. Include projects led by organized neighborhood associations and Tree Campus K-12, Tree Campus Higher Education, or Tree Campus Healthcare campuses.

E8. Volunteer Tree Care (4 points) eligible each year (not with E7)

During the year, a program (i.e. TreeKeepers, Citizen Foresters, etc.) was in place to deliver training and to utilize citizen volunteers for basic tree planting and care activities (such as mulching, pruning, watering). Program is managed by either city staff or non-profit partner organization (see E3), and volunteer opportunities are regular and ongoing.

E9. Volunteer Coordinator (5 points) one time only

During the year, the city or its non-profit partner organization hired a volunteer coordinator (min. 50% of job duties) to develop and coordinate volunteer resources for tree planting and care projects on city property.

E10. Citizen Science (3 points) eligible each year

During the year, the city or its non-profit partner organized a 'citizen science' project for the community to collect data that supports an urban forestry initiative. Projects include tree inventory, phenology, species monitoring, etc., and include a data report.

Outreach

E11. Public Tree Care Guide (6 points) one time only

During the year and for the first time, the city published (online or print) a guide for staff and the public on city laws, policies, and best practices for tree planting and care, as a companion to the tree care ordinance. The guide recommends practices that conform to ANSI Standards for arboricultural practices (A300), safety (Z133), and nursery stock (Z60.1), as well as applicable ISA BMPs.

E12. Community Forestry Report (3 points) eligible each year

During the year, tree board, tree commission, and/or city staff members delivered to council and the public an accomplishment report for community forestry activities during the most recently completed fiscal year. Include "State of the Urban Forest" reports that describe the current status of the community forest resource.

E13. Publications (3 points) eligible each year

During the year, the city or non-profit partner published and distributed new or updated materials for the public about tree planting and care (such as the list of recommended street trees, pruning instructions, etc.).

E14. Publicity Campaign (5 points) one time only, per campaign

During the year, the city or non-profit partner launched a media campaign to inform citizens about the importance of tree planting, care, or other important tree issues in the community.

E15. Environmental Equity (4 points) eligible each year

During the year, the city or non-profit partner conducted a series of community outreach efforts (such as surveys, meetings, social media, trainings, etc.) to residents and other community service groups in targeted areas to address environmental equity. Outreach should address tree planting, care, or removal; improved access to natural resources; or social factors in the neighborhood that lead to increasing canopy.

Awareness

E16. Tree Festival (4 points) eligible each year

During the year, the city or non-profit partner held a tree-themed, community-wide event or festival (such as Arborfest, Dogwood Festival, Oak Festival, etc.) to build public awareness of trees.

E17. Interpretive Program (2 points) eligible each year

During the year, the city or a non-profit partner delivered one or more ongoing, interpretive programs for the public focused on trees, woodlands, or forests (such as tours of outstanding trees, an arboretum, nature center, heritage trees (largest, historic), forest bathing, etc.).

E18. Awards Program (2 points) eligible each year

During the year, community awards or other formal recognition were issued to individuals and supporting organizations for tree planting and care projects.

E19. External Recognition (2 points) **eligible each year**

During the year, the community received an award from a regional, state, or national organization (such as an ISA Chapter, state urban forestry council, America In Bloom, Arbor Day Foundation, etc.) for its community forestry program or projects.

E20. Arbor Day Events (2 points) **eligible each year**

During the year, the city or non-profit partner conducted additional Arbor Day events—beyond the official city observance—at local primary or secondary schools.

Education

E21. Tree Care Workshops (3 points) **eligible each year**

During the year, the city or non-profit partner delivered a series of workshops (two or more) on various aspects of tree care for homeowners, businesses, members of the public, commercial arborists, or the green industry.

E22. Education Facility (5 points) **one time only, per facility**

During the year, the city or non-profit partner opened a new education facility to the public (such as a nature center). Educational programming at the facility must include the ecological features of trees, forests, or woodland ecosystems in that location.

E23. Youth Education (2 points) **eligible each year**

During the year, the city or non-profit partner delivered formal youth education programming about trees and forests (such as 4-H, Project Learning Tree, Tree Campus K-12, etc.) to help create the next generation of environmental stewards.

E24. Outdoor Classroom (2 points) **eligible each year**

During the year, the city or non-profit partner supported the installation of one or more new outdoor classrooms at a school, library, park, daycare, or other facility dedicated to the care and education of children.

Chapter 2.30

URBAN FORESTRY COMMITTEE

Sections:

- 2.30.010 Establishment.
- 2.30.020 Membership.
- 2.30.030 Officers.
- 2.30.040 Duties and responsibilities.
- 2.30.050 Report.

2.30.010 Establishment.

There is established an urban forestry committee of the city. The purpose of this committee is to act as an advisory body to the city council. (Ord. 2846 §2(part), 2000)

2.30.020 Membership.

A. The urban forestry committee shall consist of seven members appointed by the city council to hold office for a term of three years. The terms of members of the committee shall overlap with no more than three members' terms expiring in a given year.

B. The members shall serve at the pleasure of the council.

C. If a vacancy occurs, the council shall appoint new members for the unexpired term.

D. No compensation shall be paid or allowed any member of the committee. (Ord. 2846 §2(part), 2000)

2.30.030 Officers.

At the first meeting each calendar year the committee shall elect from its members a chair, vice-chair and secretary. (Ord. 2846 §2(part), 2000)

2.30.040 Duties and responsibilities.

The committee shall:

A. Serve as an advisory committee to the city council regarding the community's urban forest and make recommendations regarding the development and improvement of the urban forest to the city council;

B. Assist with the development and implementation of an urban forestry plan;

C. Seek grants and other funding assistance to improve the quality of the urban forest;

D. Administer, with the approval of the city council, a memorial tree program;

E. Act in an advisory capacity to the city manager and to all city departments regarding tree maintenance and related issues in the city and on the city's properties;

F. Monitor the health and condition of the city's urban forest;

G. Provide information to the public regarding proper tree selection, planting and care to improve the quality of the urban forest. (Ord. 2846 §2(part), 2000)

2.30.050 Report.

The committee shall present an annual written report in May to the city council regarding the condition of the urban forest and the activities of the urban forestry committee. (Ord. 3079 §1, 2017; Ord. 2846 §2(part), 2000)

14.32.400 Street Trees

Street trees shall be planted for all developments that are subject to Subdivision, Master Plan or Site Design Review. Requirements for street tree planting strips are provided in Section 14.34.100, Transportation Standards. Planting of street trees shall generally follow construction of curbs and sidewalks; however, the City may defer tree planting until final inspection of completed dwellings to avoid damage to trees during construction. The planting and maintenance of street trees shall conform to the following standards and guidelines and any applicable road authority requirements:

- A. Growth Characteristics.** Trees shall be selected based on climate zone, growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. The following should guide tree selection by developers and approval by the City:
1. Provide a broad canopy where shade is desired and over pedestrian walkways or parking areas, except where limited by available space or except in section 4.
 2. Use low-growing trees for spaces under low utility wires.
 3. Select trees that can be “limbed-up” to comply with vision clearance requirements.
 4. Use narrow or “columnar” trees where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street.
 5. Use species with similar growth characteristics on the same block for design continuity.
 6. Avoid using trees that are susceptible to insect damage and trees that produce excessive seeds or fruit.
 7. Select trees that are well-adapted to the environment, including soil, wind, sun exposure, temperature tolerance, and exhaust. Drought-resistant trees should be chosen where they suit the specific soil type.
 8. Select trees for their seasonal color if desired.
 9. Use deciduous trees for summer shade and winter sun, unless unsuited to the location due to soil, wind, sun exposure, annual precipitation, or exhaust.
 10. The diameter of the tree trunk at maturity shall not exceed the width and size of the planter strip or tree well.
- B. Caliper Size.** The minimum diameter or caliper size at planting, as measured 4 feet above grade, shall be 2 inches.
- C. Spacing and Location.** Street trees shall be planted within the street right-of-way within existing and proposed planting strips or in sidewalk tree wells on streets without planting strips, except when utility easements occupy these areas. Selected street tree species should be low maintenance and not interfere with public safety. Street tree spacing shall be based upon the type of tree(s) selected and the canopy size at maturity and, at a minimum, the planting area shall contain 16 square feet, or typically, 4 feet by 4 feet. In general, trees shall be spaced no more than 30 feet apart, except where planting a tree would conflict with existing trees, retaining walls, utilities and similar physical barriers. All street trees shall be placed outside utility easements. If preexisting utility easements prohibit street trees within the sidewalk, required trees may be located in the front yard setback or within other required landscape areas as approved by the approval body.
- D. Soil Preparation, Planting and Care.** The developer shall be responsible for planting street trees, including soil preparation, ground cover material, staking, and temporary irrigation for three years after planting. The developer shall also be responsible for tree care (pruning, watering, fertilization, and replacement as necessary) during the first three years after planting, after which the adjacent property owners shall maintain the trees.
- E. Street Tree List.** See the following list for appropriate street trees. The developer may plant a tree species not included on this list when approved by the Community Development Director.

Table 14.32.400(F) TREES APPROVED FOR STREET TREE PLANTING

****THE SPACING OF STREET TREES WILL BE ON AVERAGE 30 FEET ON CENTER, EXCEPT IN SPECIAL PLANTING DESIGNATED OR APPROVED BY A LANDSCAPE ARCHITECT.**

Class I Ultimate height to thirty feet; for use where planter strip is less than four feet, or where there are overhead wires.

List of Acceptable Trees for Class I

Flowering Ash	Glorybower	Shadbush
Bitter Cherry	Goldenrain tree	Shantung Maple
Chitalpa	Lavelle Hawthorne	Silver Bell
Flowering Dogwood	Japanese Lilac	Tartarian Maple
Eastern Redbud	Amur Maple	Trident Maple
Franklin	Paperbark Maple	

Class II Ultimate height thirty-one to fifty feet, for use where planter strip is four to eight feet.

List of Acceptable trees for Class II

Claret Ash	Chinese Scholar Crimson	Hedge Maple
European Ash	Chinese Elm	Red Maple
Green Ash	American Hornbeam	Schwedleri Norway Maple
Modesto Ash	King Norway Maple	Forest Green Hungarian Oak
Oregon Ash	Columnar Norway Maple	Westminister Globe Oak
Tupelo		

Class III Ultimate height fifty-one feet and above, for use where planter strip is greater than six feet.

List of Acceptable Trees for Class III

White Alder	Douglas Fir	Northern Red Oak
Blue Ash	Gingko (Male Only)	Pin Oak
White Ash	Western Hemlock	Red Oak
White Birch	Japanese Zelkova	Scarlet Oak
American Birch	Katsura	Shumard Oak
Columnar European Beech	Kentucky Coffee Tree	Swamp White Oak
European Beech	London Plane	White Oak
Bald Cypress	Norway Maple	Willow Oak
Atlas Cedar	Sugar Maple	Oregon Myrtle
Deodar Cedar	Sycamore Maple	Pecan
Western Red Cedar	Burr Oak	

Common Hackberry	English Oak	
Trees Recommended for Riparian Soils**		
Red Alder	American Elm	Oregon Oak Red Oak
Green Ash	Little Leaf Linden	White Oak
Oregon Ah	Big Leaf Maple	Sweetgum
White Ash	Red Maple	Tupelo
Western Catalpa	Silver Maple	Gingko (Male Only)
Bald Cypress	Sugar Maple	Hawthorne
Box Elder	Sycamore Maple	Western Hemlock

**Riparian soils are soils that are considered "flooded" or "wet land" sites.*

***Above trees are tolerant of riparian soils, but can be used in other soil conditions as well.*

Trees Recommended for right-of-way use

**RIGHT-OF-WAY TREES ARE MAXIMUM 35 FEET IN CANOPY SPREAD DUE TO POSSIBLE UNDERGROUND UTILITIES, RIGHT-OF-WAY TREES ARE SUBJECT TO REVIEW BY COMMUNITY DEVELOPMENT DEPARTMENT; SEE RECOMMENDATIONS FOR PLANTING*

Class I	Class II	Class III
Flowering Ash	Claret Ash	White Alder
Bitter Cherry	European Ash	White 'paper' Birch
Chitalpa	Oregon Ash	Common Hackberry
Flowering Dogwood	Columnar Norway Maple	Male Gingko
Eastern Redbud	Hedge Maple	Sugar Maple
Franklin	Tupelo	
Glorybower	Forest Green Hungarian Oak	
Goldenrain tree		
Lavelle Hawthorne		
Amur Maple		
Paperbark Maple		
Shantung Maple		
Tartarian Maple		
Trident Maple		
Shadbush		
Silver Bell		
Japanese Lilac		

(Ord. 2959 §5(Exh. A (part)), 2007. Formerly 3.2.400)

Appendix D:

Parks and Recreation Master Plan (s)

Urban Renewal Plans (none at this time)

Specific elements of the Comprehensive Plan

Design and landscaping guidelines and development standards (Public Works Specifications)

Ordinances, including the local tree ordinance

Cottage Grove Municipal Code; Titles 2, 12, and 14 (tree protection, street trees, landscaping, screening/buffering, Urban Forestry Committee)

Vision 2037