

URBAN FORESTRY

Service Description

Eugene's urban forest provides environmental, social and health benefits for its citizens through a growing canopy along city streets, in parks and natural areas, and on private property. Approximately 100,000 street trees are located along more than 500 miles of city streets. Planted and naturally-seeded trees are found in Eugene's park system, which consists of over 600 acres of developed parks and more than 2,900 acres of natural lands. Trees increase property values and livability through their beauty; their presence along roads calms and slows traffic and increases the life of asphalt pavement; trees improve water quality by reducing storm water runoff through interception, absorption and filtration; they clean the air by absorbing pollutants and particulates and giving us oxygen to breathe; and they provide energy savings by shading and cooling the urban environment.

Public safety is a high priority in this service—response to public calls about tree hazards involves inspection, investigative reporting, processing for public comment, and mitigation pruning or removal of about 200–300 dangerous trees per year. Enhancement of the urban forest is also important—around 1,000 trees are planted annually.

Maintenance activities include hazard abatement, storm and emergency response, street and sidewalk clearance pruning, traffic vision and sign clearance pruning, and request pruning. Staff also provide enhancement, planning and preservation services, which include the NeighborWoods and Tree Stewards volunteer planting and pruning programs, new development tree establishment, hazard detection and removal, and street tree removal permit review and enforcement.

Historic Perspective

- 1963 City produced report titled **A Street Tree Program for Eugene**, recommending tree planting and maintenance of street trees.
- 1974 **Tree Preservation Ordinance** regulating tree removal from private property.
- 1984 **Historic Street Tree Charter Amendment** protecting street trees over 50 years old within 1915 City Limits boundary.
- 1985 Mayor's Tree and Beautification Commission formed.
- 1987 **Entrance Beautification Study** conducted.
- 1989 Mayor's Tree and Beautification Commission changed to Tree Commission.
- 1992 **Urban Forest Management Plan** adopted.
- 1993 Tree Commission directed to sunset.

- 1994 Intergovernmental Agreement establishing street tree pruning standards and citizen notification process for work performed by Eugene Water and Electric Board.
- 1995 Ordinance 7.280 passed requiring new development to include street trees.
- 1999 Updated Administrative Rules related to the Tree Preservation Ordinance.
- 2000 Revised tree regulations in Chapter 6 and 9 adopted, appealed and remanded.
- 2001 Administration of tree regulations and plan review for non-right-of-way trees transferred to Planning and Development Department.
- 2005 Street tree inventory initiated to comply with American Public Works Association accreditation process.

Citizen Involvement

This service is directed in part by the development of park management plans, such as the Hendricks Park Forest Management Plan and the Skinner's Butte Master Plan. Citizens also provide opinions and suggestions through public forums as well as at hearings at Planning Commission and Council meetings and through telephone calls and written correspondence. The City Council adopts policies and plans that affect the Urban Forestry Service. Some examples of these plans and policies include the Urban Forestry Management Plan, individual refinement plans (Whiteaker Plan, South Hills Study), and various policies relating to trees and parks in the Parks and Recreation Plan.

Customer Input

Public Works Parks and Open Space Division staff receive informal input by telephone and email from property owners or neighborhood/societal groups. Often, Urban Forestry staff initiate these contacts by posting notices of tree removals in neighborhoods or sending postcard reminders to volunteers of the NeighborWoods and Tree Stewards Programs. Staff regularly attend neighborhood association meetings and answer questions about trees and parks. Support for internal customers such as Public Works Engineering is given by presenting information and answering tree-related questions about specific street projects at public open houses. Door hanger post cards soliciting customer feedback on satisfaction with street tree services are delivered when pruning adjacent trees. Urban forestry web pages provide information and solicit input and questions on all program areas.

Mission

To preserve, maintain and improve Eugene's urban forest in order to enrich the lives of all Eugene's citizens and visitors.

Outcomes

- Maintain balance between public safety and tree health.
- Increase the value of the landscape by preservation of natural forested areas and through effective management of street trees.
- Increase, protect and preserve the public tree canopy cover.
- Enhance public education about trees.
- Improve the management of forested ecosystems within Eugene's parklands.

Operating Principles

- We are stewards and advocates for the urban forest. When making decisions our highest concern is balancing competitive needs while striving to ensure the health of Eugene's trees.
- We use public funds effectively and operate in a safe and efficient manner.
- By example, we set the standards for professional arboriculture in the community.
- We are committed to the prioritization of work which balances the needs of tree preservation and public safety.
- We respond to our customers with integrity and encourage their involvement in our urban forest.

Current Operating Environment

External Trends

Increased Growth and Density

The increase in regional population and development has resulted in less open space within the Urban Growth Boundary. This "infill" pressure toward increased density, especially in the downtown area, stresses or kills the mature, established trees, resulting in a substantial loss of tree canopy in the City. Loss of naturalized open spaces to development increases the need to design and engineer livable planting spaces for our future urban forest so that its life-giving functions remain sustainable. Council has directed staff to take a proactive role to protect, create and enhance the urban forest by regulating development and growth related activities.

Public Environmental Awareness

Public awareness of, and desire for, environmental preservation of the urban forest continues to grow. National legislation and policies focus attention more clearly onto local environmental protection issues, and citizens and stakeholders want to be involved in decisions relating to trees. This increases the complexity of urban forestry issues, and the increased need for documentation of decision-making processes requires more staff resources.

National Standards

The national trend for public urban forestry programs is one of increasing professionalism, an example of which is American Forests' national goals for minimum tree canopy cover requirement for sustainable, functioning urban forests. The advances in maintenance and preservation practices and standards, such as hazard assessment techniques, pruning, tree root zone protection, inventories, and species and age diversity management require continual staff training. Training requires more time and resources. Training volunteers to prune and maintain public trees is one way many communities across the nation are coping with decreasing municipal tree maintenance budgets.

Additional Impacts to the Urban Forest

Much of the urban forest is aging, resulting in a need to increase maintenance activities such as pruning and removal to protect residents from falling limbs and decaying trees. At the same time, public demand encourages the City to increase planting programs, such as the NeighborWoods volunteer program. The thousands of new trees added through Eugene's successful planting programs initially require less expensive per-unit pruning, but more frequent pruning must be done to establish a safe limb structure. Shifting resources to maintain newly planted trees leaves fewer resources for pruning and removal of potentially hazardous older trees. Already-successful program- and project-specific applications of the partially-completed street tree inventory highlight its usefulness as a planning tool for informed and effective management of the forest.

Internal Conditions

Changing Priorities

Although scheduled, systematic urban forestry care improves efficiency and reduces costs, the shift from a response-oriented system to a preventive maintenance effort to prune and remove tree hazards has been constrained by budget shortfalls. A reduction of one general funded tree worker in FY03 reduced options for tree maintenance in parks, and road fund reductions have further limited options for effective preventive street tree maintenance work.

Volunteer Outreach

The NeighborWoods Program offers opportunities for volunteers to plant street trees in their neighborhoods. Tree Stewards volunteers meet on Saturdays to prune young trees. This increases the feeling of ownership and stewardship that residents have for the urban forest, thereby reducing vandalism of trees. Staff must spend time instructing and monitoring volunteer activities in order to ensure establishment of young trees (at the

expense of maintaining older, mature trees), but staff is committed to supporting and expanding volunteer efforts at planting and caring for trees.

Supporting Management Information Systems

Staff feels a critical need to continue and complete efforts to systematically manage service delivery. Partial completion of a GIS-platform tree inventory system has already resulted in program efficiencies, improved quality of service delivery, and discrete management analysis opportunities. The growing street tree "layer" has been added to the City's GIS program, is updated monthly, and is available for staff Citywide to use in plan review, project planning, and permit application work. Completion of the inventory will enable analysis and broader-scope management decisions that are informed and more effectively focused on the best use of resources.

Partnership and Neighborhood Association Outreach

Partnership with the Eugene Tree Foundation (ETF) through programs such as NeighborWoods and ETF's Legacy Tree Program help achieve shared tree planting and public education goals. Collaboration with partners improves project quality, acceptance and success. Extending the relationship to neighborhood associations further enhances program effectiveness. ETF and the City are working with representatives from the U of O, for example, and with the West University Neighborhood (WUN) to improve the streetscape and landscape in portions of that neighborhood that are adjacent to University property. Involving neighborhood-level groups in localized tree management plans is one outcome of a tree inventory. This kind of public involvement process can improve service delivery and enhance long-term stewardship of our public natural resources.

Performance Measures

Core Processes

Manage Public Trees

- Number of trees pruned that are 6 inches in diameter or less.
- Number of trees inventoried.

Regulate Activities Affecting Trees

- Turnaround time for permit/referral process.
- Percent of time that response to a regulatory complaint is made within 10 working days.

Total System

Effectiveness

- Number of street trees and major limbs (>4" diameter) that fail.

Efficiency

- Total maintenance costs per street tree.

Financial

- Total service costs per street tree.
- Percent of cost recovery associated with fee-generating programs.

Customer Satisfaction

- Percent of customers responding who are satisfied by their interaction with staff and the services provided.
- Percent of customers responding who are satisfied with the condition and management of Eugene's urban forest.

Strategy 1: Implement supporting systems that improve effective management of the Urban Forest asset.

Objective: Inventory 100% of Eugene's estimated 100,000 street trees by 2011.

Work Activities:

- Work through neighborhood associations to encourage local leadership and volunteer participation in the creation of neighborhood-level tree inventory, maintenance and management plans.
- Use volunteer tree stewards to enter inventory data on trees in their neighborhoods.

Strategy 2: Improve efficiency and effectiveness of maintenance programs to ensure public safety and optimum utilization of resources.

Objective 1: As resources allow, work to increase the ratio of time spent in Preventive Maintenance vs. Request tree pruning without jeopardizing 24-hour tree hazard response goal.

Work Activities:

- Use staff resources and database systems to proactively filter incoming service requests for identification of hazards associated with city street trees (e.g., traffic light or stop sign vision obstruction, dead, broken limbs over 4" diameter, uprooting or cracked street tree).
- Expand the Preventive Maintenance tree-pruning program as resources allow, concentrating on pruning trees 6-inches in diameter or less.
- Monitor program output for efficiency measures.

Urban Forestry System Map

