

COMMUNITY AND URBAN FORESTRY IN WASHINGTON AND OREGON¹

by N. Robin Morgan

Abstract. Federal and state government involvement in community and urban forestry in Washington and Oregon plays a key role in initiating urban forestry programs. An analysis of case studies throughout the area reveals that even without all the components of the "ideal" urban forestry program in place, it is possible to make significant advancement in the development of an urban forest. Funding or technical assistance frequently serves as a catalyst for active citizens or small governments to initiate ongoing efforts to develop and maintain their urban forest.

Résumé. L'implication de l'Etat et du gouvernement fédéral en foresterie urbaine dans les Etats de Washington et le l'Orégon joue un rôle majeur dans l'établissement de programmes municipaux de foresterie urbaine. Une analyse de certains projets initiés dans la région révèle que même en l'absence de toutes les composantes d'un programme idéal de foresterie urbaine, il est possible de faire des pas significatifs dans le développement d'une forêt urbaine. Des programmes de financement et d'assistance technique servent fréquemment de catalyseur à des groupes de citoyens ou à des municipalités pour initier des efforts suivis pour développer et maintenir la forêt urbaine. La plupart des municipalités des deux Etats ont une population de moins de 20,000 habitants et doivent compter sur l'assistance technique et financière du Comté, de l'Etat et du Fédéral. L'analyse des projets initiés dans les Etats de Washington et de l'Orégon démontre que beaucoup peut être accompli par des groupes de citoyens, même avec un budget limité.

The highly productive, forested landscape of western Washington and Oregon has until recent times promoted a nonchalant attitude about trees in the cities which has often led to episodes of massive tree removal. In addition, the rural nature of eastern Washington and Oregon has prevented sound arboricultural practices from being recognized and incorporated into accepted tree management activities. Urban trees that have survived establishment in the harsh climate east of the Cascade Mountain Range are frequently ruined through improper pruning techniques. Most of the incorporated municipalities in the two States have a population of less than 20,000 (Table 1) and must rely on funding and technical assistance at the County, State, or Federal level. The analysis of the case studies from Washington and

Oregon demonstrate that much can be accomplished by active citizens on a shoestring budget.

The development of community and urban forestry in Washington and Oregon is directly and indirectly related to the Cooperative Forestry Assistance Act of 1978. Neither funding nor technical assistance for the development of community forestry in the small urban centers was offered until federal funds were made available. The funding has been made available to some of the smaller cities and communities though many have never heard of the program. Urban forestry programs already in place in some of the larger metropolitan areas have primarily benefited from the availability of funds for special projects.

History of the urban forestry on a federal level.

1962. Under the regime of President Kennedy, the Outdoor Recreation Resources Review Commission was formed to study the nation's outdoor recreational resources. Their report recommended the creation of the Land and Water Conservation Fund and included urban forestry information. The report was scheduled to sunset in 25 years.

1965. The White House Conference on National Beauty was established as Ladybird Johnson actively pursued a nationwide beautification campaign. The Deputy Chief of the Forest Service advocated an active urban forest program.

1967. A USDA Forest Service interdepartmental task force presented a landmark report. A Proposed Program for Urban and Community Forestry.

1972. The Cooperative Forest Management Act was authorized but not funded.

1978. The Cooperative Forestry Assistance Act passed. Section 6 of the Cooperative Forestry Assistance Act was devoted to urban forestry and authorized financial, technical and related assistance to local governments.

1. Presented at the annual conference of the International Society of Arboriculture in Vancouver, B.C. in August of 1988.

1987. As a sequel to the now sunsetted President's Outdoor Recreation Resources Review Commission, the President's Commission on Americans Outdoor was formed. In their report they underscored the importance of urban forests estimating that by the year 2000, 80 percent of our population will live in urban centers.

The United States Forest Service (USFS) is divided into three broadly defined sections: National Forests, Forest Research, and State and Private Forestry. It is the State and Private Forestry program that administers the funding received through the Cooperative Forestry Assistance Act.

Pacific Northwest Region of the USFS. The Pacific Northwest Region of the USFS is a land of great contrast, beauty, and productivity. The Region comprises 24.5 million acres of public lands in Washington and Oregon, and small portions in Idaho and Northern California, and includes 19 National Forests and one National Grassland. The Region accounts for 13 percent of the total land area of the entire national Forest System, and has some of the most diverse climate, vegetation, and terrain in the U.S. Its forests produce about half of the timber sold annually from the entire National Forest System, account for nearly one-sixth of the total recreational use on all the country's National Forests, and has 15 percent of the National Wilderness Preservation System.

In Fiscal Year 1987, \$55,000 was granted to the Region through the Cooperative Forestry Assistance Act. On an annual cycle, Washington and Oregon submit a grant application to the USFS for community and urban forestry assistance. Of the total for FY 1987, the Washington State Department of Natural Resources received \$35,000 and the Oregon Department of Forestry received \$20,000.

Urban forestry in the State of Washington. The community and urban forestry funds received for Washington are administered by the Service Forestry Program Manager in the Division of Forest Regulation and Assistance of the Washington State Department of Natural Resources (DNR). Since 1981, the Washington DNR has passed the monies through to local governments, with the local government providing

the required 50-50 match. Some of the earliest projects funded in this manner include a booklet and video produced by the City of Seattle titled *Seattle's City Forest*, and a tree inventory conducted by the City of Spokane.

In addition to projects which receive community and urban forestry assistance, the DNR regularly produces a booklet called the *TOTEM*. The Spring 1987 issue was devoted to urban forestry activities within the State of Washington. The publication has a distribution range of 16,000 and was so favorably received that efforts were commenced to pass through state legislation the funding for two state urban forestry coordinators. The proposed legislation was later killed in the budget process.

Washington case studies. Seattle, Washington is the Region's largest city with a population in 1987 of 491,300. The City's Street Tree Program began prior to the Seattle World's Fair in 1962. The original intent of the Street Tree Program was to create an urban forest. In 1986, a Street Tree Task Force was formed to facilitate communication between the different agencies and departments who were impacted by the urban forest and who had differing goals for its management.

The Engineering Department was assigned the task to oversee the planting and maintenance of the Street Tree Program. Presently the Seattle Engineering Department manages approximately 21,000 trees, and oversees the management of

Table 1. Urbana area population categories

Population	Washington (1987 census)	Oregon (1984 census)
► 100,000	3	2
90,000 - 100,000	0	1
80,000 - 90,000	1	0
70,000 - 80,000	0	0
60,000 - 70,000	1	0
50,000 - 60,000	0	0
40,000 - 50,000	3	2
30,000 - 40,000	7	3
20,000 - 30,000	7	3
10,000 - 20,000	16	120*
5,000 - 10,000	25	35
1,000 - 5,000	104	10
◄ 1,000	98	91
Total	265	241

several thousand privately owned trees lining the City's streets. The Engineering Department's goal is to maintain the existing street tree program, to aggressively pursue new street tree planting programs, and to preserve and protect existing trees allowing them to grow to full maturity.

The principal objective of the Seattle Parks Department is to preserve, plant and maintain trees in natural and ornamental landscape situations ensuring that the trees planted be allowed to reach the form and characteristics typical to the species planted.

The purpose of Seattle City Light, one of the nation's largest utility municipalities, is to provide power to all its customers throughout Seattle and King County. City Light's main concern regarding trees near their line is to keep the trees and the power lines separated. Last year, trees caused 40 percent of all power outages in the City Light service area which contains an estimated number of 250,000 trees. Trees were the largest single cause of outages. Because many trees growing under power lines are poorly placed, tree removal is often the only solution.

A City Light Tree Replacement Advisory Forum was created two months ago as a means of obtaining public participation in addressing the following issues: 1) implications of adopting a tree replacement policy, 2) development of criteria for tree replacement, 3) appropriate tree selection, 4) integration of a tree replacement program into present operations, 5) funding levels and alternative resources, and 6) public information and education.

The Tree Replacement Advisory Forum is comprised of private citizens from every neighborhood association, representatives from various municipal departments such as Parks, Engineering, and City Light, and representatives from the Arboretum and the Center for Urban Horticulture. The Forum's scope of work shall be confined to establishing a City Light departmental policy on tree replacement.

Seattle also benefits from the establishment of the Center for Urban Horticulture six years ago as part of the University of Washington. Through the Center, professionals working in fields relating to urban forestry can enrich their educational backgrounds, and if desired obtain a Master's

Degree in areas such as urban forestry or arboretum management. Oftentimes, the streets of Seattle become the focus of research dealing with the impacts of urban conditions such as the amount of available sunlight for trees on downtown streets, wind tunneling down boulevards, and compacted soil on the overall health and vigor of Seattle's urban forest. The Center has escalated in importance to the community and now can boast the second highest number of contact hours in the professional and public programs offered through the University's entire Continuing Education Program.

Vancouver, Washington has a population of 43,390 and has initiated a new urban forestry program managed through the Parks Department. The goal of this program is to preserve historic and notable trees and to promote the reforestation of Vancouver. In 1985 the City of Vancouver applied for and received a matching grant through the Washington DNR from the Cooperative Forestry Assistance Act. The grant was for the development of a computerized inventory of Vancouver's street trees and the publication of a document, *The Urban Forest: It's The Nature of Vancouver*. This document is designed to help business people and homeowners beautify the community through correct tree selection and planting techniques, and the understanding of tree preservation considerations.

Walla Walla, Washington has a population of 25,420 and is located in the "bread basket" area of eastern Washington. The City of Walla Walla applied for and received two separate matching grants through the Washington DNR from the Cooperative Forestry Assistance Act. The first grant was for the development of a computerized tree inventory and the preparation of a brochure on street trees in Walla Walla. The second grant was for a seminar with Alex Shigo and was co-funded by Whitman College. Part of the funds were used to send seven City employees and local tree contractors to the seminar hoping that in the future they would share what they learned through seminars.

Maintenance of street trees in Walla Walla is the responsibility of the abutting property owner, but must be done within the guidelines that the City establishes. The City contracts all of its tree

maintenance work.

Moses Lake, Washington has a population of 10,600 and is located in the desert of eastern Washington. Low rainfall and high summer temperatures combined with summer wind created an environment which demands supplemental watering for trees. The average mean temperature ranges from 16°F in January to 87°F in July. The area receives an average of eight to ten inches of rainfall per year and has an average evaporation rate of 30 to 40 inches per year.

In 1987 the City of Moses Lake applied for and received a matching grant through the Washington DNR from the Cooperative Forestry Assistance Act. The grant was for the preparation of a community tree program by the park and Recreation Department, who is currently responsible for street beautification. Their 1987 budget for street beautification and a street tree study was \$40,000. Topics addressed in the study include Community Goals, Community Needs, and outlines a proposed Work Program. The tree study states that tree topping is so prevalent in their community that most people believe that topping is proper care. Moses Lake does not have trees that are native to the area. There are 552 City-maintained street trees. All trees have been planted over time by various citizens of the area.

Port Townsend, Washington, with a population of 6,550, represents a departure from reliance on a government body to plan, develop, or maintain trees within the city proper. Port Townsend, perched on the top of the Olympic Peninsula, has an extensive collection of restored 1800-era buildings. Although many buildings still exist from the early days of Port Townsend, none of the native trees survived the building of the town. Early settlers chopped down every tree within the old city limits and used the lumber to build the town. This removal of trees from city property located within forested land was a common practice in the Pacific Northwest in earlier times. With the current degradation and harvest of surrounding forests, local citizens are placing a much higher value on city trees and the urban forest. A group of local citizens, called Trees for Port Townsend, planted both sides of 13 blocks and one side of 16 city blocks along major arterials between 1971 and

1987. Of the trees planted by this group, 75 percent are still in place. Picking up where they left off the Executive Director of the Abundant Life Seed Foundation, a local non-profit organization whose purpose includes aiding the preservation of native and naturalized plants through cultivation. The Seed Foundation, operating under grants from the Washington State Department of Natural Resources, has been mapping and inventorying the streets of the Port Townsend community since 1985. The grants were matched with local cash donations and volunteer labor. The survey included over 500 city blocks with more than 6,000 trees and will provide a basis for future tree-planting programs.

Urban forestry in the State of Oregon. Oregon has received monies through the Cooperative Forestry Assistance Act for over ten years. Unlike Washington which passes the money straight through to cities who meet the 50-50 match requirement, the Oregon Department of Forestry provides the 50-50 match. The lump sum collected under the Cooperative Forestry Assistance Act, \$20,000 for the FY of 1987, is not separated from the General Fund on a project by project basis and is therefore harder to track. It is allocated from the General Fund to the Forest Resource Planning section. The Forest Resource Planning section works with cities and communities on land use planning. There are 36 counties in the State, and 35 of them are forested or contain forested land. Because the goal of the Board of Forestry is the retention of productive land base, a major concern of the Department of Forestry is the erosion of the highly productive land base, or land that is capable of producing more than 120 cubic feet per acre per year. Urban sprawl is in direct conflict with this goal.

Statewide comprehensive planning was first mandated in 1971 by the Oregon Land Conservation and Development Commission. Every local jurisdiction is required to do planning: 270 jurisdictions in the State do comprehensive planning. Every square acre of the State has been included in some Comprehensive Plan. The Oregon Department of Forestry has been involved in approximately 100 of them. The focus of attention is frequently on the rural interface, where the forests and the cities meet. Plan amendments and zoning

change requests for these areas require an analysis by the State Forester. Wildfire in areas not adequately protected from fire or accessible to fire fighting equipment is given serious attention.

Although the federal community and urban forestry funds may be directly allocated to comprehensive planning, the State's commitment to urban and community forestry can also be seen in other programs. In addition to planning, the Insect and Disease section, the Service Forestry section, and the Public Affairs section all provide support for urban forestry in various ways. Walk-in visits from the urban population generally relate to insect and disease problems. Service Foresters in the field assist with multiple use management of urbanized forests. The Public Affairs section coordinates special programs, such as Arbor Week and Tree City USA, and special publications, such as *An Introductory Guide to Community and Urban Forestry in Washington, Oregon and California*.

Oregon case studies. Eugene, Oregon is located in the southern Willamette Valley and has a population of approximately 110,000. Eugene's street tree program was first initiated in 1962 when the Mayor appointed a sub-committee to study the feasibility of a street tree program for the City. It was recommended at that time, among other things, that complete responsibility for the locating, planting, selecting, purchase, ownership, maintenance, and removal of street trees should rest with the City, and that the Parks and Recreation Department should have the authority and responsibility for the administration of the program.

Over time, with many trees being planted each year, the budget has not increased proportionately to handle the increasing maintenance needs. In an effort to promote the planting of proper species of trees and to eliminate unnecessary maintenance costs associated with inappropriate trees, Eugene published a document titled *Trees for Eugene: A Property Owners Guide to Selecting and Planting Street Trees*. The citizens of Eugene loudly proclaimed their commitment to trees with the passage of the Historic Tree Charter Amendment, and voter approval is required for the removal of any designated historic tree. Earlier this year, the Mayor's Tree and

Beautification Commission, in cooperation with the City, produced *A Report on the Preservation and Development of Eugene's Urban Forest*. Eugene's urban forestry management activities include planting and maintaining trees as well as replanting when old trees must come down.

Sweet Home, Oregon represents the typical town throughout the Pacific Northwest whose economic base is timber. The population of Sweet Home is 6,890 and its geographic location is in the foothills of the Cascade Mountain range. The native trees were logged and used to build the town. Because the City is nestled into the forest, the replanting of these trees was given little to no consideration until recently. A group of local private and government-employed foresters have come together to form the core of the newly appointed Sweet Home Tree Advisory Committee which is comprised of volunteers from many different backgrounds including forestry, education, business, and journalism. Because the City itself currently has no financial commitment to urban forestry, this Committee has become the catalyst for tree planting by local groups and agencies. Their philosophy is that the best time to plant a tree was twenty years ago, and that today is the second best time. The School District, Oregon Women for Timber, and the City conducted tree plantings this year which were all facilitated by the Committee. Sweet Home was one of 12 Oregon cities to be designated a Tree City USA in 1988.

Rogue River, Oregon demonstrates what can be done in the way of urban forest management when active citizens get involved. Led by an 81 year old woman, the townspeople have been actively involved in community and urban forestry activities for the past several years including planting trees within the City, replanting a burned hillside in clear view of most of the town, trimming and removing trees as necessary, and working with every single student in the K-5 range on fun Arbor Day projects. What started with donations of trees and labor is now a council-approved annual budget. With a population of 1,300 and a budget of \$1,500, Rogue River has clearly established a model for communities and cities of all sizes to follow.

Cooperative urban forestry efforts. In 1985, Washington and Oregon State foresters began

discussions to co-fund some kind of publication designed to stimulate new urban forestry programs and enhance existing ones. The need for this type of project was documented by the amount of time that urban foresters from the major metropolitan areas were spending on providing guidance to other cities and communities within the two states. After the project was organized and underway, California joined the effort and the resulting product was a 28-page document titled *An Introductory Guide to Community and Urban Forestry in Washington, Oregon and California*. This document addresses education and policy, ways and means, master planning, and urban forestry operations including planting, maintaining and replacing. Three thousand copies were printed in October of 1987, and within six months supplies were depleted. Analysis of distribution revealed that copies had been requested and sent by the dozens to cities and states all over the United States as well as to other countries. The Urban Forestry Committee that funded and guided the project consisted of representatives from the Pacific Northwest and Pacific Southwest Regions of the USDA Forest Service, the Washington State Department of Natural Resources, the Oregon Department of Forestry, and the California Department of Forestry and Fire Protection. Phase 2 of the same project is currently underway. Early next year the companion document, *A Technical Guide to Community and Urban Forestry in Washington, Oregon and California* will be published. The wide request for this kind of information documents the need for easy to use and easy to distribute urban forestry assistance and the growing interest in caring for the environmental quality of urban spaces.

Conclusion

Many of the urban forestry efforts occurring in Washington and Oregon today have been initiated through projects which were co-funded by small seed grants or through the Tree City USA program. The analysis of the case studies from Washington and Oregon demonstrate that much can be accomplished, even by active citizens working within the constraints of a tight budget. Most of the incorporated municipalities in the two States have a population of less than 20,000 and must rely on funding and technical assistance at the County, State, or Federal level. These State-administered programs are financially supported by the Cooperative Forestry Assistance Act of 1978 through the USDA Forest Service, State and Private Forestry program. In order to ensure the continued funding of these programs, State and Federal legislators across the country need to hear, repeatedly, that the program is working and that continued funding is critical.

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Urban Forester
Sarasota County Forestry Division
Sarasota, Florida 34232