

# Urban Forestry Work Plan

2015–2016



CITY OF  
**Vancouver**  
WASHINGTON

Urban Forestry

PO Box 1995

Vancouver, WA 98668-1995

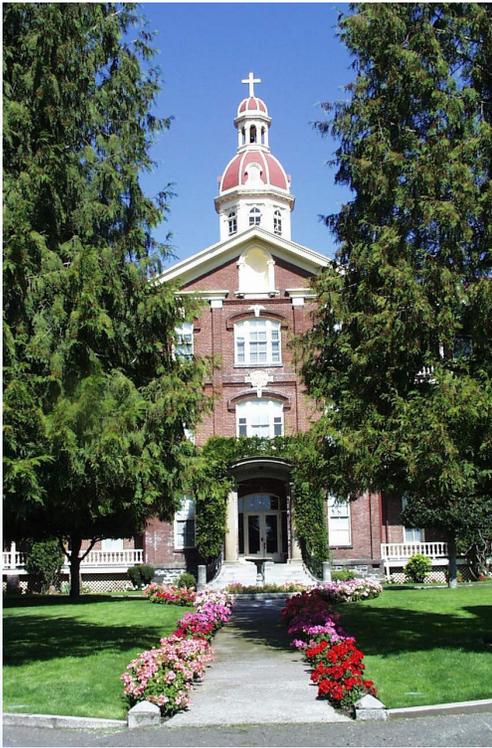
[www.cityofvancouver.us/urbanforestry](http://www.cityofvancouver.us/urbanforestry)

**Vancouver City Council:**

Mayor Timothy D. Leavitt

Larry J. Smith, Jack Burkman, Bart Hansen,  
Bill Turlay, Anne McEnery-Ogle, Alishia  
Topper

**City Manager:** Eric Holmes



---

**City of Vancouver**

**Department of Public Works:**

Brian Carlson, Director

Rich McConaghy

Environmental Resources Manager

360-619-4125

[Rich.McConaghy@cityofvancouver.us](mailto:Rich.McConaghy@cityofvancouver.us)

Charles Ray

Urban Forester

360-487-8328

[Charles.Ray@cityofvancouver.us](mailto:Charles.Ray@cityofvancouver.us)

Jessica Antoine

Urban Forestry Outreach Coordinator

360-487-8308

[Jessica.Antoine@cityofvancouver.us](mailto:Jessica.Antoine@cityofvancouver.us)

Nicholas Redmond

Urban Forestry Specialist

360-487-8308

[Nick.Redmond@cityofvancouver.us](mailto:Nick.Redmond@cityofvancouver.us)



## Urban Forestry Commission

Established for the purpose of managing, conserving, and enhancing the existing trees located in the parks and public areas owned by the City of Vancouver and in public rights-of-way. The Commission is charged with enhancing the appearance of the city and protecting an important environmental and economic resource for the benefit of the city's residents and visitors and with assisting property owners and public agencies to improve and maintain trees in a manner consistent with adopted city policies.

Six members are appointed by City Council to four year terms and one member is appointed as liaison by Vancouver Parks and Recreation Advisory Commission (PRAC). The Commission meets the Third Wednesday of each month at 6 p.m., Vancouver City Hall, 415 W 6th Street.

---

### Commission:

Tim Carper, Chair

Dale Erickson, Vice Chair

Susan Sanders

Jean Akers

Dawn Freeman

Jacob Sigo

Vacant, PRAC

# TABLE OF CONTENTS

Introduction .....	5
Goal One .....	7
Goal Two .....	9
Tree Canopy Project .....	11
Goal Three .....	12
Proper Tree Care .....	15
Goal Four .....	16
Benefits of Trees .....	18
Conclusion .....	21



## Vancouver Urban Forestry Program

The urban forest comprises all the trees, shrubs, and other vegetation within the City of Vancouver. Along with the Columbia River, trees are one of Vancouver’s most prominent natural features. Vancouver’s trees are not merely beautiful — The urban forest is critical to the healthful functioning of the city and greatly improves the quality of life for all residents.

Urban trees are “green infrastructure” and provide significant environmental, social, and economic benefits. By capturing stormwater, trees help prevent flooding, reduce pollution from runoff, minimize erosion, and promote groundwater recharge. Urban trees filter airborne pollutants, including particles such as dust and soot, and gases, such as ozone and nitrogen oxides. Trees also produce oxygen and store vast amounts of carbon dioxide. By shading, cooling and blocking wind, trees reduce heating and cooling energy use by up to 30 percent. In neighborhoods, trees promote stronger social ties, encourage more outdoor activity, decrease crime and violence, and increase community pride. Property values are shown to be 10 to 20 percent higher for houses with large, well-maintained trees. These benefits translate directly into increased real estate values for homes with large, well-maintained trees. New research suggests that urban trees also have significant economic benefits, such as positively influencing consumer shopping behavior in business districts and promoting economic development.

However, a healthy urban forest doesn’t just happen. A healthy urban forest requires thoughtful planning and ongoing maintenance. Unfortunately, a recent study showed that Vancouver’s tree canopy cover, at less than 20 percent, continues to be much lower than the recommended level. That means Vancouver is not realizing the maximum of potential urban forest benefits. Vancouver’s Urban Forestry program works to optimize these benefits by preserving and enhancing tree canopy, while engaging the community in stewardship. This document outlines Urban Forestry program activities being implemented for 2015-2016



## Vancouver Urban Forestry Program

Our **vision** for Vancouver’s urban forest is a healthy, dynamic, diverse, and cohesive ecosystem that is valued and cared for by all residents because it balances economic vitality with the conservation of natural resources now and for future generations.

The **mission** of Vancouver’s Urban Forestry Program is to maximize the aesthetic, environmental, and economic benefits that trees provide to city residents and visitors by preserving, managing, and enhancing existing trees and other vegetation and promoting the reforestation of the urban area, through an active integrated program with community support and participation.

The **2015–2016 goals** of the Urban Forestry program are to:

- Preserve existing trees and continue planning, maintenance, and operating principles that improve canopy health.
- Restore canopy-deficient areas through tree planting to provide equitable distribution of urban forest benefits to all Vancouver residents.
- Promote an urban forest stewardship ethic within the community.
- Adhere to the City of Vancouver’s Operating Principles and establish Urban Forestry as a leader in Pacific Northwest municipal forest management.



## Preserve existing trees and continue planning, maintenance, and operating principles that improve canopy health.

**Support the Community and Economic Development Department** in critical review of all development tree plans, ensure replanting and response to all violations of the Tree Conservation Ordinance.

**Support Code Compliance** in enforcement of the Minimum Property Maintenance Ordinance by evaluating the hazard potential of trees on private property and ensuring trees that are not hazardous are not removed unnecessarily.

**Support Public Works and Community and Economic Development Department** by reviewing all street plans for tree species selections and locations to maximize planting of site-appropriate trees and minimize potential future hardscape infrastructure damage.

**Support Public Works and Parks and Recreation** in the development of natural resource management plans for significant urban natural areas, especially natural area parks, and respond to tree issues within Vancouver’s Park system. Identify tree canopy and secession plans that incorporate tree replacements into adopted park master plans.

**Support all Public Works divisions** on priority projects and efforts to implement reforestation projects to improve watershed health.

**Enforce the Street Tree Ordinance to preserve street tree canopy**, minimize conflicts between trees and the built environment with replacements and reduce incidence of improper tree care.

- Continue outreach to the general public and tree care providers about the ordinance requirements.
- Refine protocols for reviewing and issuing permits for major pruning, removal, planting of street trees; and for Street Tree Worker License program.
- Enforce ordinance in a fair and reasonable manner to ensure no net loss of tree canopy.

**Recognize and protect significant trees** through Heritage Tree Program.

- Increase awareness of program through outreach, tours, publications and events.
- Solicit nominations from the general public, NeighborWoods Stewards and Urban Forestry Commission.
- Consider and designate new Heritage Trees every biennium, announcing new Heritage Trees at festivals or community events.
- Record relevant historical and arboricultural information about each tree, compile information into Heritage Tree Inventory and install signs at each designated tree.

**Collaborate with the Old Apple Tree Research Team (OATRT)** to evaluate progress and chart a course of action to care for the Old Apple Tree. The OATRT includes representatives from: Arborscape Tree Care; City of Vancouver, City of Vancouver Urban Forestry Commission, Collier Arbor Care, Joe’s Farm, and the U.S. National Park Service.

*Did you know? for every \$1.00 we spend on our urban forest today, our region will receive more than \$2.50 in benefits over 40 years.*

## Preserve existing trees and continue planning, maintenance, and operating principles that improve canopy health.

**Continue to update a dynamic inventory** of street trees and trees on City property to facilitate effective management, assess the overall condition and value of the urban forest, and improve record keeping.

- Refine data collection protocol to maximize efficiency and accuracy.
- Build inventory gradually over time, beginning with canopy projects and service requests.
- Update the street tree inventory with removal requests and new planting projects.

**Proactively manage trees** on City property for safety and to minimize storm-damage costs through hazard tree identification and removal.

**Coordinate young tree pruning** on canopy restoration project sites and explore options for the city to proactively maintain trees through a pruning cycle as city assets, as part of asset preservation.

**Provide training for Operations crews** and other City staff on proper pruning and tree care to improve management of City grounds; encourage City staff to contact Urban Forestry personnel for assistance.

**Promote tree-friendly development** and land use practices, such as preserving mature trees and planning for appropriate replanting.

- Explore incentives to preserve mature trees and incorporate these into policy and planning decisions.
- Develop protocols for tree preservation on construction sites using the most current research and practices; share these techniques with city staff and developers through training.
- Encourage retention or planting of canopy corridors, or tree tracts, to function as buffers and wildlife corridors; utilize these corridors to connect parcels and build a cohesive forest ecosystem.
- Recognize model projects by nominating projects for the Community Pride Design Award or the Gordon and Sylvia MacWilliams Evergreen Award (Mac Award).
- Recognize those who strive to help the City of Vancouver attain its adopted goal of 28% urban tree canopy cover by awarding various groups who have met or exceeded their tree canopy coverage goals per their land use zoning on their property/properties through both on the ground efforts and through commitments to development plans that contribute to the urban canopy once tree plantings mature with a Tree Canopy Achievement Program (TreeCap) designation. TreeCAP inspires others and helps the entire city realize the environmental, social and economic benefits of a healthy tree canopy.

**Encourage proper tree placement** and pruning to reduce conflicts between trees and transportation corridors and safety elements, including street lights, traffic signs and vehicle visibility.

**Identify significant wooded areas** as natural resource systems and support the acquisition and/or protection with the Public Works and Parks Acquisition Programs.

## Restore canopy-deficient areas through tree planting to provide equitable distribution of urban forest benefits to all Vancouver residents.

**Use the 2011 tree canopy GIS data** to strategically plan Canopy Restoration Program efforts.

- Categorize neighborhoods based on tree cover ratio and distribution patterns; prioritize lowest canopy areas for tree planting projects.
- Implement action items identify in the 2011 Tree Canopy Report.
- Plan and budget to repeat GIS canopy analysis; establish a five- to ten-year cycle for future canopy mapping.

**Promote the citywide tree canopy goal** of 28 percent total canopy.

- Market the specific canopy goals based on zoning and property types identified in the Urban Forestry Management Plan.
- Foster community support through education and outreach focusing on the benefits of trees.
- Implement the new TreeCap canopy goal recognition program.
- Encourage participation in the new Treefund tree planting discount program.

**Plant trees and shrubs on public property**, including parks and natural areas.

- Assess park properties and lands to determine tree planting needs.
- Plant in lowest-canopy parcels first.
- Utilize both contractors (to maximize efficiency and effectiveness) and volunteers (to maximize public involvement and reduce costs) for planting projects.
- Work with park planners and designers to include canopy targets in the park development process; encourage incorporation of tree planting as a funded element in park master plans.
- Plant trees to replace turf in hard to mow or unused grassy areas.
- Plant native trees and shrubs where appropriate. Native plants are adapted to local conditions and require less water and are more resistant to pests and diseases.
- Maximize canopy through species selection and tree location.
- Ensure equitable geographic distribution of tree planting projects.
- Develop tree secession, replacement, and planting plans to guide future tree planting needs in parks.

**Encourage street tree planting.**

- Coordinate with Friends of Trees to implement a 5-year planting campaign to conduct volunteer neighborhood tree plantings in at least fifteen neighborhoods with four major planting events; encourage new neighborhoods to participate.
- Secure an AmeriCorps member to increase neighborhood participation in tree planting projects.
- Update and distribute the Street Tree Selection guide annually.
- Inspect all proposed street tree planting sites prior to installation to minimize future infrastructure conflicts.
- Encourage planting of street trees along sidewalks and in planter strips and medians as an effective traffic-calming technique.
- Partner with the Vancouver Downtown Association to revitalize downtown through street tree plantings.

## Restore canopy-deficient areas through tree planting to provide equitable distribution of urban forest benefits to all Vancouver residents.

### **Ensure proper maintenance** and monitoring of all trees.

- Continue a summer tree maintenance program involving AmeriCorps, youths as interns or temporary seasonal employees.
- Hold contractors accountable on projects.
- Monitor all projects for at least five years.
- Replace all trees that decline during the first three growing seasons.
- Coordinate volunteer efforts at community-driven projects.

**Partner with local school districts** to plant trees on school grounds with students.

**Encourage tree planting on private property;** partner with property owners, the Vancouver Watersheds Alliance and others on project design, incentives and implementation.

**Partner with Washington Department of Transportation** to restore canopy along highways.

**Assist NeighborWoods Stewards** in coordination of canopy restoration projects.

**Review development project proposals** to maximize tree planting opportunities.

**Promote stewardship** of native plant communities on private and public property.

- Encourage planting of native trees and shrubs where appropriate.
- Distribute a comprehensive list of Vancouver’s native trees and shrubs.
- Encourage local nurseries to expand stock of native trees and shrubs.

**Market Witness Tree program** as a means to memorialize loved ones through planting trees.

- Update the Witness Tree mapping interface.
- Utilize Witness Tree funding to reduce tree planting costs.

### Call Before You Cut!

*Before removing any tree or pruning any street tree, call 360-487-8328 to check if a permit is required.*

In Vancouver, a permit is required to remove a tree if the tree is:

- \* A street tree in the public right-of-way;
- \* A nuisance or hazard tree;
- \* A property zoned industrial, commercial, or multi-family use;
- \* On a single-family residential lot larger than one acre or can be further sub-divided;
- \* On an undeveloped or developing parcel;
- \* In a sensitive area such as a slope, riparian area or wetland buffer.

*The Street Tree Ordinance, VMC 12.04, states that a permit is required for major pruning of street trees Work must be performed to national arboricultural standards by an individual or a company possessing a Street Tree Workers License.*



## Promote an urban forest stewardship ethic within the community.

**Strengthen and expand community partnerships**, especially with the following groups:

- Local businesses
- Tree care companies
- Vancouver and Evergreen school districts
- Other City departments
- Civic, faith-based and service organizations.

**Foster civic involvement** through the NeighborWoods program, a comprehensive training and education program that empowers neighborhood volunteers to become leaders in urban forest management.

- Recruit at least 10 new NeighborWoods Stewards to participate annually.
- Refine training program and curriculum binder annually based on participant feedback.
- Involve partners as program presenters.
- Assist Stewards with identification of potential projects and provide support to help them successfully implement their projects.
- Maintain communication with Stewards through e-mail list-serve and occasional social gatherings.
- Recognize NeighborWoods Stewards and their accomplishments.

**Offer Tree Talk workshops** on various tree-related topics throughout the year as a low-commitment alternative to NeighborWoods.

- Continue to meet the community's needs by developing new workshops such as chainsaw safety, hazard tree identification (to alleviate the perception that healthy, large trees are dangerous) and residential landscape design to reflect our regions native landscape.

**Celebrate trees on Arbor Day** in April.

- Host an Arbor Day event involving youth and elected officials.
- Award the Gordon and Sylvia MacWilliams Evergreen Award(s) annually as part of Arbor Day to recognize individuals, organizations and business that have made a significant positive impact on the urban forest.
- Capitalize on Arbor Day as an opportunity for media exposure.

**Celebrate Heritage Trees** at Old Apple Tree Festival in October.

- Explore strategies to boost attendance and improve the festival.
- Include more entertainment, booths from partner organizations and children's activities.

**Recognize extraordinary contributions** to Urban Forestry through the Silva Bolds Whitfield Award.

*Did you know? NeighborWoods Stewards receive more than 20 hours of free tree-related education. In exchange, they serve as a resource for their neighborhood on tree matters.*

## Promote an urban forest stewardship ethic within the community.

### GOAL THREE

**Partner with Neighborhood Associations** to enhance local urban forest management.

- Encourage every Neighborhood Association to incorporate urban forestry elements and planting projects into Neighborhood Action Plans; assist neighborhoods with implementation of these projects.
- Give presentations to at least twelve neighborhood meetings.
- Submit articles for inclusion in neighborhood newsletters.
- Encourage neighborhoods to apply for grants and seek sponsors to implement urban forestry projects; provide assistance if necessary.
- Continue Urban Forestry Commission liaison program.
- Nominate neighborhood associations for the Gordon and Sylvia MacWilliams Evergreen Award that meet all the following criteria: implement a neighborhood tree planting (with Friends of Trees or otherwise), have an active NeighborWoods Steward, and have urban forestry elements in Neighborhood Action Plan.

**Recognize those who strive to help** the City of Vancouver attain its adopted goal of 28% urban tree canopy cover through the TreeCap designation program.

**Communicate the benefits of trees** and the importance of an effective Urban Forestry program to City Council and other decision-makers.

**Engage volunteers** in hands-on urban forestry projects such as tree plantings, invasive species removal, and young tree care.

**Use existing and new marketing tools** to deliver priority messages to target audiences on a seasonally-appropriate timeframe.

**Maintain Urban Forestry website** as a comprehensive and dynamic source for urban forestry information.

**Utilize available free and low-cost media** such as Clark-Vancouver Television, public service announcements, and newsletter articles to deliver marketing messages and promote Urban Forestry activities.

**Release at least one media advisory** (press release) per month to ensure continued media presence.

**Distribute tree care brochures** and outreach materials.

**Increase visibility of Urban Forestry** by tabling at six or more community events, such as the Home & Garden Idea Fair, Earth Day Events and the Sturgeon Festival.

## Promote an urban forest stewardship ethic within the community.

**Give presentations to various civic, service, or community organizations** and involve these organizations in volunteer projects.

**Expand environmental education** efforts in local schools and community.

**Partner with the Water Center** to design and build an outdoor classroom to re-connect visitors to the natural environment at the Water Center while implementing an awarded design grant from the Washington State Department of Natural Resources.

**Inform the general public** and tree care companies about Vancouver’s tree ordinances.

**Encourage proper tree species selection** and optimal planting locations to maximize benefits of trees and minimize future conflicts (i.e. “right tree, right place”).

**Collaborate with Washington Department of Natural Resources** and the Urban & Community Forestry Council to continue the comprehensive and creative tree awareness campaign, Think Before You Top to reduce topping an improper tree care practice.

**Educate the general public about invasive trees** and the infrastructure damage and native habitat loss they effect. Distribute the ‘Guide to Invasive Trees’ brochure.

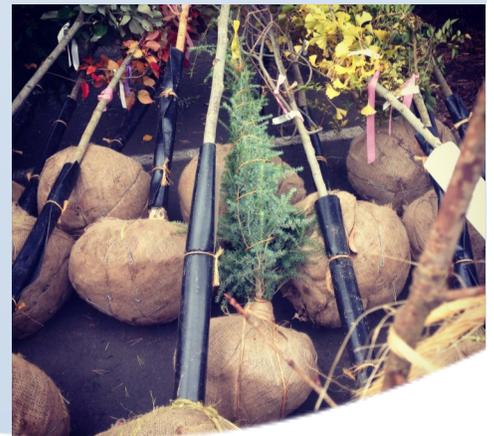
**Empower the general public** to take action about the degradation of native plant communities due to invasive species.

- Work with volunteers to remove and control invasive species, such as English ivy and Himalayan blackberry, which threaten native plant communities on private and public lands.
- Coordinate a comprehensive and creative “No Ivy” campaign, centered on “No Ivy Day” in early October, to increase awareness of the fact that ivy is killing otherwise-healthy mature trees throughout the city, inspire removal efforts and promote landscape alternatives.



### *Get involved through volunteering:*

- *NeighborWoods Stewards*
- *TreeTalk workshops*
- *Tree planting events*
- *Restoration events*
- *Outreach at special events*



## Protect your trees with proper tree care

Around our homes or along the streets, trees are one of our most valuable assets. They are also a long-term investment. Like any investment, trees require careful decisions and the occasional advice and service of a professional.

### ISA Certified Arborists

In the tree world, arborists are the professionals that can safeguard your trees and save you from the long-term consequences of neglect or improper care. Arborists certified by the International Society of Arboriculture have demonstrated a minimum level of knowledge and a commitment to stay current with national standards and best practices. Although not a guarantee of good service or performance, ISA certification suggests that the company or individual takes tree care seriously. The City of Vancouver cannot recommend an arborist, but a complete list is available by calling 1-888-472-8733 or visiting [www.isa-arbor.com](http://www.isa-arbor.com).

### City Licensed Street Tree Workers

A Street Tree Workers License is required to perform major pruning on street trees. Urban Forestry maintains a list of contractors who have met the minimum qualifications to work on street trees.

### Think Before You Top—Get the Facts

“Topping” is defined as indiscriminate cutting of branches to stubs or branches too small to assume the terminal role. Research in the last several decades has repeatedly proven that topping is very harmful to trees and is almost never an acceptable practice. Protect your trees from becoming hazardous. Do not top your trees, and do not hire any tree care provider that suggests this service.



### Attend a TreeTalk Workshop

Free TreeTalk workshops offer a variety of tree care topics throughout the year. Common workshop topics include Proper Pruning, Tree Planting, Identify Common Pests and Diseases in Trees, Tree ID Walks, and A Homeowners Guide to Hazard Trees.

---

#### Tree regulations in the Vancouver Municipal Code:

**VMC 12.02, Urban Forestry Commission:** Established and defined the role of the Urban Forestry Commission, a citizen advisory group appointed by City Council.

**VMC 12.04 , Street Trees:** Regulates the planting, pruning and removal of trees within the right-of-way. Permit requirements available on the website or by contacting Urban Forestry directly.

**VMC 20.770, Tree Conservation:** Regulates tree removal on private property before, during and after development.

## Adhere to City of Vancouver’s Operating Principles and establish Vancouver Urban Forestry as a leader in Pacific Northwest municipal forest management.

**Coordinate the roles, responsibilities, policies, and projects** of City and other government agencies, and local partners to ensure sound planning and management of the urban forest.

**Ensure stable and adequate funding** to achieve Urban Forestry goals.

- Maintain partnerships with all departments.
- Seek grants and sponsorships to leverage program funds and expand capacity.
- Utilize the Parks Foundation to accept private donations and business sponsorships.
- Promote Urban Forestry as a core municipal service that works across all departments and is directly linked to the City’s Stormwater Management Strategy and Strategic Commitments.

**Highlight program accomplishments** in an Annual Report and provide quarterly Urban Forestry updates to Public Works and Parks managers.

**Revise and submit the Urban Forestry Work Plan** and Urban Forestry budget request biennially.

**Utilize and implement the Urban Forestry Management Plan**, which is an integrated and sustainable approach to preserving and enhancing the City’s urban forest resources, to achieve the goals over the next twenty years.

**Employ an adequate number of highly-qualified individuals.**

- Maintain active International Society of Arboriculture certification for all full-time staff.
- Maintain Municipal Specialist certification for at least one staff member.
- Maintain Tree Risk Assessor certification for at least one staff member.
- Seek opportunities for meaningful continuing education.
- Remain current with latest arboricultural research, trends, techniques, and knowledge.



*Did you know?  
Of our customers, 92 percent reported  
Urban Forestry staff was professional  
and provided quality information based  
on customer feedback cards.*

## Adhere to City of Vancouver’s Operating Principles and establish Vancouver Urban Forestry as a leader in Pacific Northwest municipal forest management.

**Utilize advances in technology** to move to a mobile, paperless system for service requests and daily activities to improve customer service and response time with limited resources and growing workloads.

**Integrate Urban Forestry Commission** into City planning by coordinating joint meetings with Vancouver-Clark Parks and Recreation Advisory Commission and Vancouver Planning Commission

**Manage all tree pruning and planting contracts** to ensure contractor compliance with specifications.

**Respond to all citizen requests** for service and information.

- Achieve at least 75 percent customer satisfaction, as evidenced through customer reply cards.
- Reduce average response time for site inspections to less than eight days.

**Apply for “Tree City USA” recognition** annually and prestigious “Tree City Growth Award” when applicable; promote receipt of awards at Arbor Day celebration.

**Seek opportunities** for Urban Forestry staff to speak at regional and national arboriculture events and submit articles for publication in magazines and journals.

---

*Vancouver has been recognized by the National Arbor Day Foundation as a Tree City USA each year since 1989. The Tree City USA program is designed to recognize communities that effectively manage their urban forest and meet the four Tree City USA standards.*



**TREE CITY USA®**

*Vancouver has continually been selected for this national recognition for managing its urban trees as a valuable natural resource and for making trees a priority. Maintaining this national status shows that Vancouver and its citizens recognize that urban trees are closely linked to quality of life. Our citizens take pride in working together as stewards to preserve and enhance the urban forest.*

## Improvements to the urban forest promote sustainability and counteract local threats of poor air and water quality and the global threat of climate change.

### We all live in a watershed!

Watersheds are regions or areas defined by ridges where the water drains into a particular stream, lake or river. In Vancouver, our community has bountiful water bodies, including Vancouver Lake, Burnt Bridge Creek and the Columbia River. What happens in our neighborhoods affects water quality in Vancouver's waterways. To improve our water quality requires a watershed approach that looks not just at waterways, but the land and land uses that send polluted runoff to rivers and streams.

### Here are 10 steps you can take to help improve our water quality:

1. Don't overuse fertilizer and pesticides. Instead, use non-toxic alternatives and apply in proper amounts.
2. Preserve established trees in your yard and neighborhood.
3. Plant street and yard trees, shrubs and groundcovers that filter pollutants and reduce stormwater runoff; remove turf and invasive plants.
4. Mulch landscape beds to prevent erosion and reduce irrigation water.
5. Don't let sprinklers water sidewalks and streets.
6. Use non-toxic alternatives to home-cleaning chemicals.
7. Never dump used motor oil, paint or household chemicals on the ground or in a stormwater drain.
8. Sweep instead of hosing driveways and sidewalks.
9. Drive less: use public transportation, carpool, bike or walk more.
10. Scoop pet poop, bag it and put it in the trash.

*Did you know? Vancouver's tree canopy covers 18 percent of the city, helping to preserve watershed health and reduce runoff while improving the livability of our neighborhoods.*

## The Economic Benefits of Trees

### Consumer Behavior

Recent research by Dr. Kathy Wolf at the University of Washington suggests that trees in business districts can significantly impact consumer shopping behavior. Wolf reports that shoppers were willing to travel farther to, pay more for parking, and shop longer at business districts with more trees. per Wolf, Those shoppers also assume that goods or services sold there are higher quality and that retailers are more trustworthy. Most importantly, shoppers in tree-lined business districts are reportedly willing to pay up to 11 percent more for goods and services. See [www.naturewithin.info](http://www.naturewithin.info) for more information about this research.

### Economic Development

Trees greatly improve quality of life for urban dwellers. Quality of life is often a significant determining factor when businesses are considering a move to a new location. A healthy, well-cared for urban forest signals that residents take pride in their community and that local government is effective at meeting the needs of its citizens. A healthy urban forest can help attract new businesses and jobs to Vancouver.

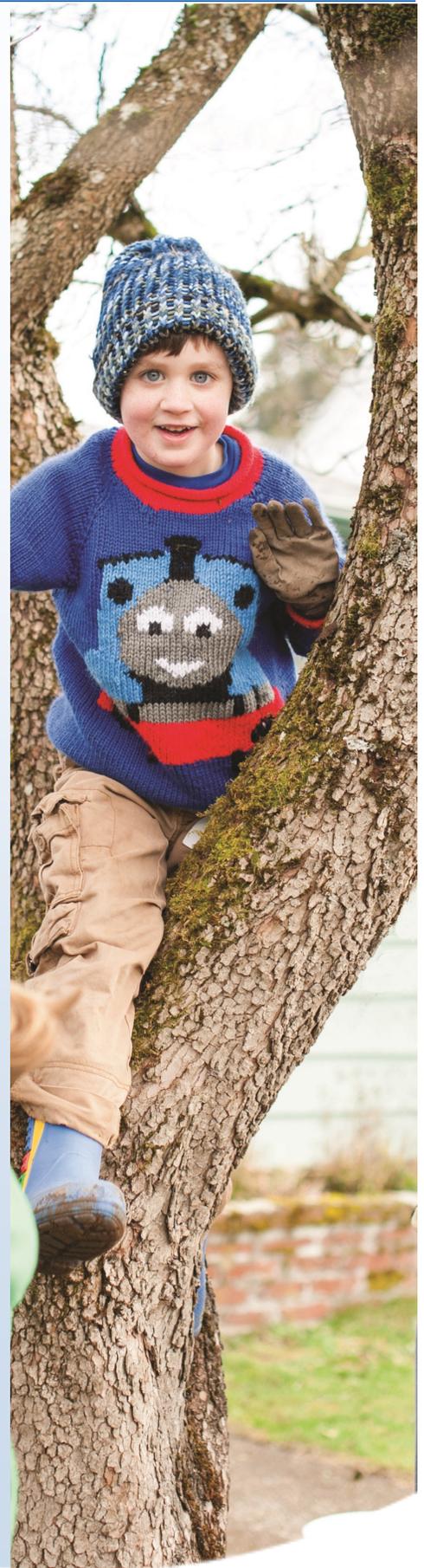
## The Social Benefits of Trees

Research at the University of Michigan and at the University of Illinois at Urbana-Champaign demonstrates the profound impact that trees can have on psychological well-being and community.

Because trees reduce stress and mental fatigue caused by urban living, create a cooler and more pleasant outdoor environment, encourage more walking and biking, are aesthetically beautiful, and provide many other benefits, they help make our community more livable.

For example, increasing greenery has been shown to: accelerate recovery from surgery and reduce reported pain; reduce crime, especially domestic violence; and help kids diagnosed with ADHD concentrate better.

Visit [www.naturewithin.info](http://www.naturewithin.info) for more information about the social benefits of trees.



# BENEFITS OF TREES

## The Environmental Benefits of Trees

Urban trees provide significant environmental benefits that improve quality of life in the city. Trees are absolutely critical to protecting wildlife habitat and maintaining clean air and water. For example:

- 100 mature trees intercept approximately 250,000 gallons of rainwater each year. This reduces pollution from runoff, prevents erosion and lowers the risk of flooding.
- Trees increase the rate of rainwater infiltration into the soil, which helps recharge groundwater resources and filter the water before it discharges into streams.
- Two trees can produce enough oxygen for one person.
- 100 mature trees annually sequester over five tons of carbon dioxide, a greenhouse gas linked to global warming.
- 100 mature trees absorb or intercept more than 500 pounds of airborne pollutants each year, including particulate matter, nitrogen and sulfur oxides and ground-level ozone.
- Trees, especially native species, provide food, shelter, and other habitat values for urban wildlife.
- Trees cool the city by up to 10°F, by shading our homes and streets, breaking up urban “heat islands” and releasing water vapor into the air through their leaves.

---

*Urban Forestry strongly values relationships with the community. We rely heavily on volunteers and partners to help us achieve our mission. Your business or organization can improve Vancouver’s livability by being a Canopy Restoration Program partner.*

*Sponsors are needed to help fund tree planting projects, youth programs, Arbor Day, Old Apple Tree Festival, outreach materials and campaigns, and other projects and programs. Donations are tax-deductible, and we are committed to giving our partners the recognition they deserve.*

*Working together we are making a difference. We encourage volunteer groups and potential planting locations on private property throughout Vancouver.*

---



CONCLUSION

The opportunities to reap the many benefits of trees are too numerous and significant to squander. Immediate action is required to reverse tree canopy decline and ensure a high quality of life for future generations in Vancouver. Widespread community tree planting and improved tree maintenance will help restore tree canopy throughout the city.

This Work Plan outlines the many ways that Vancouver Urban Forestry will work to promote sound urban forest management. However, there are multiple opportunities for every Vancouver resident to make a difference. What can you do to restore tree canopy in Vancouver?

- Become a NeighborWoods Steward or attend a Tree Talk workshop
- Volunteer at a community tree planting
- Organize a community tree planting in your neighborhood
- Plant trees on your property and remove English ivy
- Educate yourself about proper tree care
- Hire an arborist certified by the International Society of Arboriculture for major pruning and tree care needs
- Never top a tree
- Share your tree knowledge with friends and family

Learn more about Urban Forestry and how to get involved by calling 360-487-8308 or find us online at [www.cityofvancouver.us/urbanforestry](http://www.cityofvancouver.us/urbanforestry)

