November UFC Program and Staff Reports

7. Program Updates

AmeriCorps and Friends of Trees:

Upcoming Events Commissioners welcome:
November 14, UF Tree Planting SE 34th Street Tree Planting -The City of Vancouver, WA

November 16, UF Tree Planting SE 34th Street Tree Planting -The City of Vancouver, WA

December 14, Friends of Trees SE Vancouver Planting Event Calendar - Friends of Trees

Bri is scheduling a Farmers Market tabling event for the turn of the year

Urban Forestry Work Plan 2025-26:
The Urban Forestry Work Plan is attached to coincide with the biennial budget. The 25-2026 Work Plan reflects new program elements and the newly adopted Urban Forestry Management Plan. Please review and share any feedback at the meeting or email comments to staff.

2025-26 Budget:
The city is anticipating a budget shortfall in the General, Street and Fire Funds during the 2025-26 budget cycle. Urban Forestry does not receive any funding from these three funds as the program is funded by stormwater fees. As part of this budget shortfall, enterprise funds such as water, sewer, stormwater and solid waste have been asked to plan for at least a 5% reduction. The City Manager's 2025-26 recommended budget is now available online. Urban Forestry's reductions are manageable spread across program areas. Unfortunately, the limited term Tree Tech position Urban Forestry requested was not supported during this budget cycle. Staff will further develop the case to support a Tree Tech position over this next year to be included in the 2027-2028 budget cycle. The city is required to have an approved budget by fall of 2024 for the 2025-26 cycle.

Tree and Landscape Code Updates
Attached is the final draft of the proposed updates to the tree and landscape code. The Policy Subcommittee has been working on these proposed updates since 2021. The Commission reviewed earlier versions of these updates. This project started in 2021 with a tree canopy assessment which showed Vancouver had the lowest tree canopy compared to other regional cities. One of the recommendations of this study was to update Vancouver's tree and landscape codes. Planning, Stormwater and Urban Forestry commissioned a research project to compare approx 15 cities tree and landscape standards. That report identified Vancouver was below average regarding tree and

landscape requirements compared to these other communities. This started the proposed code update followed by the Climate Action Framework in 2022, which identified more code updates, and the updated Urban Forestry Management Plan in 2023. In 2024, Urban Forestry hired a consultant to review the proposed updates and provide recommendations which is attached. The Commission reviewed the proposed updates at the October meeting. At the November meeting, staff will provide an overview and request the Commission vote to support and recommend inclusion of the proposed updates into the wider code update process as part of the City's Comprehensive Plan update in 2025.

Subcommittee Reports:

Outreach:
Dec 11 - Meeting/Holiday celebration

- Meet at Silva Bolds-Whitfield Award Monument Plaza
- Decorate... pine tree... MJ/Jess to coordinate on Retails thrift store decorations...
- Tap Union/Luepke Flower shop side open

Old Apple Tree Debrief

- Highlight Old Apple Tree... Move stage next the Old Apple Tree
- Cider garden.... permit/fence in... find non-profit (Urban Abundance?) to host... Start planning March 2025 or so to give lots of time for non-profit take on...

2025 Outreach Planning

- Two Farmer Market Times...
    - Jan 4 (planting)
        - 4 hours... Winter hours of Farmer Market...
        - FOT planting... benefits of trees... tree bag off...
        - heritage tree display
        - New game? Spin wheel? Wood cookie display/Doug-fir/Older than the United States
        - Invite card for upcoming events... (Riley)
        - Recipe cards... apple dessert from Susan Law... (MJ)
        - Clif and Melissa and Jess.... Riley is out... interns, have help handout flyers...
        - Hopscotch game....
    - May/June (tree care)

        - Bring watering bags and bucket examples… show how to set up…
- Arbor Day - April…
- Heritage Tree Outreach and applications… proactive… scouting party/outreach
    - Adapt tree planting post card for heritage tree program…
- 2025 outreach message goal: watering
- Discussion: Watershed Alliance and Columbia Springs funding challenges
    - Future of watershed alliance and watering bag grants
    - Would like update from City staff… City budget and impacts to our nonprofit partners
- Outreach email to our neighborhoods
    - Tree care tip (water bags off), upcoming tree plantings, tree diversity, pruning damaged trees for season… (MJ to share w/ team)

Policy:
No report.

Pollinator:
No report

Corridor:
No report

9. Urban Forestry Staff Report

Since the October Commission meeting, staff have been focused on preparing for the upcoming planting season; implementing our 3-year Green Work Force IRA grant; our Tree Inventory IRA grant; next steps with our Urban Forest Management Plan and our workload to ensure all aspects of our program are moving forward.

Tree City USA and Growth Award Application
Staff submitted to recertify as a Tree City USA this fall and will be submitting an application for a Growth Award. The Growth Award is a prestigious award designed to recognize cities that have made notable improvements in their Urban Forestry Programs over the last year. Vancouver would qualify for the Growth Award due to the partnership with Friends of Tree Adult Internship Program, Urban Forestry's work with Planning regarding Urban Forestry staff now reviewing all single family residences and the Old Apple Tree Festival.

Tree Inventory Grant 2025-26

This summer Urban Forestry was awarded $350,000 to complete a tree inventory from Washington Department of Natural Resources (DNR) as part of an Inflation Reduction Act grant. City Council approved the grant agreement on October 7, 2024. Staff will be working with Procurement on a request for proposal to secure a contractor to complete the project. The goal is to have a contractor by December 2024.

Green Work Force Grant 2024-2026 Environmental Youth Corps Program

Riley is doing a great job creating a school-year program. Crew started on November 2 and will continue through January. Students are working on Saturdays, supporting volunteer events, planting trees, and learning about urban forestry and our community. The Federal IRA grant agreement that funds the Environmental Youth Corps program has been updated to reflect a 3-year contract. The original 5-year grant has been condensed to 3 years due to uncertainty of funding for 5 years at the federal level. Riley participated on a panel for The Corps Network's webinar on Career Development in Urban Forestry. She presented on the Environmental Youth Corps program to 79 participants!

Proactive Street Tree Program

The proactive street tree program continues to move forward in coordination with Transportation's Pavement Management program. Staff will be implementing planting plans along several of the streets serviced in 2024 this fall and winter of 2025. Staff will also be attending Transportation's debrief meeting on this year's program and planning for 2026. It is anticipated this program will reduce storm damage in the right of way, address social/environmental justice, and improve climate resilience.

2024 Annual Report

Staff will begin work on the annual report this month. Please send us any partners you have worked with, projects you have worked on, and other activities to be included in our 2024 Annual Report. See last year's Annual Report for reference, UF_AR2023.pdf.

Our site visit inspection backlog is less than 10 days (goal is 10 day response time) and hovering around 15 requests. Development and inspection request are steady.

Potential Zoning Code Amendments to Tree/Landscape Regulations

**Consultant Disclaimer: The code suggestions in this document are based on a review of the subsections cited by the City of Vancouver. A comprehensive review of code for cross references and definitions has not been completed as of the submittal date of this document. The consultant recommends a comprehensive review of the code when completing updates to ensure consistency between seemingly unrelated code standards. This comprehensive review can be completed by the consultant, City of Vancouver Staff, or preferably both.*

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
1. 20.150.040C. Definitions Meanings of Specific Words and Terms I through L.	Update landscape definition to reflect pervious vegetated area only not hardscape features. Thus, landscape areas remain pervious and available for landscaping.	Update definition from: To beautify or improve a section of ground by contouring the land and planting flowers, shrubs or trees. Landscaping may also include nonvegetative improvements such as courtyards, fountains, pedestrian walkways, plazas, and medians. To: to enhance a section of pervious ground for aesthetic, ecological and economic value by planting groundcover, shrubs or trees. Hardscape and paved areas shall not be included in the minimum required landscape area.	Agree with requiring landscaping to be pervious as proposed by staff. Suggest removing a development standard from within the definition as follows: ~~to~~ An enhanced ~~a~~ section of pervious ground for aesthetic, ecological and economic value ~~by planting~~ with groundcover, shrubs or trees. ~~Hardscape and paved areas shall not be included in the minimum required landscape area.~~ Impervious surfaces are not considered landscaping.	Consultant recommended revisions remove the development standard from the definition. If the City wants to allow a certain portion of landscaping to be impervious, they can specify that in the development standards.
2. 20.410.050-1 Low Density Development Stnds	Lack of room for trees on single-family lots	Change minimum landscaping from 10% to 20% and remove "net." Leaves 80% maximum hardscape surface lot coverage. Increase rear setbacks to 10 feet.	Support changing both the landscaping and setback standards for new construction as proposed by staff. For non-conforming development, do not allow properties to move further away from compliance with standards. Allow discretionary "planned development" option for developments that seek to vary from standards but provide alternative benefits such as green roofs, street trees with enhanced soil volumes, central courtyards with tree canopy, preservation of mature trees using alternative pier foundations, or other options that provide equivalent or greater benefits than meeting code standards. Do not allow reduction through discretionary process of less than previous code minimums (e.g. no less than 10% net landscaping, no less than 5-foot rear yard setback).	Brings new development in line with peer jurisdictions from previous study by consultant. Allows flexibility to vary from standards when tree benefits can be provided in alternative ways.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
3. 20.420.050-1 High Density Development Stnds	Lack of tree retention on multifamily sites and inadequate room for trees in setback/buffers	Change minimum landscaping from 10% to 20% and remove "net." Leaves 80% maximum hardscape surface lot coverage. Change 5-foot setbacks to 10 feet.	Support changing both the landscaping and setback standards for new construction as proposed by staff. For non-conforming development, do not allow properties to move further away from compliance with standards. Allow discretionary "planned development" option for developments that seek to vary from standards but provide alternative benefits such as green roofs, street trees with enhanced soil volumes, central courtyards with tree canopy, preservation of mature trees using alternative pier foundations, or other options that provide equivalent or greater benefits than meeting code standards. Do not allow reduction through discretionary process of less than previous code minimums (e.g. no less than 10% net landscaping, no less than 5-foot setback).	Brings new development in line with peer jurisdictions from previous study by consultant. Allows flexibility to vary from standards when tree benefits can be provided in alternative ways.
4. 20.430.040-1 Commercial Development Stnds	Lack of tree retention on commercial sites and inadequate room for trees in setback/buffers	Change minimum landscaping for CN, CC, CG, RGX and MX from 15% to 20% and remove "net." Leaves 80% maximum hardscape surface lot coverage. Change 5-foot setbacks to 10 feet.	Support changing both the landscaping and setback standards for new construction as proposed by staff. For non-conforming development, do not allow properties to move further away from compliance with standards. Allow discretionary "planned development" option for developments that seek to vary from standards but provide alternative benefits such as green roofs, street trees with enhanced soil volumes, central courtyards with tree canopy, preservation of mature trees using alternative pier foundations, or other options that provide equivalent or greater benefits than meeting code standards. Do not allow reduction through discretionary process of less than previous code minimums (e.g. no less than 15% net landscaping, no less than 5-foot setback).	Brings new development in line with peer jurisdictions from previous study by consultant. Allows flexibility to vary from standards when tree benefits can be provided in alternative ways. Won't Section 20.925.100 (Water Conservation Standards.) prevent high water use plants and lawn areas in setback landscaping?
5. 20.440.040-1 Industrial Development Stnds	Lack of tree retention on industrial sites and inadequate room for trees in setback/buffers	Change minimum landscaping for OCI from 15% to 20%, IL from 10% to 20%, and IH from 0% to 10%, and remove "net." Leaves 80%-90% maximum hardscape surface lot coverage.	Support changing both the landscaping and setback standards for new construction as proposed by staff. For non-conforming development, do not allow properties to move further away from compliance with standards. Allow	Brings new development in line with peer jurisdictions from previous study by consultant. Allows flexibility to vary from standards when tree benefits can be provided in alternative ways.

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Code changes with moderate to significant policy implications				
		Change 5-foot setbacks to 10 feet.	discretionary "planned development" option for developments that seek to vary from standards but provide alternative benefits such as green roofs, street trees with enhanced soil volumes, central courtyards with tree canopy, preservation of mature trees using alternative pier foundations, or other options that provide equivalent or greater benefits than meeting code standards. Do not allow reduction through discretionary process of less than previous code minimums (e.g. no less than 5-foot setback).	Won't Section 20.925.100 (Water Conservation Standards.) prevent high water use plants and lawn areas in setback landscaping?
6. 20.770.070.B.1 Tree, Vegetation, and Soil Plan Review Standards	Existing trees are not a priority within the design process. With this addition, existing trees would be part of design process at the beginning vs the end. Retention of 30% of existing trees that are in good condition allows for reasonable use as designers can weigh and select the best design that retains 30% of the existing trees not all trees. Density standards provides a min/max range. As long as the development is within the allowable range the project meets code.	Add text 1. Preserve and protect a minimum of 30 percent of existing trees in good condition and incorporate them into the tree and landscape plan where preservation of 30 percent of existing trees in good condition will not prevent reaching the minimum density range for the underlying zone. When there are…This may require site redesign including but not limited to ….and changing the location of or reducing the number of buildings or building lots as long as the project is within the allowed density range. Provided, where necessary….	Support staff suggestion for preservation. City of Portland, OR requires preservation of 33% (one-third) of trees over 12-inch DBH that are not dead, dying, dangerous, or nuisance species (all defined terms). Alternatively, can define trees as good, fair, poor, very poor, dead as in City of Milwaukie, OR code (see below). In addition, mitigation costs apply to the removal of any trees over 20-inch DBH to incentivize preservation of more mature trees in Portland. Mitigation costs go towards tree planting projects by the City. If 33% preservation requirement is not met, mitigation costs also apply in Portland. Suggested revisions are as follows: Preserve and protect a minimum of ~~30~~ 33 percent of non-exempt existing trees at least 12-inch DBH and in fair and good condition and incorporate them into the tree and landscape plan where preservation of ~~30~~ 33 percent of non-exempt existing trees in fair and good condition will not prevent reaching the minimum density range for the underlying zone… When there are…This may require site redesign including but not limited to ….construction of buildings on pier foundations, and changing the location of or reducing the number of buildings or	Preservation standard implemented in Portland, OR which is a neighboring jurisdiction that balances trees, development, and urban density. One-third (33%) is a more common threshold number to work with than 30%. Suggest setting minimum preservation threshold at 6-inch or 12-inch DBH so there is a minimum size tree for calculation purposes. Suggest allowing an enhanced cost in lieu of preservation option if site redesign alternatives are not feasible to retain trees. Suggest including in the site redesign options the requirement for pier foundations as is often required by the City of Cannon Beach, OR. Will need a listing of tree conditions to include good, fair, poor, very poor, and dead.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
			building lots as long as the project is within the allowed density range. Provided, where necessary…. For the purposes of the 33 percent preservation standard, exempt trees include: a. Trees in poor, very poor, or dead condition; b. Trees meeting the Nuisance tree criteria; c. Trees meeting the Hazard tree criteria; d. Trees on the City of Vancouver Invasive Tree List; e. Offsite trees; f. Street trees in the public right-of-way; and g. Trees that are less than 12-inch DBH. Here are the tree health criteria definitions from the City of Milwaukie, OR code which could be incorporated: Assess the health condition of each tree using the following categories: (1) Good (no significant health issues) (2) Fair (moderate health issues but likely viable for the foreseeable future) (3) Poor (significant health issues and likely in decline) (4) Very poor or dead (in severe decline or dead)	
7. 20.770.070.B.3 Tree, Vegetation, and Soil Plan Review Standards	Existing trees are not a priority within the design process. With this addition, existing trees would be part design process at the beginning vs the end.	Add text 3. In designing a development project and in meeting the required minimum tree density by preserving a minimum of 30 percent of existing trees in good condition, the applicant…	Support staff suggestion for preservation with the following percent revision: In designing a development project and in meeting the required minimum tree density by preserving a minimum of ~~30~~ 33 percent of non-exempt existing trees at least 12-inch DBH and in fair and good condition, the applicant… Here are the tree health criteria definitions from the City of Milwaukie, OR code:	Preservation standard implemented in Portland, OR which is a neighboring jurisdiction that balances trees, development, and urban density. One-third (33%) is a more common threshold number to work with than 30%. Suggest setting minimum preservation threshold at 6-inch or 12-inch DBH so there is a minimum size tree for calculation purposes. Suggest allowing a cost in lieu of preservation option if site redesign options are not feasible to retain trees.

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Code changes with moderate to significant policy implications				
			Assess the health condition of each tree using the following categories: (1) Good (no significant health issues) (2) Fair (moderate health issues but likely viable for the foreseeable future) (3) Poor (significant health issues and likely in decline) (4) Very poor or dead (in severe decline or dead)	Will need a listing of tree conditions to include good, fair, poor, very poor, and dead.
8. 20.770.050 Tree, Vegetation and Soil Plan Required	Incentivize tree preservation by instituting mitigation costs. If removing existing trees, pay mitigation costs based on how many tree units the existing trees are worth based on Table 20.770.080-1.	C. Application, fee and mitigation costs. The application for a tree removal permit and/or tree, vegetation and soil plan review shall be made on a form provided by the City, and shall be submitted at the same time as the tree, vegetation and soil plan. The applicant shall pay a permit fee to the Community and Economic Development Department. Prior to tree removal, mitigation costs are required to be paid to the City Tree Account based on tree units of existing trees permitted to be removed. Mitigation costs are not required for hazardous, nuisance, dead/declining, invasive or damaged trees. Example: If removing a 34 inch Douglas Fir in good condition which is worth 12 tree units, mitigation costs would be 12 x going rate for tree units ($850.00) equals $10,200.	Support staff suggestion to allow mitigation costs in lieu of preservation, which is a common allowance for other cities in the region. Suggest applying enhanced costs when 1/3 of trees in good or fair condition over 12-inch DBH cannot be preserved. Have seen mitigation costs be effective at encouraging applicants to seriously consider alternative design options to preserve trees. Also note that for affordable housing projects, cities often allow reduced or waived mitigation costs. Recommend the following revisions to the proposed code language: C. Application, fee and mitigation costs. The application for a tree removal permit and/or tree, vegetation and soil plan review shall be made on a form provided by the City, and shall be submitted at the same time as the tree, vegetation and soil plan. The applicant shall pay a permit fee to the Community and Economic Development Department. Prior to tree removal, mitigation costs are required to be paid to the City Tree Account based on tree units of existing trees permitted to be removed. Mitigation costs are not required for hazardous, nuisance, dead/declining, invasive or damaged trees, trees in poor or very poor condition, and trees on the City of Vancouver Invasive Tree List. Example: If removing a 34-inch DBH Douglas Fir in fair or good condition which is worth 12 tree units, mitigation	Preservation standard implemented in Portland, OR which is a neighboring jurisdiction that balances trees, development, and urban density. One-third (33%) is a more common threshold number to work with than 30%. Suggest setting minimum preservation threshold at 6-inch or 12-inch DBH so there is a minimum size tree for calculation purposes. Suggest allowing a cost in lieu of preservation option if site redesign options are not feasible to retain trees. Suggest an enhanced cost in lieu of preservation if 33% preservation standard is not met. Do not suggest putting costs into code. Include costs in "SCHEDULE OF FEES FOR DEVELOPMENT & BUILDING RELATED PERMITS" so they can be more easily amended and updated as needed. Will need a listing of tree conditions to include good, fair, poor, very poor, and dead.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
			costs would be 12 x ~~going~~ current rate for tree units ~~($850.00) equals $10,200~~. Enhanced mitigation costs of 1.5 times the regular mitigation costs are required to be paid to the City Tree Account based on tree units of existing non-exempt trees permitted to be removed below the one-third (33%) preservation threshold described in Section 20.770.070.B.1. Enhanced mitigation costs are based on the largest non-exempt tree or trees that would be required to meet the 33% preservation threshold. Example: If removing a 34-inch DBH Douglas Fir in fair or good condition which is worth 12 tree units results in a project not meeting the 33 percent preservation threshold, enhanced mitigation costs would be 12 x 1.5 x current rate for tree units.	
9. 20.925.030-1 Landscaping and Buffer Stnds	Lack of room within 5-foot setback/buffers for trees.	Change required buffer setbacks of 5 feet to 10 feet.	Support changing buffer setbacks for new construction as proposed by staff. For non-conforming development, do not allow properties to move further away from compliance with standards. Allow discretionary "planned development" option for developments that seek to vary from standards but provide alternative benefits such as living walls, native landscaping, larger nursery stock, street trees with enhanced soil volumes, preservation of mature trees using alternative pier foundations, or other options that provide equivalent or greater benefits than meeting code standards. Do not allow reduction through discretionary process of less than previous code minimum (e.g. no less than 5-foot buffer).	Brings new development in line with peer jurisdictions from previous study by consultant. Allows flexibility to vary from standards when tree benefits can be provided in alternative ways.
10. 20.945.040.I.3 Parking & Loading	Too high of a threshold, loss of opportunity to plant parking lot shade trees.	Reduce threshold for when interior landscaping is required from more than 20 parking spaces to more than 10 parking spaces.	Support changing standard as proposed by staff.	Mitigates urban heat by requiring landscaping and trees where there will be larger areas of paving for parking lots.

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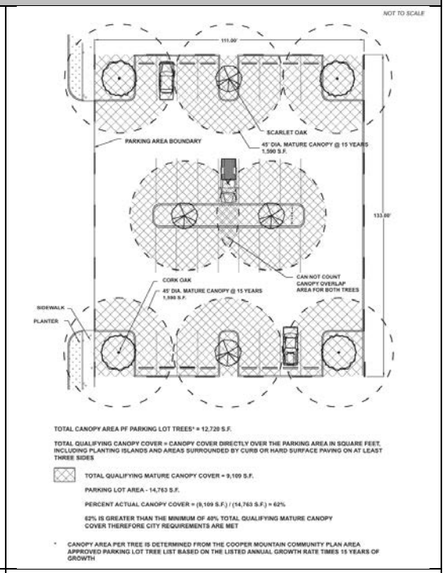
Code changes with moderate to significant policy implications				
11. 20.945.040.I.3.b. Parking & Loading	Lack of soil volume and root space for trees to mature within parking lot islands.	Change parking lot island dimensions of six feet to the standard parking lot stall of 9 feet by 17 feet.	Rather than a specific dimension standard, suggest requiring a minimum of 459 square feet of open soil per tree (which is 9 feet by 17 feet) and minimum width of 6 feet or greater. This will allow flexibility in design while providing minimum dimensional standards appropriate for shade trees.	Allows flexibility in design to address issues such as compact spaces and other variations while providing a larger minimum soil volume than in current code. Encourages contiguous planting strips which is generally healthier for tree growth than isolated islands. See example design from Fort Worth, TX code below: 
12. 20.945.040.I.3.b. Parking & Loading	Lack of soil volume and root space for required trees to mature within parking lots is compounded when other development elements are placed within landscape islands.	Add additional text: If other elements such as but not limited to fire hydrants, streetlights are to be included in landscape islands, landscape island shall be enlarged to provide appropriate distance between additional elements and the required trees.	Support staff suggestion and minor text addition as follows: If other elements such as but not limited to fire hydrants, streetlights, and utility vaults are to be included in landscape islands, landscape island shall be enlarged to provide at least 459 square feet of open soil per tree and appropriate distance between additional elements and the required trees.	Ensures soil volume minimums are still met for each tree when other elements are placed in islands.
13. 20.945.040.I.3.c.1. Parking & Loading	Lack of shade trees within parking lots	Change number of trees required from one tree for every 10 parking stalls to one tree for every 5 parking stalls in addition to any additional trees required to achieve 50% tree canopy coverage of the parking lot. 1 tree per 5 stalls is in line with other jurisdictions. If parking lot is 20,000, at least 10,000 would need to be covered by tree canopy at maturity. Oregon parking lot standards requires 50% tree coverage.	Support change although note that final Oregon CFEC parking lot tree canopy rule requires: "Tree canopy covering at least 40 percent of the new parking lot area at maturity but no more than 15 years after planting". Clarify that 50% coverage is based on the mature size of the tree, trees shall be evenly distributed throughout the parking area, approved as parking lot trees by the City of Vancouver, and specify that the parking area calculations include parking stalls, drive isles, and interior landscape areas.	Parking lot shading is an important climate change mitigation strategy. Fifty percent (50%) standard is achievable but suggest City note in tree lists which trees are approved as parking lot trees, require even distribution of trees, and provide guidance on calculations. See example from draft City of Beaverton, Cooper Mountain Tree Code.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
				
14. 20.945.040.I.3.c.1. Parking & Loading	Lack of soil volume and root space for trees to mature within parking lot islands.	Landscape islands shall be the size of a standard parking stall 9 feet by 17 feet with the tree planted in the center of the landscape island.	Rather than a specific dimension standard, suggest requiring a minimum of 459 square feet of open soil per tree (which is 9 feet by 17 feet) and minimum width of 6 feet or greater. This will allow flexibility in design while providing minimum dimensional standards appropriate for shade trees.	Allows flexibility in design to address issues such as compact spaces and other variations while providing a larger minimum soil volume than in current code. Encourages contiguous planting strips which is generally healthier for tree growth than isolated islands. See example design from Fort Worth, TX code below: 
15. 20.770.030 Exemptions. Protect all trees.	Protect all trees. Remove questions and arguments regarding what is subdividable. More equitable across the city. Or add more than double the minimum lot size.	Delete exemption D for Residential parcels. D. Residential parcels. Removal of trees on lots which: 1) have an existing single family residence, 2) are under one acre in size, and 3) which cannot be further divided in accordance with the parcel's underlying zoning district and Chapter 20.320 VMC,	Support staff change except consider applying to trees less than 12-inch DBH consistent with proposed minimum preservation thresholds in items 7 and 8. D. Residential parcels. Removal of trees less than 12-inch DBH on lots which: 1) have an existing single family residence,	This allows some management of smaller trees on residential parcels while ensuring consistency with minimum preservation thresholds in items 7 and 8. Also reduces staff permitting burden in regulating removals of trees that are less than 12-inch DBH on residential parcels.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
	Or with all single family designations allowing up to 4 units, permits required for all lots?	governing short subdivisions and subdivisions, respectively. Such exemption shall not apply to lots subject to prior approved tree, vegetation, and soil plan.	2) are under one acre in size, and 3) which cannot be further divided in accordance with the parcel's underlying zoning district and Chapter 20.320 VMC, governing short subdivisions and subdivisions, respectively. Such exemption shall not apply to lots subject to prior approved tree, vegetation, and soil plan.	Important to protect larger trees on residential parcel given allowance of up to 4 units and potential impacts to existing trees.
16. 20.150.040E. Definitions Meanings of Specific Words and Terms Q through T.	Define tree drip line.	Tree Drip Line. A tree's drip line shall be described by a line projected to the ground from the outer edge of the tree canopy delineating the outermost extent of foliage in all directions.	Support staff change.	Consistent with common definition of term.
17. 20.770.140 Enforcement and Penalties	Provide incentive to not remove protected and retained trees as part of development.	D. Restoration. Violators of this chapter or of a permit issued thereunder shall be responsible for restoring unlawfully damaged areas in conformance with a plan, approved by the Planning Official, which provides for repair of any environmental and property damage, and restoration of the site; and which results in a site condition that, to the greatest extent practical, equals the site condition that would have existed in the absence of the violation(s). Restoration costs will be based on the City appraised value of unapproved trees removed using the latest edition of Guide for Plant Appraisal (International Society of Arboriculture, Council of Tree and Landscape Appraisers). The amount of costs above the approved restoration plan will be paid into the tree account. Protected and retained trees that are removed in violation of an approved tree plan shall have the tree drip lines maintained in perpetuity as protected tree drip lines. No impervious surface, obstructions, or structures are permitted within a protected tree drip line. Tree replacement planting shall be prioritized within the protected tree drip line to the maximum extent feasible for optimal health of the replacement trees.	Support staff change with the following edits: Protected and retained trees that are removed in violation of an approved tree plan shall have the tree drip lines maintained in perpetuity <u>through a deed restriction, conservation easement, or other protective instrument approved by the City</u> as protected tree drip lines. No impervious surface, obstructions, or structures are permitted within a protected tree drip line. Tree replacement planting shall be prioritized within the protected tree drip line to the maximum extent feasible ~~for optimal health of the replacement trees~~ <u>to restore equivalent or greater functions and values of the removed tree(s)</u>.	Removes incentive to "cut and pay" to get out of preserving trees which is not an uncommon request in the consultant's experience. Suggested edits clarify ways tree drip lines can be protected in perpetuity. Specifies that replacement trees must provide equivalent or greater functions and values of removed trees so that for example, an Oregon white oak is not replaced with an ornamental dogwood.
18. Section 20.925	At times projects are not able to plant all required landscape and street trees due	Section 20.925.030 General Provisions.	Support staff suggestion.	This is common practice to allow a cost in lieu of planting for many cities in the

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
Capture lost landscape and street trees not planted onsite as part of no net loss.	to site constraints. When this occurs, there is not mechanism to capture these lost trees.	A. Landscaping Requirements. Landscaping shall be provided and maintained per Table 20.925.030–1 and 20.925.030-2 of this section. B. Buffer trees are required. When space is unavailable for planting the required buffer trees as determined by the Planning Official due to site constraints, not design constraints, then the applicants shall pay the estimated cost of the current market value of the trees, including installation and maintenance costs, into the City's Tree Account established for purchase, installation, and maintenance of such trees. Section 20.925.060 Street Trees. C. Size, and spacing and placement of street trees. The specific spacing of street trees by size of tree shall be as follows: 1. One 2" caliper deciduous tree shall be provided for every 30' of frontage on a public or private street., provided that the Planning Official may adjust the spacing to accommodate access points or other obstructions. When space is unavailable for planting the required street trees of one for every 30' as determined by the Planning Official, due to site constraints, not design constraints, then the applicants shall pay the estimated cost of the current market value of the street trees, including installation and maintenance costs, into the City's Tree Account established for purchase, installation, and maintenance of such trees;		region. Also, costs can be included in "SCHEDULE OF FEES FOR DEVELOPMENT & BUILDING RELATED PERMITS" so they can be more easily amended and updated as needed.
		What would be a good incentive for seeking Gold Leaf?	You could potentially apply a percent reduction (e.g. 25%) in tree removal mitigation costs for projects that achieve Gold Leaf status. For sites not subject to mitigation costs, incentive could be a percent reduction (e.g. 25%) in certain SDC charges such as for sewer	Removal of trees is offset by providing additional future canopy growth through Gold Leaf status. Incentive would be to reduce tree removal mitigation costs.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
			connections based on benefits additional tree canopy provide to those systems.	Incentive for projects not subject to mitigation could potentially be a reduction in SDC.
19. 20.770.020 Applicability add TreeCAP Program requirement.	Require projects to achieve Silver Leaf canopy coverage at a minimum per Climate Action Framework	20.770.020 Applicability. B. Tree, Vegetation, and Soil Plan required Unless otherwise exempted in Section 20.770.030 VMC, any site subject to a development within the City of Vancouver shall be required to develop a tree, vegetation, and soil plan and shall be required to meet the minimum tree density and at a minimum achieve Silver Leaf TreeCAP tree canopy coverage percentages herein created.	Support staff recommendation but suggest listing percent canopy requirements in code so people do not have to cross reference TreeCAP to find percentages. For reference here are the tree canopy tiers from the City of Tigard, OR Code: 1. Subdivisions and land partitions: a. 40 percent for the overall development site in the R-1, R-2, R-3.5, R-4.5 and R-7 zones, and 15 percent for each lot designated for single detached house development. b. 33 percent for the overall development site in the R-12, R-25, and R-40 zones. 2. Apartments: 33 percent for the overall development site. 3. Nonresidential development: 33 percent for the overall development site, except nonresidential development in the MU-CBD, MUC-1, I-L, and I-H zones and schools (as defined in TCDC Section 18.60.050.J) are only required to provide 25 percent for the overall development site. 4. Mobile home parks: 33 percent for the overall development site. 5. Wireless communication facilities: zero percent for the overall development site. For the City of Portland, OR, the required tree area is as follows:	Makes code more user friendly.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
			Table 50-2 **Determining Required Tree Area** **Development Type** / **Option A** One to Four Family Residential: 40 percent of site or development impact area Multi Dwelling Residential: 20 percent of site or development impact area Commercial/Office/ Retail/Mixed Use: 15 percent of site or development impact area Industrial: 10 percent of site or development impact area Institutional: 25 percent of site or development impact area Other: 25 percent of site or development impact area Note that in City of Portland, OR the tree area does not directly correlate to canopy area.	
20. 20.770.050 Tree, Vegetation and Soil Plan Required B.1.e; B.2.e; B.4.d; B.5.a.e; B.6.d; B.7.e	Require projects to achieve Silver Leaf canopy coverage at a minimum per Climate Action Framework	TreeCAP Percentage. The site plan shall include tree canopy coverage percentages that at a minimum show how the project will achieve Silver Leaf TreeCAP designation within 20 years.	Support staff recommendation but suggest listing percent canopy requirements and provide more details regarding how projects can meet percent requirements. For example, how site trees, street trees, canopy overlap, offsite canopy, and species can be used to meet requirements. Suggest soil volume and tree spacing and building/pavement setback requirements be established to ensure appropriate placement of trees at a site. See City of Tigard, OR and City of Milwaukie, OR urban forestry manuals and codes for example specifications.	Canopy cover is a good metric for ensuring consistency with citywide climate action and urban forestry goals. However, questions regarding calculations will arise during development review if code, tree manual, or informational brochures do not specify items such as appropriate species, mature sizes, spacing, building and pavement setbacks, and calculation standards such as how site trees, street trees, canopy overlap, offsite canopy, and species can be used to meet requirements. City of Tigard, OR has implemented tree canopy standards since 2012 and has consistent process for doing so. City of Milwaukie, OR also has a newer code with canopy standards that has been implemented. City of Beaverton, OR is also in process of adopting canopy standards for Cooper Mountain area. Consultant worked on all

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
				three codes and can provide recommendations for Vancouver on strategies for achieving specificity without making code overly complex.
21. 20.770.070 Tree, Vegetation and Soil Plan Review Standards. B.1.	Require projects to achieve Silver Leaf canopy coverage at a minimum per Climate Action Framework	1. When there are feasible and prudent location alternatives on site for proposed building structures or other site improvements, existing native vegetation and trees are to be preserved, even if the minimum tree density and Silver Leaf TreeCAP designation is exceeded. This may require site redesign including, but not limited to: redesign of streets, sidewalks, stormwater facilities, utilities; changing the shape and size of the parking lot; reducing or limiting proposed site grading; and changing the locations of buildings or building lots. Provided, where necessary, density transfer areas per VMC 20.940 may be used to ensure protection and retention of trees	Support staff recommendation. Suggest including in the site redesign options the requirement for pier foundations as is often required by the City of Cannon Beach, OR.	Requires preservation of existing trees since existing mature trees provide more benefits and services than newly planted trees. Pier foundations can be an effective tool for preserving trees close to newly constructed buildings.
22. 20.770.070 Tree, Vegetation and Soil Plan Review Standards. B.3 & 4.	Require projects to achieve Silver Leaf canopy coverage at a minimum per Climate Action Framework	3. In designing a development project and in meeting the required minimum tree density and Silver Leaf TreeCAP designation, the applicant shall prepare the required tree, vegetation, and soil plan in the following order of tree preservation priority. Trees and native vegetation to be preserved must be healthy, wind-firm, and appropriate to the site at their mature size, as identified by a qualified professional. 4. On sites where there are currently inadequate numbers of existing trees, or where the trees are inappropriate for preservation, as determined by the planning official, then replacement tree planting shall be required. In designing a development project and in meeting the required minimum tree density and minimum Silver Leaf TreeCAP designation, the following trees shall be planted in the following order of priority:	Support staff recommendation.	Primarily a house keeping amendment to ensure Silver Leaf is noted as a requirement.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
23. 20.770.080 Tree Density and TreeCAP Requirements F.	Require projects to achieve Silver Leaf canopy coverage at a minimum per Climate Action Framework	F. *Minimum Silver Leaf TreeCAP designation requirement established*. The minimum Silver Leaf TreeCAP (Tree Canopy Achievement Program) designation for new development based on zoning designation is required; Silver Leaf TreeCAP designation ***for area of site disturbance*** for all projects. For properties within the City Center District, the minimum Silver Leaf TreeCAP designation does not apply. 1. TreeCAP designation may consist of existing trees, replacement trees or a combination of existing and replacement trees, pursuant to the priority established in Section 20.770.070 VMC. Existing trees in excess of the minimum Silver Leaf TreeCAP designation may be required to be retained based on the tree, vegetation, and soil plan review standards of 20.770.070. Required street trees may not be counted toward the minimum Silver Leaf TreeCAP designation except for the portion of the tree canopy that covers or is anticipated to cover the parcels in 20 years. 2. TreeCAP calculation. For the purpose of calculating required minimum tree canopy coverage, the area of the entire site shall be included in the calculations. Tree canopy cover shall be the anticipated tree canopy width within 20 years of each tree at the spacing provided.	Support staff recommendation except have a question about the ***bolded and italicized*** statement since later in the text it says that the entire site is subject to the Silver Leaf TreeCAP. Also, suggest amending the City's tree lists to include a category for anticipated canopy cover after 20 years of growth. Suggest listing percent canopy requirements and provide more details regarding how projects can meet percent requirements. For example, how site trees, street trees (noted by staff), canopy overlap, offsite canopy, and species can be used to meet requirements. Suggest soil volume and tree spacing and building/pavement setback requirements be established to ensure appropriate placement of trees at a site. See City of Tigard, OR and City of Milwaukie, OR urban forestry manuals and codes for example specifications. Also, suggest establishing square foot Tree Canopy Cost for projects that cannot meet Silver Leaf tree canopy standards based on the square foot deficit of tree canopy below the standard. The costs can be used to support the City's urban forestry efforts at other sites.	Canopy cover is a good metric for ensuring consistency with citywide climate action and urban forestry goals. However, questions regarding calculations will arise during development review if code, tree manual, or informational brochures do not specify items such as appropriate species, mature sizes, spacing, building and pavement setbacks, and calculation standards such as how site trees, street trees, canopy overlap, offsite canopy, and species can be used to meet requirements. City of Tigard, OR has implemented tree canopy standards since 2012 and has consistent process for doing so. City of Milwaukie, OR also has a newer code with canopy standards that has been implemented. City of Beaverton, OR is also in process of adopting canopy standards for Cooper Mountain area. Consultant worked on all three codes and can provide recommendations for Vancouver on strategies for achieving specificity without making code overly complex. Tree Canopy Cost can be used to address concerns for projects that cannot meet Silver Leaf standard. In the consultant's experience in Tigard, OR applicants seek to avoid the Tree Canopy Cost and meet the canopy standards wherever possible. Their cost is currently $3.00 per square foot of tree canopy. This value was calculated prior to 2012 based on the crown area and typical cost of a nursery tree using the 9th Edition of the Guide for Plant Appraisal (previous edition). For a more recent project in 2023, I recommended a tree canopy cost of $4.90 per square foot of tree canopy based on the average square foot value of tree canopy in a study[1] of eight[2] reference cities (including Portland, OR)

[1] Nowak, David J.; Crane, Daniel E.; Dwyer, John F. 2002. *Compensatory value of urban trees in the United States*. Journal of Arboriculture. 28(4): 194-199.
[2] Baltimore, MD was excluded from the average since it was an outlier in tree canopy value.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
25. 20.950. COTTAGE CLUSTER HOUSING 20.950.030 Site Development and Design Standards.	Cottage Cluster development is multi family on single family designation without landscape requirements.	20.950. COTTAGE CLUSTER HOUSING 20.950.030 Site Development and Design Standards. A. *General Standards.* 7. Landscaping. Cottage Cluster Housing shall provide and maintain landscaping under the Higher Density Residential designation per 20.925, Table 20.925.030–1 and 20.925.030-2 along the properly lines where the housing will be located. C. *Common Courtyard Design Standards.* Each cottage cluster must share a common courtyard in order to provide a sense of openness and community of residents. Common courtyards must meet the following standards: 3. The common courtyard shall be developed with a mix of landscaping including large stature conifer and shade trees, lawn area, pedestrian paths, and/or paved courtyard area, and may also include recreational amenities. Impervious elements of the common courtyard shall not exceed 50 percent of the total common courtyard area.	Agree with staff recommendation. Suggest modifying Vancouver tree lists so that categories of trees are defined. Include cross reference to Vancouver tree lists in code. Columns can be added to tree lists noting trees that are small, medium, large, conifer, deciduous, shade trees, native, non-native, ornamental, columnar, climate-adapted, etc. as needed.	Cottage clusters should have landscaping requirements for livability. If requiring certain types of vegetation, need to define the types and can do so in the tree lists. The tree lists can be amended and updated as needed.
26. 20.770.080 Tree Density Requirement E.1.b.	Specify large stature trees are required vs small ornamental or columnar replacement trees.	b. Replacement trees shall optimize tree diversity; include native species and at least 60% large stature native or climate adaptive conifers; utilize insect and disease resistant trees; and shade trees unless determined by the Planning Official as not appropriate for the site conditions. The planting of large stature trees is required to meet the purpose and goals of this Chapter for ecosystem services. The planting of ornamental and columnar trees shall be minimized.	Agree with staff recommendation. Suggest modifying Vancouver tree lists so that categories of trees are defined. Include cross reference to Vancouver tree lists in code. Columns can be added to tree lists noting trees that are small, medium, large, conifer, deciduous, shade trees, native, non-native, ornamental, columnar, climate-adapted, etc. as needed.	If requiring certain types of vegetation, need to define the types and can do so in the tree lists. The tree lists can be amended and updated as needed.
27. 20.925.050 Installation Requirements A.2.	Specify large stature trees are required vs small ornamental or columnar replacement trees.	2. Trees shall optimize tree diversity; include native species and at least 60% large stature native or climate adaptive conifers; utilize insect and disease resistant trees; and shade trees unless determined by the Planning Official as not appropriate for the site conditions.	Agree with staff recommendation. Suggest modifying Vancouver tree lists so that categories of trees are defined. Include cross reference to Vancouver tree lists in code. Columns can be added to tree lists noting trees that are small,	If requiring certain types of vegetation, need to define the types and can do so in the tree lists. The tree lists can be amended and updated as needed.

Issue/Code Section	Concern/Problem/Source	Staff Comments	Consultant Recommendation	Consultant Rationale/Comments
Code changes with moderate to significant policy implications				
		The planting of large stature trees is required to meet the purpose and goals of this Chapter for ecosystem services. The planting of ornamental and columnar trees shall be minimized.	medium, large, conifer, deciduous, shade trees, native, non-native, ornamental, columnar, climate-adapted, etc. as needed.	
28. 20.925.030. General Provisions. D.4. Irrigation System	Require all projects install irrigation systems. Summers are growing longer and hotter, irrigation throughout the plant establishment period (3-5 years) is a necessity.	Change from: 4. All landscaped areas shall be provided with an irrigation system or a readily available water supply with at least one outlet located within 50' of all plant material. To 4. Irrigation System. All landscaped areas, including islands and street trees shall be provided with a mechanical in-ground irrigation system.	Agree with staff suggestion for an automated irrigation system since watering is less likely to occur with manual watering. Suggest following minor revisions: 4. Irrigation System. All landscaped areas, including islands and street trees shall be provided <u>supplemental water</u> with an <u>automated</u> ~~mechanical in-ground~~ irrigation system. This following definition was created for another tree code project by the consultant. <u>Automated Irrigation System. A system for delivering water to plants using a timer, sensor, or other electronic device that requires minimal human or manual intervention.</u>	Trees and plants need supplemental water especially during early establishment after planting and throughout their lives given increased heat and drought with climate change. Irrigation installation is an added cost, but necessary in most cases to support new landscaping. Not all systems need to be in ground, as drip irrigation and other methods may be possible or required in situations such as where there are mature trees.
29. 20.925 and 20.770	Reduce dead vegetation due to lack of maintenance and watering on new projects. Require vegetation maintenance bond for establishment period (3 years) to ensure trees survive or reinspect after the 3rd summer and require replanting based on approved tree plan prior to release.	Section 20.925.120 Vegetation Maintenance Bond. A Vegetation Maintenance Bond (VMB) is to guarantee all plant/vegetation maintenance (including street trees) associated with the project are maintained in an acceptable condition through the establishment period of three years. This VMB is required to be submitted and accepted by the City prior to civil plan approval, final plat approval or certificate of occupancy is issued. A VMB shall be in a form approved by the City Attorney executed by a surety company authorized to transact business in the state of Washington. The VMB is required when the estimated cost for plants and labor (purchase, site preparation, installation and maintenance) is more than $1,000 as determined by a qualified	Agree with staff suggestion. Bonding is a common requirement for tree and plant establishment by cities in the region. Recommend not including a dollar amount ($1,000) in the code because of changes to the amount that may be required due to inflation. Suggest including the specific dollar amount in an administrative document that can be reviewed and amended by staff as needed. Also recommend detailing the process for releasing bond. For example, the City of Tigard, OR requires 80 percent plant survival and 100 percent dead plant replacement after the establishment period. Otherwise, the establishment period is reset.	Bonding can be an effective tool ensuring establishment of required trees and vegetation. However, there are logistical issues to consider for releasing bonds and for accessing private property for inspections.

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		professional and shall be 125% of the estimated costs submitted per the final landscape plan and approved by the City. The City may perform yearly inspections of the project to assure the maintenance is in an acceptable condition. 20.770.100.F. Vegetation Maintenance Bond. A Vegetation Maintenance Bond (VMB) is to guarantee all plant/vegetation maintenance (including street trees) associated with the project are maintained in an acceptable condition through the establishment period of three years. This VMB is required to be submitted and accepted by the City prior to civil plan approval, final plat approval or certificate of occupancy is issued. A VMB shall be in a form approved by the City Attorney executed by a surety company authorized to transact business in the state of Washington. The VMB is required when the estimated cost for plants and labor (purchase, site preparation, installation and maintenance) is more than $1,000 as determined by a qualified professional and shall be 125% of the estimated costs submitted per the final landscape plan and approved by the City. The City may perform yearly inspections of the project to assure the maintenance is in an acceptable condition.	Also need to keep in mind who will be completing the inspections (City staff or private consultant such as arborist or landscape architect) and how access will occur after site is occupied. May need to establish code authority for inspection access. Follow up inspections for mitigation plantings is an increasingly important issue for cities in the region to ensure accountability and success for tree replacements. In Lake Oswego, OR the City contacts the tree permit applicants and owners to arrange for an inspection by City staff. In Tigard, OR the project arborist is required to provide a report verifying success of mitigation plantings after the establishment period. In Portland, OR City staff require the tree owner to provide evidence of planted mitigation trees including nursery receipts and photos.	
30. VMC Table 20.925.030-2 Landscaping and Screening Design Standards1 Additional Requirements	Buffer trees shall be along each property line not grouped along selected property lines to provide buffering along all adjacent properties.	Add: Required number of buffer trees shall be planted along each property line to provide buffering along all adjacent properties.	Agree with staff suggestion. This can be added as a footnote along with the other footnotes to Table 20.925.030-2.	Clarifies code intent and staff's administrative practice.
31. 20.925.100.B Water efficient landscape (xeriscape) standards.	Section does not provide clear direction to applicants what to submit to the city to show adherence to code requirements. For example projects want to use river rock or bark dust and not plant material as ground cover.	D. Submit detailed landscape plan with plant quantities and spacing to meet xeriscape standards above.	Agree that a landscape plan should be required but suggest that a licensed landscape architect should be required to prepare the plan due to the complexity of the specifications. Suggest the following language:	The standards in Section 20.925.100 are complex enough that they should be demonstrated in a landscape plan by a licensed landscape architect.

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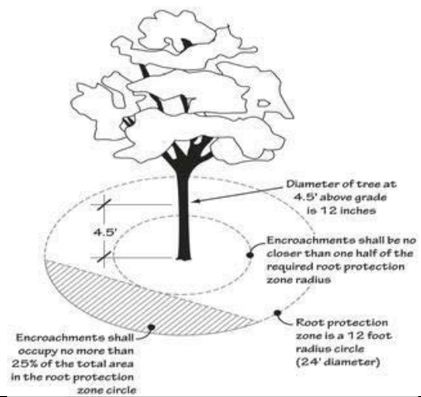
Code changes with moderate to significant policy implications				
			D. Submit a detailed landscape plan by a licensed landscape architect with plant quantities, ~~and~~ spacing, soil treatments, and irrigation methods to meet ~~xeriscape standards above~~ the Water Conservation Standards in Section 20.925.100.	
32. Update qualified professional for projects larger than 1 lot must work with LA or Arborist to complete.	Given retention of 30-50% of existing trees, should arborist report be required?		My recommendation is to require an arborist for any project for which a Level V tree plan is required. A landscape architect should be required for any project that requires a Level IV tree plan. The code currently allows discretion for the City to require a professional for other tree plan levels, which seems appropriate to require on a case-by-case basis. Other jurisdictions such as Lake Oswego, OR and Portland, OR allow applicants to create tree protection plans unless there is disturbance proposed within certain setbacks. E.g. 1-foot radius per 1-inch DBH for Lake Oswego, or as specified in figure below for Portland: 	Larger projects can absorb the cost of a professional more easily than smaller projects. However, smaller projects that plan to encroach within typical recommended tree protection setbacks should have a professional to help ensure viability of retained trees.
33. Increase fine amounts??	What is standard in the region? 12.04.100 Street Trees $250 1st; $500 2nd and $1000 after 20.770.140-1 Tree, Veg and Soil Conservation Civil Penalties. 5 classifications this be condensed?		Appraised value is a common fine amount in the region but it involves hiring a professional at significant cost to complete the appraisal. If appraised value is the fine, recommend including cost to complete the appraisal in the fine amount.	Do not include dollar amounts in code for violations so adjustments can be made to account for inflation. Appraised value is a common fine amount in the region but needs to account for cost of the appraisal in the fine.

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			Otherwise, can include a per-inch mitigation cost which I suggest including in an administrative cost schedule that can be periodically updated with inflation. The per-inch cost can be easily calculated without an appraisal. City of Portland Violation Costs are currently as follows: Damaged Tree: $225 per inch Removed Tree: $450 per inch Damaged Heritage Tree: $450 per inch Removed Heritage Tree: $900 per inch The City of Portland has discretion to require up to inch for inch replacement. When private trees are illegally removed, the City allows planting of the inches where space allows and then payment of the balance of inches. See Portland Code Section 11.70.080.B.4. When street trees are illegally removed, the City is focused on tree for tree replacement of street trees that are removed and then the payment of the balance of inches. See Portland Code Section 11.70.080.C.1. The City of Lake Oswego Violation Costs are currently as follows: Removed Tree: $103 per inch Removed Tree (enhanced): $209 per inch (or appraised value, whichever is greater) The City of Lake Oswego does not have a planting in lieu of payment option. Enhanced fines are for the removal of trees over 36-inch DBH, heritage trees, street and other public trees, trees in mapped sensitive lands areas, and trees protected by a development condition of approval. The violator is also subject to losing their City business license or ability to bid on City projects.	Per inch fine is easier to administer and requires less discretion. City of Portland provides a good guide for per inch costs. Can allow a combination of planting and payment to satisfy fine amounts using the Portland model.

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			Violations in Table 20.770.140-1 could be condensed for ease of administration.	
34. 12.04 Street Trees. Capture lost landscape and street trees not planted onsite as part of no net loss.	At times projects are not able to plant all required street trees due to site constraints. When this occurs, there is no mechanism to capture these lost street trees.	12.04.030 Authority and duties of the City Forester. D. The City Forester may direct where a street tree must be planted so that a street tree achieves its mature size or full, environmental function. When space is unavailable for planting the required street trees as determined by the City Forester, then the applicants shall pay the estimated cost of the current market value of the street trees, including installation and maintenance costs, into the City's Tree Account established for purchase, installation, and maintenance of such trees. Any person who violates this subsection may be subject to enforcement action, as authorized in VMC 12.04.100.	Support staff suggestion for a cost in lieu of street tree planting when space is unavailable. Also, support creating flexibility in street tree planting location at the back of sidewalk when space in the public right-of-way or planting strip is not available. The City of Tigard, OR code allows the following: "Street trees must be planted within the right-of-way wherever practicable. Street trees may be planted a maximum of six feet from the right-of-way when planting within the right-of-way is not practicable as determined by the City Engineer." Other Tigard, OR code provisions regulate trees planted on private property to meet street tree requirements in the same manner as other street trees. Some other cities require trees planted on private property to meet street tree requirements to have a protective instrument such as a deed restriction to inform purchasers of properties that the trees are protected as street trees.	Requiring a cost in lieu of street tree planting when space is not available is common in the region. Recommend allowing street tree planting on private property near the public right-of-way when there is not planting space in the right-of-way. If this is allowed, recommend code or other protections for these trees to prevent future removals.
35. 12.04.040. C. Permit fee	Codify permit fee for street tree permits	12.04.040. C. Permit application data and fee. The applicant must provide the location, number and kind of trees to be pruned or removed and planted; the kind of work to be done; the reasons for the requested activity; and any other information required by the City Forester to ensure compliance with the provisions of this chapter. The applicant shall pay a permit fee to the City.	Support staff suggestion for a street tree permit cost. Consider not requiring cost for street tree planting.	Street tree permit costs are common in the region. Some cities do not require permit costs for street tree planting so that there is not a disincentive to planting street trees.
36. 20.925.030 General Provisions.	Incorporate green building policy recommendations for cool surfaces. The intent is to reduce the urban heat island effect by increasing shade, incorporating reflective paving materials, and increasing landscape areas. Reducing urban heat island effect reduces airborne toxins,	Staff suggests incorporating into subsection 20.925.030 (General Provisions). This would involve adding item J.	20.925.030.J. *Cool Surfaces.* At least 50 percent of the site area outside of building footprints shall be cool surfaces. Cool surfaces shall be highly reflective, highly permeable, vegetated, shaded, or a mix of these features as follows:	Incorporated green building policy recommendations for cool surfaces with slight modifications to reflect already defined terms in the Vancouver Development Code. Defined terms include: site, building, pervious surface, impervious surface, and breezeway. For

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	decreases building cooling demand, and improves indoor and outdoor comfort.		1. Highly reflective surface: Uses high albedo paving materials with an initial solar reflectance (or albedo) of at least 0.33 or Solar Reflectance Index (SRI) of at least 29. 2. Highly permeable surface: Uses grid pavement with at least 50% perviousness. 3. Vegetated surfaces: Includes vegetated landscape areas or use of plants that provide foliage or tree canopy cover over impervious surfaces on the site within 15 years after planting. Plants must be in place prior to final building inspection or issuance of certificate of occupancy and cannot include artificial turf or other non-living plant material. The square footage of plant foliage or tree canopy over impervious surfaces is eligible for credit towards this standard. Examples for meeting this standard include vegetated landscape beds, parking lot tree canopy cover, and vegetated roofs over breezeways. 4. Shaded surfaces: Provide shade with architectural devices or structures. If the device or structure is a roof, it shall have an aged solar reflectance value of at least 0.28. If the device or structure is not a roof, or if aged solar reflectance information is not available, it shall have at installation an initial solar reflectance of at least 0.33. Structures can be covered by energy generation systems such as solar thermal collectors, photovoltaics, and wind turbines. 5. Fee in lieu of Cool Surfaces: For sites that are unable to meet this standard, a tree canopy fee based on the square footage of area the site is deficient of cool surfaces shall be required according to the SCHEDULE OF FEES FOR DEVELOPMENT & BUILDING RELATED PERMITS.	deficient sites, recommend a tree canopy fee in lieu based on the square footage the site is deficient. Recommend including a drawing example of how to meet this requirement either in code or as a supplementary handout.
Climate Action Framework Limit turf due to maintenance. Area not covered by trees	Landscape chapter limits no more than 40% of landscape area can be turf/grass. Should this be reduced?		This is in the Water Conservation Standards section 20.925.100.A.3.b. I would suggest a vegetative coverage standard for landscaped areas (such as	Requires plants to be used in landscaped areas to avoid large areas of drain rock or mulch. If 40% turf or high water use plants is too much, can reduce

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landscape beds groundcover, shrubs understory. Require additional trees? At least 1 onsite tree per lot even if exceeds density.			75%) to avoid the issue of people landscaping only with drain rock or mulch. High water use plants such as irrigated turf could be specified as a lower percentage of the landscaped (such as 25%) if there is guidance in the Climate Action Framework.	percentage based on guidance from Climate Action Framework.

Urban Forestry Work Plan 2025-2026

Public Works

Environmental Services

CITY OF Vancouver WASHINGTON

Acknowledgements

Vancouver City Council 2024

Mayor Anne McEnerny-Ogle

Councilmember Kim D. Harless

Mayor Pro Tem Erik Paulsen

Councilmember Bart Hansen

Councilmember Ty Stober

Councilmember Sarah J. Fox

City Manager

City Manager Lon Pluckhahn

Deputy City Manager Lisa Brandl

Deputy City Manager vacant

Public Works Department

Director of Public Works Steve Worley

Environmental Services Division

Environmental Services Manager Will Elder

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Charles Ray, Urban Forester

Nicholas Redmond, Urban Forestry Specialist

Jesse Batty, Urban Forestry Specialist

Andrew Land, Urban Forestry Specialist

Jessica George, Outreach Coordinator

Ian Bonham, Tree Planting Coordinator

Urban Forestry Commission

Established for the purpose of preserving, managing, and increasing the city's urban forest, thereby protecting a vital environmental, social and economic resource that benefits all residents and visitors, and for the purpose of assisting property owners and public agencies in improving and maintaining the urban forest in a manner consistent with adopted city policies.

The Commission is an advisory board of seven members who have demonstrated an interest in preservation and enhancement of the unban forest and appointed by City Council to four-year terms.

The Commission meets the third Wednesday of each month at 6 p.m. at Vancouver City Hall, 415 W Sixth Street.

Urban Forestry Commissioners

Melissa Johnston, Chair

Clif Barnes, Vice Chair

Susan Law

Jamie Beyer

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Introduction

Our urban forest comprises all 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 healthy functioning of the city and improves the quality of life for all community members.

Urban trees are green infrastructure and provide significant environmental, social, economic and human health benefits. By capturing stormwater, trees help prevent flooding, reduce pollution from runoff, minimize erosion and promote groundwater recharge (Soak Up the Rain.).

Urban trees filter airborne pollutants, including particles such as dust and soot, and gases, such as ozone and nitrogen oxides. Trees produce oxygen and store vast amounts of carbon dioxide (Nowak, et al.).

By shading, cooling and blocking wind, trees reduce heating and cooling energy use up to 25 percent (Heat Island Effect.). In neighborhoods, trees promote stronger social ties, encourage more outdoor activity, decrease crime and violence and increase community pride (Wolf.).

Property values are shown to be up to 10 percent higher for houses with large, well-maintained trees (Trees in the City.). These benefits translate directly into increased real estate values. Additional research shows that urban trees also have significant economic benefits for communities and promoting economic development (Wolf.).

A healthy urban forest doesn't just happen by itself. A healthy urban forest requires thoughtful planning and ongoing maintenance through all sectors, including involvement from community members as well as development and business communities. With only 21 percent tree canopy coverage, Vancouver is not realizing the maximum of potential urban forest benefits.

Vancouver's Urban Forestry program works to optimize and grow these benefits by preserving and enhancing tree canopy equitably while engaging the community in stewardship. This document outlines Urban Forestry program activities for 2024-26.

Introduction

Vancouver's Urban Forestry Program is part of the City's Department of Public Works and works closely across all departments.

Urban Forestry seeks to improve the quality of life in our city by enhancing tree canopy to provide clean air and water for current residents, visitors and future generations. Aesthetic, economic, social and environmental benefits associated with a healthy tree canopy significantly influence overall community health. Tomorrow's community vitality is closely linked with today's prudent management of the urban tree canopy, or green infrastructure.

Vision

Vancouver's urban forest is a healthy, dynamic, diverse and cohesive ecosystem that is valued and cared for through community stewardship because it balances economic vitality with the conservation of natural resources now and for future generations.

Mission

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.

Goals

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 Vancouver Urban Forestry as a leader in Pacific Northwest municipal forest management.

Goal One

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 development tree plans and ensure replanting and response to all violations of the Tree Conservation Ordinance. Complete final site tree inspections for all new development to ensure quality trees are retained and replanted following the approved plans.

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 Departments by reviewing street plans for climate adaptive tree species selections and locations to maximize planting of site-appropriate trees and minimize potential future hardscape infrastructure damage.

Support Public Works and Parks, Recreation and Cultural Services 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. Develop tree canopy and succession 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, climate resilience, and an equitable canopy.

Support Long Range Planning regarding proposed tree and landscape code update as part of the comprehensive code update in the Comprehensive Plan.

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 community outreach regarding tree ordinance requirements.
- Refine protocols for reviewing and issuing permits for major pruning, removal and planting of street trees and for the Street Tree Worker License program.
- Enforce the ordinance in a fair and reasonable manner to ensure no net loss of tree canopy.
- Continue to implement street tree removal posting protocols to inform the community on proposed street tree removal.

For every $1 we spend on our urban forest today, our region will receive more than $2.50 in benefits over 40 years.

Western Washington and Oregon Community Trees Guide: Benefits, Costs and Strategic Plantings

Goal One

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

Recognize and protect significant trees through the Heritage Tree Program.

- Increase awareness of program through outreach, tours, publications and events.
- Encourage nominations from the public, Neighborhood Tree Stewards, neighborhood associations and Urban Forestry Commission.
- Identify, designate and celebrate new Heritage Trees regularly.
- 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 and ensure the legacy lives on.

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

- Refine data collection protocol to maximize efficiency and accuracy.
- Implement approved grant to complete a street tree inventory.
- Update inventory over time, beginning with canopy projects and service requests.
- Utilize TreePlotter to input and manage street and park tree inventory with staff and interns. Engage the community in learning about our urban forest and the benefits of trees.

Coordinate young tree pruning on canopy restoration project sites and as part of asset preservation. Provide young tree care workshops to volunteers in coordination with neighborhoods and Friends of Trees.

Proactively manage trees on City property for safety and to minimize potential storm-damage costs through risk identification and removal. Continue the parks tree pruning cycle to mitigate hazards and increase health of trees. Explore options for the city to proactively maintain trees through a pruning cycle as City assets

Proactively manage street trees along transportation corridors to improve condition and reduce potential tree and transportation conflicts. Support the pavement management program by pruning for clearance and to improve tree health and replant with the right tree in the right location. Utilize the street tree management program to increase tree health and ensure an equitable distribution of tree benefits and for climate resilience across the community.

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

Goal One

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

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

- Support Urban Forestry Commission's Policy Subcommittee to evaluate development standards related to trees. Include code updates associated with Urban Forestry Management Plan and Climate Action Framework.
- Explore incentives to preserve mature trees and incorporate 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 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 property owners and developers who strive to help the City of Vancouver attain its adopted goal of 28 percent canopy cover through the Tree Canopy Achievement Program (TreeCAP) designation. TreeCAP awards property owners who have meet or exceeded tree canopy goals per zoning through both existing and new trees. TreeCAP inspires others and helps the community realize the environmental, social and economic benefits of a healthy tree canopy.

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

Develop and implement Invasive Tree and Risk Management Program to ensure a healthy, safe tree canopy for the entire community

- Tree Assistance Program to assist with the removal and/or pruning of invasive or declining trees to qualifying property owners, either private or public property.
- Prioritize equity and environmental justice, working with underserved communities.

Continue to implement Vancouver's Emerald Ash Borer Management Plan in anticipation of the insect's arrival.

- Monitor ash tree populations.
- Identify and treat quality ash trees; Identify, remove and replace declining ash trees.
- Conduct community outreach, amplify message of do not move ash tree wood or firewood.

Goal Two

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

Use the Urban Forestry Management Plan and TreePlotter software 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.
- Use TreePlotter and the Tree Equity Maps to incorporate demographics on race, language, and income from the 2020 Census and American Community Survey in future canopy mapping projects to analyze and address tree canopy distribution and environmental justice.
- Plan and budget to repeat GIS canopy analysis on a five to 10-year cycle.

Promote the citywide tree canopy goal of 28 percent canopy by 2047.

- Plant and establish approximately 2,000 trees per year throughout Vancouver.
- Promote 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. Partner with organizations like Fourth Plain Forward to develop culturally-specific and multilingual education and outreach materials to better engage all Vancouver residents.
- Encourage property owners and developers to participate in the TreeCAP canopy goal recognition program.
- Encourage participation in the Treefund tree planting discount program.
- Hold annual yard tree giveaway to distribute free trees to residential property owners to incentivize planting native, climate adaptive and large-form trees on private, residential property in the City of Vancouver and educate on basic stewardship.
- Utilize Washington Health Disparities Map and CEJST maps and census data, which provide environmental public health data, and overlay with tree inventory maps to determine areas with socioeconomic, health and environmental disparities to focus tree planting efforts.

Vancouver's tree canopy covers approximately 21 percent of the City, helping to preserve watershed health and reduce runoff, while improving the livability of our neighborhoods.

Goal Two

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

Encourage street tree planting

- Coordinate with Friends of Trees to continue a five-year planting campaign to conduct volunteer neighborhood tree plantings with neighborhoods during five major planting events; encourage new neighborhoods to participate.
- Secure AmeriCorps members to increase neighborhood participation in tree planting projects.
- Update and publish the Street Tree Selection list.
- Work with transportation planners and designers to include canopy targets; encourage incorporation of street tree planting as a funded element in master plans.
- 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, coordinating with Neighborhood Traffic Safety Alliance and project applicants.
- Partner with community programs, such as the Vancouver Downtown Association and Fourth Plain Forward, to revitalize business districts with street tree plantings.
- Work with property owners to plant vacant street tree locations as part of the proactive street tree management program along streets being serviced in 2025-26.

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

Encourage tree planting on private property

- Partner with property owners, the Watershed Alliance, Friends of Trees and others on project design, incentives and implementation.
- Collaborate with community organizations, specifically organizations serving underserved communities, to address equitable geographic distribution of tree canopy.

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

Assist Neighborhood Tree Stewards in coordination of canopy restoration and stewardship projects.

Review development project proposals to maximize tree planting opportunities and tree retention to reestablish native conifer ridge lines that reflect the Northwest landscape. Create greenway corridors through tree canopy connecting properties.

Goal Two

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

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

- Assess park properties and lands to determine tree planting needs.
- Prioritize planting in lower-canopy, underserved areas first.
- Work with 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.
- Support Naturespaces Program in parks by planting native and climate adaptive trees, building healthy soils and properly maintaining these areas. These plants adapted to local conditions, 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 to ensure sensitive communities benefit from a healthy tree canopy.
- Develop and implement tree succession, replacement and planting plans to guide future planting needs in parks.
- Partner with the Portland-Vancouver Canopy Collective to engage youth through tree planting and maintaining climate forward species in Justice 40 locations.

Ensure proper maintenance and monitoring of all trees.

- Continue a summer tree maintenance program involving AmeriCorps members, interns and volunteers.
- Encourage young tree care through proper mulching, structural pruning and watering.
- Hold contractors accountable on projects for tree health, including proper planting and watering to ensure establishment.
- Support Friends of Trees planting events, pruning events and crew leader and summer inspector trainings.
- Monitor all projects for at least five years; replace all trees that decline during the first three growing seasons.
- Coordinate volunteer efforts on community projects.

Goal Two

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

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

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

Promote Witness Tree Program as a means to memorialize loved ones through planting trees.

- Manage the Witness Tree mapping interface.
- Utilize Witness Tree funding to reduce tree planting costs.
- Market the Witness Tree program and how to participate.

Call Before You Cut!

Before removing any tree or pruning any street tree, call 360-487-8332 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;**
- **On a property zoned for industrial, commercial, or multi-family use;**
- **On a single-family residential lot that is larger than 1 acre or can be further sub-divided;**
- **On a single-family residential lot that was developed after 1996**
- **On an undeveloped or developing parcel;**
- **In a sensitive area such as a slope, riparian area or wetland buffer.**
- **If the tree is Quercus garryana (Oregon white oak or Garry oak)**

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.

Vancouver's Tree Canopy

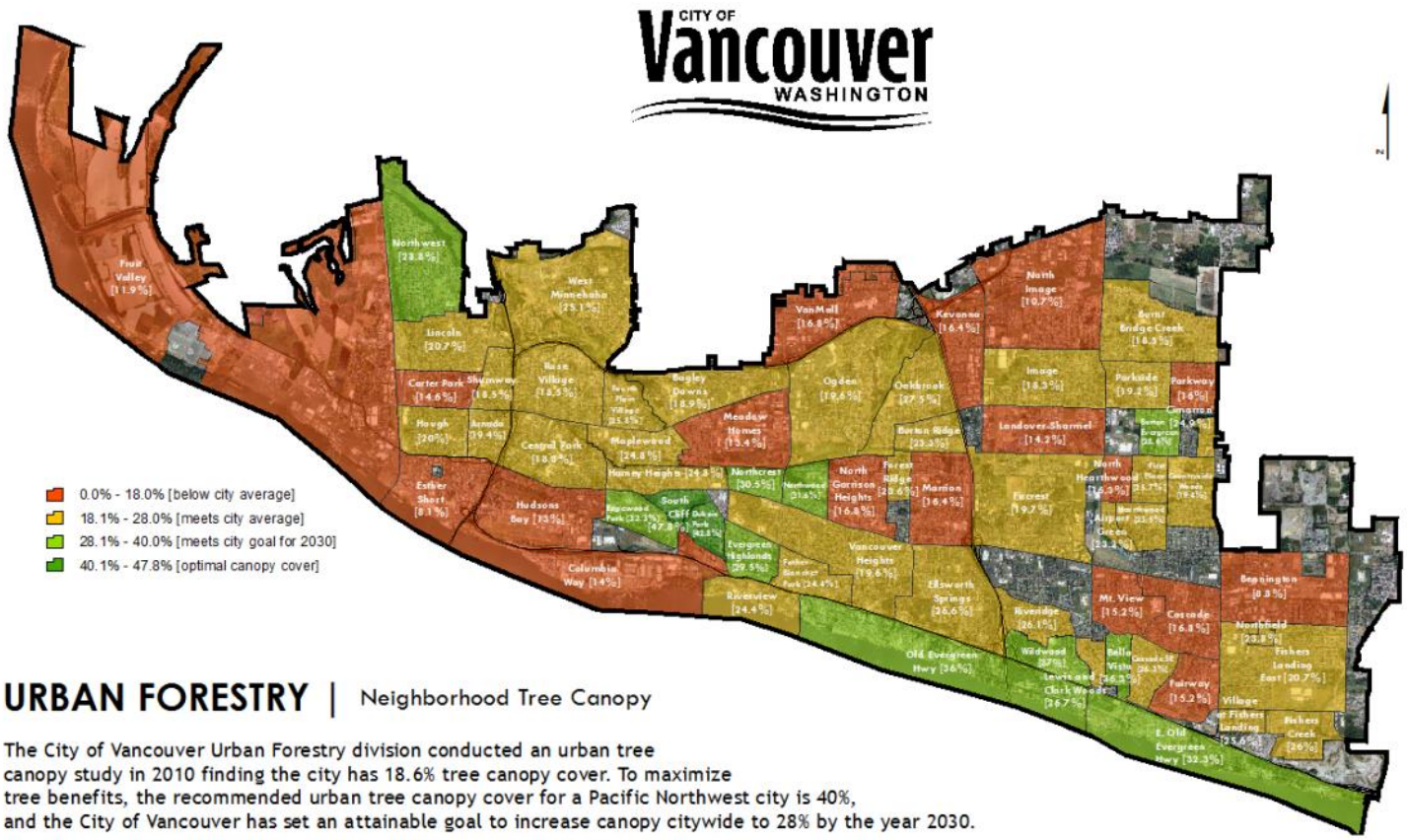
In 2021, Vancouver Urban Forestry conducted a tree canopy study using high-resolution infra-red imagery data. This study revealed that Vancouver's total tree canopy has increased to 21 percent, up from approximately 16 percent in 2011.

To maximize the many benefits of trees in communities, including to air and stormwater, and to minimize urban heat island effect, American Forests (www.americanforests.org) recommends 40 percent canopy cover for Pacific Northwest cities. Vancouver has established an achievable goal of 28 percent tree canopy by 2047. All community members are encouraged to help Urban Forestry reach this goal by planting new trees and caring for existing trees.

Through the Canopy Restoration Program, Urban Forestry is planting trees with both contractors and volunteers to achieve its canopy goal. Tree plantings can occur in parks, on school grounds,

Friends of Trees is Urban Forestry's non-profit partner that assists in coordinating community tree plantings to build social networks with neighborhoods and the community.

To learn more, volunteer or coordinate a planting in your neighborhood, visit www.friendsoftrees.org.



Goal Three

Promote an urban forestry stewardship ethic in the community through education and community outreach.

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

- Underserved organizations and communities.
- Local businesses, developers and firms.
- Tree care companies, landscape companies and consultants, including women and minority owned businesses.
- Vancouver and Evergreen school districts, private schools, WSU Vancouver and Clark College.
- City departments and programs, including Parks, Grounds, Streets and others.
- Civic, faith-based, non-profit and service organizations.
- Regional partners, such as the Lower Columbia Nature Network, Friends of Trees, The Watershed Alliance, Portland-Vancouver Canopy Collective and Lower Columbia Estuary Partnership.

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

- Recruit at least 10 new Stewards to participate annually, reach out to diverse groups about the program.
- Refine training program and curriculum 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 these projects.
- Maintain communication with Stewards through email list-serve and social gatherings.

Offer Tree Talk Workshops on various tree-related topics monthly throughout the year.

- Continue to meet the community's needs and interests by developing new workshops, such as the Trees for Climate Change, focusing on climate forward species selection. This workshop focuses on right-tree, right-place and Low Impact Development practices to restore the watershed ecological functions. Participants then learn about a variety of trees to plant in landscapes that offer a myriad of benefits.
- Develop online learning opportunities to engage residents of all ages on the benefits of trees.

Goal Three

Promote an urban forestry stewardship ethic in the community through education and community outreach.

Celebrate trees on Arbor Day in April.

- Host an Arbor Day event involving youth and elected officials.
- Award the Mac Award annually during Arbor Day to recognize individuals, organizations and business that have made a positive impact on the urban forest.
- Leverage Arbor Day as an opportunity for increased media coverage and awareness.

Celebrate Heritage Trees at Old Apple Tree Festival in October.

- Explore strategies to boost attendance and improve the festival, including interactive activities.
- Include entertainment, partner booths and children's activities.
- Highlight Vancouver's many Heritage Trees.

Distribute tree care brochures and outreach materials at community events, workshops and City offices throughout Vancouver.

Partner with Neighborhood Associations to enhance local urban forest management.

- Encourage Neighborhood Associations to incorporate urban forestry elements and planting projects into Neighborhood Action Plans; assist with implementation of these projects.
- Seek out opportunities to present at 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 through neighborhood outreach.
- Nominate for the Gordon and Sylvia MacWilliams Evergreen Award (Mac Award) those neighborhood associations that meet the following criteria: implemented a neighborhood tree planting with Friends of Trees or others, have an active Neighborhood Tree Steward and have urban forestry elements in their Neighborhood Action Plan.

Recognize those who strive to help the City of Vancouver attain its adopted goal of 28 percent urban tree canopy cover through the Tree Canopy Achievement Program (TreeCAP) designation program.

Communicate and promote the benefits of trees and the importance of an effective Urban Forestry program to City Council, local decision-makers, media and the general public.

Goal Three

Promote an urban forestry stewardship ethic in the community through education and community outreach.

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

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

Incorporate Community-Based Social Marketing strategies into outreach and education programs to promote sustainable behavior change and increase public awareness of tree care and tree benefits.

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

Utilize available free media such as CVTV videos, NextDoor and newsletter articles to deliver targeted messages and share Urban Forestry activities.

Release media advisory (press release) regularly and as needed to promote educational and community engagement opportunities, tree health care and seasonal tree communications, such as summer watering and fall leaf management.

Recognize extraordinary contributions to Urban Forestry through the Silva Bolds Whitfield Award plaque, located at 13th and Main streets in downtown Vancouver.

Get involved through volunteering

- Neighborhood Tree Stewards
- TreeTalk workshops
- Tree planting events
- Restoration events
- Special events outreach

Sign up for the digital newsletter for these events and more at www.cityofvancouver.us/trees

Goal Three

Promote an urban forestry stewardship ethic in the community through education and community outreach.

Increase visibility of Urban Forestry by having a table presence at community events.

Give presentations to various civic, service or community organizations and involve these organizations in volunteer projects, such as tree plantings and tree care workshops.

Expand environmental education efforts in local schools and community groups.

Coordinate with the Water Resources Education Center to maintain and update an indoor educational tree exhibit to re-connect visitors to the natural environment. Explore concepts, ideas and funding sources.

Inform the general public and tree care companies about Vancouver's tree ordinances and tree permit requirements.

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 partners to continue the comprehensive and creative tree awareness campaign, Think Before You Top, to reduce the improper practice of topping trees.

Educate the general public about invasive trees and pests and the infrastructure damage and native habitat loss they cause. Utilize tools including the 'Guide to Invasive Trees' brochure and door hanger and Emerald Ash Borer flyer and yard signs. To reach a wider audience, partner with other programs, such as Master Gardeners, Watersheds Alliance and neighborhood associations.

Empower the general public to take action to stop the degradation of native plant communities due to invasive species. Work with volunteers to remove and control invasive species, such as English ivy, Himalayan blackberry, Tree of Heaven and Black Locust, which threaten native plant communities on private and public lands.

Provide public interface to the current tree inventory through the Tree Plotter inventory program and website for the community to learn about our urban forest and the benefits of our tree canopy.

Develop Workforce Development opportunities in urban forestry for youth, young adults, and historically underrepresented people and improve the health of Vancouver's urban natural systems, create green job opportunities, address climate change impacts and environmental injustice and enhance community health, safety and quality of life.

- Partner with Friends of Trees to host an intern through the Adult Urban Forestry Program.
- Grow the Vancouver Urban Forestry's Environmental Youth Corps program to employ youth and young adults to create job opportunities while caring for our urban forest.

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

n the tree world, arborists are the professionals that can help safeguard your trees and save you from long-term consequences of neglect or improper care. Arborists certified by the International Society of Arboriculture (ISA) have demonstrated a minimum level of knowledge and a commitment to be aware of the latest national standards and best practices. Although not a guarantee of good service or performance, ISA certification suggests that a company or individual takes tree care seriously. The City of Vancouver cannot recommend specific arborists, but encourages those interested to call 1-888-472-8733 or visiting www.isa-arbor.com or www.pnwisa.org for a complete listing.

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. 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, Vegetation and Soil Conservation: Regulates tree removal on private property before, during and after development.

Goal Four

Adhere to the City of Vancouver's Operating Principals 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 adopted Strategic Commitments.

Continually implement City values of collaborative, inclusive, innovative, compassionate and empowered throughout the program.

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 budget request biennially.

Utilize and implement the updated 2023 Urban Forestry Management Plan, an integrated and sustainable approach to preserving and enhancing the City's urban forest resources, to achieve the goals over the next 25 years.

Employ highly-qualified individuals within the program.

- 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 and remain current with latest arboricultural research, trends, techniques and knowledge.

Natural Disaster Preparedness

- Maintain mobile work stations.
- Provide guidelines and protocols for health and safety measures for all staff, volunteers, interns and AmeriCorps members.
- Provide respirators and other personal safety equipment to provide a safe work environment and reduce impacts to program service levels.

Goal Four

Adhere to the City of Vancouver's Operating Principals and establish Vancouver Urban Forestry as a leader in Pacific Northwest municipal forest management.

Continue leadership in utilizing advances in technology to continue efficiency on a mobile, paperless system for service requests and daily activities to improve customer service and response time with limited resources and growing workloads. Utilize tree management platform Tree Plotter for tree inventory, management and outreach.

Collaboration of the Urban Forestry Commission in their liaison assignments with other boards, commissions and groups, such as Vancouver Parks and Recreation Advisory Commission and the Vancouver Planning Commission, to work cooperatively and develop solutions that reflect the City's values.

Manage tree pruning and planting contracts to ensure contractor compliance with specifications and that they are accountable for providing successful projects.

- Explore feasibility to develop grow contracts with tree growers of climate forward trees for restoration projects.

Respond to all citizen requests for service and information.

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

Recognized as a "Tree City USA" annually and awarded the prestigious "Tree City Growth Award"; celebrate prestige of awards at Arbor Day celebration.

Staff speaks and presents at regional and national arboriculture events and submits articles for publication in industry magazines and journals.

Continue to be a leader and resource for other urban forestry programs throughout the region.

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.

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 the Vancouver community recognizes that urban trees are closely linked to quality of life. Our community takes pride in working together as stewards to preserve and enhance the urban forest.

Benefits of Trees

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 the water quality in Vancouver's waterways. Improving our water quality requires a watershed approach that looks not just at waterways, but the land and land uses that can send polluted runoff to rivers and streams.

Here are 11 steps you can take to help improve our water quality:

1. Avoid chemical fertilizer and pesticides, or if you must use, use sparingly. Switch to non-toxic alternatives and apply in proper amounts following labels and instructions.

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, improve soils 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. Monitor containers for unintentional spillage.

8. Sweep instead of hosing driveways and sidewalks.

9. Don't wash vehicles on driveways or roads and do not dump cleaning agents on roadways

10. Reduce vehicle trips. Use public transportation, carpool, bike or walk more.

11. Scoop pet poop, bag it and put it in the trash.

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, pay more for parking, and shop longer at business districts with more trees. Per Wolf, those shoppers also assume that goods or services sold in these areas 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 for research details.

Economic Development

Trees greatly improve quality of life for urban dwellers. Quality of life is often a significant determining factor when businesses are considering moving to a new location. A healthy, well-cared for urban forest signals that the community values trees and that local government is effective at meeting the needs of the community. A healthy urban forest can help attract new businesses and jobs to Vancouver and increase property values (Nowak, et al.).

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.

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. Trees 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 children diagnosed with ADHD concentrate better.

Visit www.naturewithin.info for more information about the social benefits of trees.

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 5 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 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.

Visit www.naturewithin.info for more information about the many benefits of trees.

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 becoming a 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 numerous and significant to every community member. 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 through its defined goals the many ways that Vancouver Urban Forestry will achieve these goals through leadership, stewardship, integrity, collaboration, and accountability to promote sound urban forest management. However, there are multiple opportunities for every Vancouver resident to help make a difference. What can you do to restore tree canopy in Vancouver?

- Become a Neighborhood Tree Steward
- Attend a TreeTalk Workshop
- Volunteer at a community tree planting
- Organize a community tree planting in your neighborhood
- Plant trees on your property and remove English ivy and other invasive species
- Educate yourself about proper tree care
- Publish tree-related articles in your neighborhood newsletter
- 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.

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