



**CITY OF KIRKLAND**

**Citywide Urban Forestry Strategic Management Plan  
Urban Forest Work Plan 2014 – 2019**

Planning & Community Development  
Parks & Community Services  
Public Works



## Urban Forest Work Plan 2014 – 2019

AREA	OBJECTIVE	DESCRIPTION	TIMING	DEPTS.	COST	POTENTIAL FUNDING SOURCE
1.0 URBAN FOREST ASSET	<b>1.1 INVENTORY PUBLIC TREES (x4)</b>  <i>Document the asset to proactively manage public trees efficiently, reducing potential liability</i>	1. ROW - Update existing inventory and add annexed trees. Include tree risk assessments to prioritize management efforts. Acquire work order system that synchronizes with inventory, permit, and GIS database systems (see Objective 2.2). Must calculate replacement values for claims and other damage; be compatible with FEMA & state municipal tree inventory protocols (see Objective 4.2).	As funding allows	Contractor + PCD-UF, PW, IT-GIS	\$	SW Funding for ~12,000 Collector and Arterial street trees
		2. ACTIVE PARKS - Inventory trees in high-priority active Parks. Inventory must be capable of assessing replacement value for claims and other damage, must be compatible with FEMA inventory protocols (see Objectives 2.2, 4.2).	As time/staffing allows	Contractor + PCD/UF, Parks, IT-GIS	\$	City Forestry Account for ~4,000 trees in 17 Waterfront/Community parks
		3. OPEN SPACE - Inventory trees in Park open space areas per 20-Year Restoration Plan in newly-acquired neighborhoods using Tree-iage method (similar to stand forestry management).	Late 2014 to early 2015	Contractor + PCD/UF, Parks (GKP), IT-GIS	\$\$	\$50K King Conservation grant (awarded late 2013)
		4. "OTHER" AREAS – Cross Kirkland Corridor (CKC), set-aside areas from annexation, unimproved ROW areas, City-owned stream buffers, etc.	CKC – 2014-2015, Others as funding allows	PCD/UF (CKC), PW, Parks, IT-GIS	\$-\$\$	DNR grant (CKC), SW Funding, service request?
	<b>1.2 DEVELOP TREE PLANTING GUIDELINES &amp; INCENTIVES</b>  <i>Shift focus from canopy % goal (quantity) to sustaining a healthy, resilient urban forest (quality) according to industry standards, current technology, and BMPs.</i>	1. CURRENT STRATEGY – Continue planting street trees with frontage improvements, CIP projects, as replacements for trees removed with development, when tree replacement is triggered by tree removal on private property and with restoration efforts in open space parks.	Current practice	PCD, PW, PW/CIP, Parks/GKP	\$	Development fees, CIP project funding, private property owners, GKP funding. WA DNR providing crews for Open Space areas in 3 parks (Feb 2014).
		2. MINOR EFFORTS – update lists, details, technical guidelines, webpage content for - - Prohibited Plant List – consistent between City depts. and with King County/WA policy - Green roofs, vertical walls, green parking lots - Pre-Approved Plans for ROW soil volume, tree grate detail (Mar 2014) - Tree-planting guidelines for CIP projects	Ongoing as needed	PCD-UF, PW/CIP, PW, Parks	\$	Staffing resources as needed
		3. MAJOR EFFORTS – targeted tree planting based on: - ROW tree removals - Numerical or % goals according to canopy, inventory and eco-analysis data (see Objective 1.3) - Selection guidelines for public tree species and age diversity/distribution - UTRP (urban tree replacement program) for public trees negatively impacted by utility line clearance (see Objective 4.2.2) - Incentives for tree planting (ie: Tree-bate program, Live Christmas Tree program, paperless utility billing donation, etc.)	As time/staffing allows; As public tree inventory data is acquired	PCD-UF, PW/SW, IT-GIS, Contractor?	\$-\$\$	- With current staffing resources vs. contract out? - Grants - Partner with non-profits, utility providers, etc.



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	<b>1.3 ANALYZE ENVIRONMENTAL BENEFITS OF PUBLIC TREES</b> <i>Quantifies benefits in monetary terms; environmental performance measure</i>	Use CITYgreen, i-Tree or other software to obtain values for: <ul style="list-style-type: none"> <li>- Stormwater runoff reduction</li> <li>- Carbon storage/sequestration</li> <li>- Air quality/pollution removal</li> </ul> Justifies SW-UF funding, reconciles benefits with maintenance costs	As public tree inventory data is acquired or with random sample plots	PCD-UF, PW, Parks, IT-GIS	\$-\$\$	Contract out vs. conduct in-house?  SW funding with staffing resources as needed
	<b>1.4 RE-ASSESS CANOPY COVER</b> <i>Gauge canopy goal progress; is an environmental performance measure</i>	Measure UTC, analyze progress towards canopy goals. Determine trends in canopy gain/loss & impacts of development. Provides data for citywide GIS, planting strategies, education/outreach, Performance Report, etc. Schedule every 7 years.	1 <sup>st</sup> study - 2011 2 <sup>nd</sup> study - 2018 3 <sup>rd</sup> study - 2025	PCD-UF, IT-GIS	\$-\$\$	Contract out vs. conduct in-house?  DNR grant, City Forestry Account
2.0 URBAN FOREST PROGRAM	<b>2.1 DEVELOP UF PROGRAM*</b> <i>Departments cooperate with common goals for greater accountability and resource-sharing</i>	<ul style="list-style-type: none"> <li>- Adopt UFMP, obtain direction from City Council</li> <li>- Establish steering committee/formal inter-departmental working team</li> <li>- Develop Work Plan to implement UFSMP (and Council directives)</li> <li>- Establish funding structure?</li> </ul>	2014-2019 Work Plan completed by early 2014	PCD-UF, Parks, PW, Finance	\$	Staffing resources as needed
	<b>2.2 PROACTIVELY MANAGE PUBLIC TREES</b> <i>Highest return on public investment; meet maintenance expectations and safety standards</i>	<ul style="list-style-type: none"> <li>- Use an asset inventory, service request and work order system</li> <li>- Clarify maintenance responsibilities (codify?)</li> <li>- Merge staffing resources to fulfill current/desired levels of public tree maintenance?</li> <li>- Provide adequate, safe equipment (aerial truck, chip truck, climb gear, PPE, etc.)</li> <li>- Establish tree worker safety policy to comply with industry standards (see Objective 4.2)</li> <li>- Establish efficient methods to monitor/control invasive weeds, pests, pathogens</li> </ul>	<ul style="list-style-type: none"> <li>- Revised ROW tree permit procedures</li> <li>- 2014 - chipper</li> <li>- 2015 - aerial truck replacement?</li> <li>- Annually (Oct) for service package requests TBD</li> </ul>	Parks, PW, PCD	\$-\$\$\$	<ul style="list-style-type: none"> <li>- SW funding for asset inventory/work order software?</li> <li>- Reorg Field Arborist positions for safe, efficient operations</li> <li>- Merge Parks/PW budgets to replace aerial truck (\$250K)?</li> <li>- Service requests to purchase safety policy manual, gear</li> </ul>
	<b>2.3 ANNUAL WORK PLANS</b> <i>Shapes/tracks incremental efforts toward long term goals</i>	<ul style="list-style-type: none"> <li>- Provides framework for annual departmental Work Plans</li> <li>- Tracks progress and clarifies responsibilities towards goals</li> <li>- Establishes performance measures consistent with City Council goals</li> </ul>	Revised at the end of each calendar year	PCD-UF, PW, Parks	\$	Staffing resources as needed
	<b>2.4 REPORT TO CITY COUNCIL</b> <i>Increases internal efficiency &amp; accountability to decision-makers/ community</i>	<ul style="list-style-type: none"> <li>- Communicates progress (setbacks /milestones) to City Council, citizens and stakeholders on the status of the UF Management Plan</li> <li>- Guides budget development</li> <li>- May include Growth Award achievements from previous year</li> </ul>	Annual report due June/July 2014	PCD-UF, Parks, PW	\$	Staffing resources as needed
	<b>2.5 REVISE UF MANAGEMENT PLAN PERIODICALLY</b> <i>Accountability; adaptability over time</i>	<ul style="list-style-type: none"> <li>- Reviews the successes/shortcomings within each 6-year planning period, so that</li> <li>- Findings may be incorporated into the next Six Year Management Plan</li> <li>- Plan adapts to changes and adjusts to new criteria and indicators</li> </ul>	2019 = next Six Year Planning Period	PCD-UF, Parks, PW	\$	Staffing resources as needed

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3.0 MUNICIPAL-COMMUNITY INTERACTION	<b>3.1 INVOLVE COMMUNITY IN UF ISSUES/PROGRAM DEVELOPMENT</b> <i>Conduct dialogue with, involve and support citizens in diverse capacities. Meet NPDES outreach option</i>	Convene focus groups to advise UF managers and decision-makers on urban forest issues, or for specific projects. Support stewards, volunteers, advocates, and partners in UF with: Notable/Heritage Tree* program, Kid's Tree Involvement,* Live Xmas Tree program, awards, and citizen tree planting/training groups).	Ongoing or as needed	PCD-UF, Parks, PW, CMO (Marie, Kari)	\$-\$	<ul style="list-style-type: none"> <li>- Dedicated staff/resources vs.</li> <li>- Staff in steering capacity for programs with no funding</li> <li>- Grant funding for pilot programs</li> <li>- Non-profit partners?</li> </ul>
	<b>3.2 GROW GREEN KIRKLAND PARTNERSHIP PROGRAM</b> <i>Meet 20 Year Forest Restoration goals</i>	Current growth potential exceeds levy funding; in addition, significant acreage in annexation parks/open space may be added to GKP program scope.	Conduct Open House late 2014/early 2015. <i>2014-15 for Plan update</i>	Parks (GKP)	\$\$\$	<i>\$50K King Conservation District grant for 20-Yr. Forest Restoration Plan update</i>
	<b>3.3 MEET TREE CITY USA CRITERIA</b> <i>Growth Awards when feasible</i>	<ul style="list-style-type: none"> <li>- Meet each Nat'l Arbor Day Foundation requirement annually. Ongoing status gains preference for grant proposals, TCIA accreditation.</li> <li>- Coordinate Growth Award criteria to earn 10 points annually. Track achievements for Annual Report to City Council.</li> </ul>	Ongoing –by December 1 <sup>st</sup> annually	PCD-UF, Parks, PW	\$	Staffing resources as needed
	<b>3.4 PLAN &amp; PARTICIPATE IN KIRKLAND ARBOR DAY</b> <i>Meet Tree City USA standards</i>	Annual proclamation & celebration. Typically a collaborative effort with Green Kirkland Partnership restoration planting. Involves preparing packet, coordinating attendance of dignitaries, sponsorship, etc. Consider 2 <sup>nd</sup> spring event for Nat'l or State Arbor Day?	2 <sup>nd</sup> Saturday in November	PCD-UF, PARKS (GKP)	\$	<ul style="list-style-type: none"> <li>- Staffing resources as needed</li> <li>- City Forestry Account or Arbor Day tree grants</li> </ul>
	<b>3.5 DEVELOP HERITAGE TREE PROGRAM**</b> <i>Celebrate heritage trees in the City of Kirkland, fulfill Comp Plan &amp; Natural Resource Management Plan goals, meet NPDES outreach option</i>	Launch program by: <ul style="list-style-type: none"> <li>- Defining 'heritage' criteria: historical significance, age, size, unusual species, old growth or grove status, special location, etc.</li> <li>- Found volunteer base, "expert" review committee and nomination procedure.</li> <li>- Consult with legal re: options for lien/easement</li> <li>- Create nomination forms, care packet, plaque</li> </ul>	<ul style="list-style-type: none"> <li>- Draft template program July 2014</li> <li>- Start accepting nominations by late 2014?</li> </ul>	PCD-UF, Legal	\$	<ul style="list-style-type: none"> <li>- Staff in steering capacity (similar to Wildlife Community program)</li> <li>- Grant or sponsorship for commemorative plaques and celebrations</li> </ul>
	<b>3.6 PROMOTE TREE-RELATED ACCREDITATIONS &amp; AWARDS*</b> <i>Recognize citizens, developments, staff, volunteers, non-profit partners, etc. for achievements in urban forestry</i>	Establish City program and/or utilize existing award programs: Eco-Certification for CKC, SMA Municipal Forestry Accreditation, Gold Leaf Award (Recognition for Tree Retention on Development Sites), APWA Accreditation, Sterling Award (10 yrs Growth Awards Tree City USA), etc. EPA UF Program accreditation?	List current/draft template programs  As time/funding allows	PCD-UF, Parks, PW	\$	Staffing resources as needed
	<b>3.7 TARGET KIDS IN OUTREACH EFFORTS**</b> <i>Extend outreach efforts to kids' interest level, meet NPDES outreach option</i>	Potential projects include 4th Grade Foresters program, high school (Peter McDonald) program, Lake WA Tech, TCIA event with kid's tree climbing, Trees for Wildlife (Nat'l Wildlife Federation). <i>2014 GKP activities include outreach to Eastside Preparatory School, Environmental and Adventure School, Kirkland Middle School, Lake Washington High School, UW Bothell, and Northwest University. EYH Workshop in Mar 2014.</i>	GKP annually. Others as time/funding allows	PCD-UF/ as needed	\$	Dedicated staff/resources vs.  Staff in steering capacity for programs with no funding, or  Staffing resources as needed



AREA	OBJECTIVE	DESCRIPTION	TIMING	DEPTS.	COST	POTENTIAL FUNDING SOURCE
4.0 POLICIES & CODES	<b>4.1 FOCUSED PUBLIC OUTREACH RE: TREE CODES*</b> <i>Conduct dialogue with and involve citizens in making UF decisions, meet NPDES outreach option</i>	<ul style="list-style-type: none"> <li>- Update forms, handouts, and City website content.</li> <li>- Plan &amp; conduct training sessions for staff, arborists, permit applicants, stakeholders; general public on permit procedures and other forestry-related policies.</li> <li>- Use multi-media approach, articles for media &amp; industry publications, social media, etc.</li> </ul>	Ongoing, schedule events starting in early 2015	PCD-UF, MM	\$-\$\$	<ul style="list-style-type: none"> <li>- General fund</li> <li>- Intensive staffing resources per event/project</li> </ul>
	<b>4.2 STANDARDIZE PUBLIC TREE MAINTENANCE</b> <i>For utility, contractor and City compliance to safety standards, BMPs and codes.</i>	1. Expand City's urban forest storm response/emergency protocols for FEMA reimbursement	Early to mid-2014	<b>Ray Steiger/PW, Finance, Parks, PCD-UF</b>	\$	Staffing resources as needed
		2. Develop Vegetation Management Plans with Seattle City Light and Puget Sound Energy to comply with KZC 95, reduce and avoid tree-utility conflicts, and address utility clearance /critical area issues.	Late 2014 to early 2015	PCD-UF, PW, Parks	\$	<ul style="list-style-type: none"> <li>- Partner with utility companies</li> <li>- Staffing resources as needed</li> </ul>
		3. Establish safety policy and protocols to comply with industry safety standards: ANSI Z133 safety standards, A300 Series for Tree Care Operations, ISA BMP Series and OSHA Standards (Note: draft safety policy on file). Document ongoing training	By mid-2014	Bobbi Wallace/PW, Parks, <b>PCD-UF (initial)</b> , Risk Management	\$	Develop in-house with staffing resources as needed vs purchase (<\$400) via department funding
		4. TCIA accreditation preference for contractors? (see Objective 3.6)	Early 2016	PCD-UF, PW, Parks, Legal	~\$400/yr	Staffing resources as needed
	<b>4.3 UPDATE TREE CODES*, **</b>	<ul style="list-style-type: none"> <li>- Re-evaluate 40% canopy goal? (see Objective 1.3)</li> <li>- Evaluate the effectiveness of current regulations and policies</li> <li>- Consider feedback from staff, residents, and developers</li> <li>- Amend KZC Chapter 95 to simplify language &amp; clarify. Consolidate and incorporate related codes including shoreline, Holmes Pt. overlay, Green Codes and LID, etc. Consider current industry standards</li> </ul>	2017 - after Comp Plan and critical areas revisions (2015-2016)	PCD-UF	\$	Staffing resources for approx. 1 year: Senior Planner & Urban Forester

\* Recommendation established in the Development Services Review (Zucker Report), December 2012

\*\*In addition to recommendations outlined in Urban Forestry Strategic Management Plan per City Council request at the July 2, 2013 City Council meeting

#### KEY TO COSTS

\$ - Less than \$50,000. Often accomplished with existing City staff resources

\$\$ - Between \$50,000 and \$100,000. Has budget implications; requires dedicated staffing, contractor and/or volunteer commitment

\$\$\$ - Greater than \$100,000. Involves substantial project management, staffing and commitment

**Bold** = lead department

**Red** = completed, include in July 2014 Urban Forestry Annual Report

OBJECTIVE/TARGET DATE	2014				2015				2016				2017				2018				2019			
	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec
<b>1.0 URBAN FOREST ASSET</b>																								
1.1 Public Tree Inventories																								
1.1 1. Right-of-way																								
1.1 2. Active parks																								
1.1 3. Open space																								
1.1 4. "Other" – CKC, etc.																								
1.2 Tree Planting Guidelines & Incentives																								
1.2 1. Minor Efforts																								
1.2 2. Major Efforts																								
1.3 Environmental Benefits Analysis																								
1.4 Re-assess Canopy Cover																								
<b>2.0 URBAN FOREST PROGRAM</b>																								
2.1 Develop UF Program/Funding	ALL - ONGOING																							
2.2 Proactively Manage Public Trees																								
2.3 Annual Work Plans				ALL				ALL				ALL				ALL				ALL				ALL
2.4 Report to City Council																								
2.5 Revise UF Management Plan																								
<b>3.0 MUNICIPAL-COMMUNITY INTERACTION</b>																								
3.1 Involve Community in UF Decisions																								
3.2 Grow GKP Program																								
3.3 Meet TCUSA & Growth Award Criteria																								
3.4 Kirkland Arbor Day																								
3.5 Heritage Tree Program																								
3.6 Promote Tree-related Awards & Accreditation																								
3.7 Kids' Outreach																								
<b>4.0 POLICIES &amp; CODES</b>																								
4.1 Tree Code Outreach																								
4.2 Public Tree Maintenance Standards	Concurrent with Tree Code Update																							
4.2 1. Storm Response																								
4.2 2. Vegetation Management Plans																								
4.2 3. Safety Protocols/Policy																								
4.2 4. TCIA Accreditation																								
4.3 Update Tree Codes																								

PCD/UF (Note: Urban Forester position = .5 FTE)

Public Works

Parks