City of Kirkland

Urban Forestry Strategic Management Plan

July 2013

RESOLUTION R-4986

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND ADOPTING THE 2013 URBAN FORESTRY STRATEGIC MANAGEMENT PLAN.

WHEREAS, Kirkland's urban forest is a valuable natural resource that affects the air and water where we live and the desirability of our neighborhoods and downtown; and

WHEREAS, urban forests require sound and deliberate management to ensure that trees function well in their intended landscape, provide optimal benefits to the community, and remain reasonably safe for property and people; and

WHEREAS, the 2013 Urban Forestry Strategic Management Plan supports the Comprehensive Plan goal for managing the natural environment and the City Council operational values of efficiency and accountability; and

WHEREAS, City staff have worked with the Park Board and with many citizens to develop the 2013 Urban Forestry Strategic Management Plan as a foundation for cohesive, efficient, and sustainable urban forestry management in Kirkland.

WHEREAS, the City Council finds that it is in the public interest to adopt the 2013 Urban Forestry Strategic Management Plan to guide the future City practices, programs, projects, comprehensive plan elements and development regulations relating to urban forestry management.

NOW, THEREFORE, be it resolved by the City Council of the City of Kirkland as follows:

Section 1. The City of Kirkland 2013 Urban Forestry Strategic Management Plan is hereby adopted.

Passed by majority vote of the Kirkland City Council in open meeting this 2nd day of July, 2013.

Signed in authentication thereof this 2nd day of July, 2013.

MAYOR

Attest:

City Clerk

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Funding for this project was provided by the USDA Forest Service and the Washington State Department of Natural Resources Urban and Community Forestry Program. The USDA is an equal opportunity provider and employer. Forterra and the Kirkland Park Board provided letters of support to gain project funding.

WASHINGTON STATE DEPARTMENT OF
Natural Resources

FOREST SERVICE
US
DEPARTMENT OF AGRICULTURE

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Executive Summary

Context & Purpose

Kirkland was recently labeled as one of the "happiest neighborhoods in and around Seattle," a place where the "sky is bluer and the trees seem greener…" (Seattle Magazine, 2013). Trees enhance community character, but they also make enormous environmental, economic and social contributions, many of which can be monetized.

Trees are a community asset

Because of this, urban trees are regarded more and more as assets similar to other infrastructure investments. Protecting the asset and ensuring a healthy and sustainable urban forest requires sound and deliberate management.

This Strategic Management Plan was developed to establish the protocols, outcomes and services related to Kirkland's urban forest over a long term horizon. This Plan is a response to significant changes in Kirkland, including a major land annexation and the prior achievement of forestry-related goals. Having exceeded the City's forty percent canopy goal – a measure of *quantity* - the City may want to shift its focus to urban forest *quality* for long-term sustainability. This can be attained by:

- Identifying Kirkland's current challenges to better urban forest management
- Providing a sustainable framework for efficient and consistent urban forest management
- Reflecting the values of the community as a whole

Process

To identify the challenges related to better urban forestry management, Davey Resource Group (DRG) conducted a review of the City's forestry operations (Section 2). DRG interviewed staff from five departments, obtaining feedback to assess the City's performance. The performance measures for adaptive, sustainable urban forest management are derived from *Criteria and Indicators for Strategic Urban Forest Planning and Management* (Kenney et al. 2011) (Appendix A).

Public feedback was sought during the development of this Plan to ensure that the City's efforts are aligned with the community. Davey Resource Group conducted an online survey using Survey Monkey^{tm} to gauge the community's interest and priorities in urban forestry issues (Section 3.1). Over 650 responses resulted from the survey, showing the community's strong interest in urban forestry. The non-profit organization Forterra targeted three key stakeholder groups for additional input on the Plan (Section 3.2).

Local urban forestry program data is based on National Arbor Day Foundation reporting, provided by the Washington State Department of Natural Resources (Section 4.1). Best Management Practices (BMPs) are adopted or accepted industry standards for safe, efficient urban forest management (Section 4.3). The Plan is formatted in accordance to the Washington State Evergreen Communities' *A Guide to Community and Urban Forestry Programming* (Washington State Department of

Commerce, 2009) and divided into key areas of urban forest management based on *A Model of Urban Forest Sustainability* (Clark et al, 1997).

Collectively, this data provides the rationale for the goals, strategies and recommendations in this Plan. In addition, recommendations from a review of the City's Development Services were incorporated into this Plan (Zucker Systems, 2012). Directors and staff from the Parks, Public Works and Planning Departments prioritized the recommendations into a Six Year Strategy (Section 7).

Goals, Strategies & Recommendations

In the last decade, Kirkland has taken many positive steps towards urban forest management. In a recent gap analysis, Kirkland is performing well by a few indicators in urban forestry management; however the City is surprisingly averaged overall as 'low to moderate' - with twice more criteria rated below a 'moderate' performance rating (see Section 5). In response to these findings, along with information gathered from a public survey and focus group meetings, four over-arching goals and strategies were developed to direct Kirkland's urban forest management efforts over a long-term horizon:

Document Kirkland's urban forest asset to improve safety, quality and sustainability. Obtain a greater understanding of the condition, risk potential and benefits of the urban forest asset.

Protect, maintain and enhance Kirkland's urban forest, an integrated natural resource, through a balanced approach using education, incentives and regulations.

Build a comprehensive urban forest program to increase efficiency, public accountability and collaboration between City departments and to standardize public tree management.

Promote stewardship of the urban forest with community outreach and partnerships. Involve the community with long-range decisions regarding the urban forest.

In May 2013, a newly-formed interdepartmental urban forest team ('Tree Team') prioritized urban forest objectives. Discussions centered on high priorities – safety, accountability, and sustainability – and the most feasible accomplishments that could be addressed in the next six years. The high priority actions are divided into four key areas of urban forest management:

THE ASSET	**Update & maintain the public tree inventory**
	Make minor improvements to current tree planting efforts as a short-term interim strategy
	Determine the value, functions, and benefits of the urban forest
POLICIES / CODES	**Conduct public outreach re: tree regulations**
	Update tree codes and ordinances to simplify & clarify
	Update tree planting guidelines for utility, contractor and City compliance to BMPs and codes

THE PROGRAM	**Develop a program by establishing a formal interdepartmental working team**
	Provide adequate public tree maintenance resources
	Develop annual report /annual work plans with tracking and performance measures
THE COMMUNITY	**Identify the community's roles in urban forestry**
	Dedicate resources for ongoing public outreach & education
	Support further growth of the Green Kirkland Partnership

Many of these action items attain more than one of the long-term goals and strategies. There were a number of recommendations that were not ranked as high priorities or that must be sequenced after other action items (Section 6), however only the top three priorities in each area of urban forest management are included here. To correlate with Kirkland's budget and Capital Improvement Project (CIP) cycles, the working team developed a 6-Year Work Plan, the first increment of a twenty-four year framework.

From this Six Year Work Plan, each department develops its annual operating, or work plan so that urban forest goals and strategies are coordinated, linked to specific actions, and directing efficient operations on a daily basis. Previously, urban forest efforts have not been well-coordinated or tracked using meaningful performance measures. The intent of this Plan is to lay the foundation for cohesive, efficient and sustainable urban forest management on a daily, annual, incremental and long-term basis.

With oversight, regular monitoring and revisions, the resulting plan remains effective and relevant to the community now through the year 2038 and provides a template for the next 20-24 years.

> *"The materials of city planning are:*
> *sky, space, trees, steel, and cement;*
> *in that order and that hierarchy."*
>
> ***Le Corbusier, influential modern architect and urban planner***

1. Introduction

Kirkland's urban forest consists of the trees in woodlands, parks, yards, in public spaces and along streets. Trees affect the air and water where we live and the desirability of our neighborhoods and downtown. They are a valuable natural resource that enhance Kirkland's quality of life, minimize the effects of urbanization, foster civic pride and contribute to community character; long-term benefits that residents, businesses and visitors seek.

Autumn in downtown Kirkland

Unfortunately, many urban elements negatively impact trees, shortening their normal life expectancy. These impacts include constrained spaces, poor quality and limited volume of soils, reflected heat, and lack of adequate water (Urban, 2008). On a larger scale, tree removal resulting from development, insufficient public tree monitoring or maintenance, and the threat of climate change and invasive species contribute to the decline of a community's physical environment.

For these reasons, urban forests require sound and deliberate management to ensure that trees function well in their intended landscape, provide optimal benefits to the community, and remain reasonably safe for property and people. To do this, jurisdictions -

- Develop a long-term vision for its urban forest resource
- Measure the asset
- Establish tree protection ordinances
- Determine management goals and service levels

In the last decade, Kirkland has taken many of these steps towards urban forest management; however, many of the efforts have not been well-coordinated or tracked using meaningful performance measures. The intent of this Plan is to examine Kirkland's efforts towards its long-term vision and lay the foundation for cohesive, efficient and sustainable urban forest management to reflect the values of the community as a whole.

> *"We are committed to the protection of the natural environment through an integrated natural resource management system."*
>
> ***City Council Goal***

1.1 Background

Located across Lake Washington from Seattle, the City of Kirkland is an attractive, vibrant lakefront community situated north of Bellevue and west of Redmond in King County, Washington. The City is approximately 18 square miles with a population of about 82,000. Kirkland maintains its distinctive lakeside character with exceptional restaurants, shops, art galleries, public parks, beaches, and a collection of public art. Kirkland has a unique history and character of its own, particularly in relation to its urban forest.

History of Kirkland's Urban Forest

Peter Kirk

Prior to the arrival of the first Euro-American settlers in the late 1860's, the eastern shore of Lake Washington was home to the original Native American inhabitants from the Duwamish tribe (Harvey, 1992). Small areas along the lake were cleared by periodic burning to provide browse for game animals and to cultivate camas bulb.

Early homesteaders also cleared land for farming, creating "stump ranches" and burn piles from the native Douglas fir, Western red cedar, Bigleaf maple and cottonwood that once extended to the lakeshore at what is now the Houghton neighborhood (Sundberg, 2012).

At that time, few decent roads for overland travel existed; as a result much of the native woodland on the eastern shore of Lake Washington was left intact. Historical records and maps show that timber was cut only to clear sections of land for dwellings and farming. Quite a bit of timber remained even around the town's first shingle mill.

Eventually, the original inhabitant and homesteader farms gave way to a small town to support British businessman Peter Kirk's vision for a steel mill. Completed in 1880, the mill was located on Rose Hill, two miles from the lake's shore. Due to a financial crisis, the steel mill closed in 1893 prior to producing any steel.

After its incorporation in 1905, Kirkland's homes, businesses and streets grew steadily, leaving native forest remnants behind, both intentionally and unintentionally, to became part of the urban forest that exists today. As shade, ornamental and food-source trees were planted, the tree species became more diverse: oaks and maple trees were planted, and small cherry and apple orchards became commonplace on many properties.

> *"Scandinavian settlers planted*
> *birch trees*
> *on Big Finn Hill*
> *to use in their traditional sauna."*
>
> ***Loita Hawkinson, Kirkland Heritage Society***

Growth & Community Vision

Kirkland's modest growth continued after World War II until the SR 520 floating bridge was constructed in 1963, connecting Kirkland to Seattle. As a result, Kirkland's population increased dramatically in the next two decades, especially with the annexations of Houghton, Totem Lake, South Juanita, North and South Rose Hill. Unfortunately, the rapid growth resulted in a decline in environmental quality (Kirkland Comprehensive Plan, 2004).

Acquisition of Kirkland's renowned waterfront parks are a result of community vision

The link between growth, environmental degradation and an alarming loss of tree canopy cover in the Puget Sound region prompted many jurisdictions to act on a local level (American Forests, 1998). Kirkland responded with changes to its Comprehensive Plan, including the community's vision of the natural environment with a specific goal to *"work toward increasing Kirkland's tree cover to 40 percent"* (V-8 Policy NE-3.1).

Recognizing that the highest percentage of tree canopy was on private property, the Kirkland City Council adopted a comprehensive tree protection ordinance in late 2005 with the intent to slow the loss of tree canopy city-wide. To restore the declining native forests in City parks, the Cascade Land Conservancy partnered with the City (now Forterra) to prepare a 20-Year Forest Restoration Plan that was adopted by the City Council in 2008.

With a recent annexation in 2011, the City of Kirkland nearly doubled its area and significantly increased its population, making it the 12th largest City in Washington State. As a consequence, the City increased its urban forest resource considerably. By including the Finn Hill, Juanita and Evergreen Hill (Kingsgate) residential properties and parks with high canopy percentages, the City added 2,187 acres of tree canopy, effectively meeting the city-wide 40% canopy cover goal.

The Case for Better Urban Forest Management

The decisions we make now determine how well or poorly the urban forest functions in the future.

Both forestland outside the urban growth boundary and the wetlands, open space, and sensitive areas within contribute to a healthy environment. However, a significant amount of these areas has been and will continue to be adversely impacted by urban growth (Nowak & Walton, 2005). Currently, 82% of all Americans live in urban areas. It is important that regional and municipal scale planning and management efforts understand, adapt to, and direct the urban landscape to maximize the benefits that trees provide for the residents within cities.

1.2 Urban Forest Benefits

While Kirkland has committed to accept its share of growth and development in the region, the challenge becomes balancing this growth while maintaining a livable community over the next few decades. By modifying the environment, trees improve air and water quality and contribute to human health, safety, community character and economic stability.

Water Quality and Stream Flow

Clean water for a healthy environment

Surface water runoff is a major source of contamination for Lake Washington and riparian areas, impacting humans and wildlife. Requirements for surface water management are becoming more stringent and costly for both developers and the City. Runoff volumes, peak stream flows and flooding incidents can be reduced by incorporating trees into stormwater management planning, lessening the need for expensive detention facilities and the cost of treatment to remove sediment and other pollutants (Fazio, 2011). Trees improve and protect water quality in the following ways:

Interception - Trees intercept rainfall, acting as mini-reservoirs. Some water evaporates from the canopy, and some slowly soaks into the ground, reducing the total amount of runoff. (Xiao et al, 1998). Canopy interception lessens soil compaction, which in turn further reduces runoff.

Increase soil capacity and infiltration - Root growth and decomposition increase the capacity and rate of soil infiltration by rainfall and snowmelt (McPherson et al, 2002), resulting in even percolation rates and increased filtration of contaminants.

Reduce soil erosion – Tree roots reduce the flow and volume of stormwater runoff, avoiding erosion and preventing sediments and other pollutants from entering streams, rivers, Lake Washington, and the Puget Sound.

Provide salmon habitat – Shade from trees helps to cool warmer urban runoff, increasing dissolved oxygen which is essential to anadromous fish like salmon. Shade from trees provides lakeside and riparian habitat, offering protection from predation.

Air Quality

Air pollution is a serious health threat that causes asthma, bronchitis, eye irritation, headaches, dizziness, nausea and sensitivity to allergens (AirNow, 2007). Trees remove tons of material from the air within a city, improving air quality in the following ways:

Absorb pollutants & particulate matter - Trees absorb harmful pollutants like ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO) and sulfur dioxide (SO_2) (McPherson et al, 1999; Nowak 1992, Rowntree et al, 1991). Trees intercept particulate matter (PM_{10}) including dust, ash, pollen, and smoke. Mature trees absorb 120-240 lbs of particulate pollution each year (University of Washington, 1998).

Ozone and VOC reduction - Shade and evapotranspiration reduce the formation of ozone (O_3), which is brought on by high temperatures. VOCs are carbon-based particles emitted from automobile exhaust, lawnmowers, and other human activities. Although some vegetation can produce VOCs that increase ozone pollution, local i-Tree Eco models have shown trees have a positive overall effect on ozone levels. (Ciecko et al, 2012).

Increase oxygen levels - Trees and vegetation increase oxygen levels in the atmosphere through photosynthesis. Photosynthesis is the process where plants use sunlight to convert CO_2 to plant tissue.

Coast redwood on Lake Street

Carbon Storage & Sequestration

Trees reduce atmospheric carbon dioxide (CO_2) in two ways: *carbon storage* (total carbon bound up in tree biomass) and *carbon sequestration* (the annual rate of CO_2 removal through photosynthesis) (Jo, et al., 1995). Urban trees reduce atmospheric carbon:

Directly – Through growth and the storage of carbon in roots, wood and leafy biomass. 'Biomass' is the calculation of the tissue mass of a tree. Atmospheric carbon reductions offset a city's total annual emissions.

Indirectly – By lowering the demand for heating and air conditioning, thereby reducing the emissions associated with electric power generation and natural gas consumption.

The City of Kirkland is a founding member of the King County Climate Change Collaborative and a member of the International Council for Local Environmental Initiatives (ICLEI). ICLEI consists of over 1,000 local governments providing national leadership on climate protection and sustainable development. In 2009, the City Council adopted a *Climate Protection Action Plan* to achieve targeted reduction of greenhouse gases according to ICLEI milestones, identifying tree canopy as a performance measure towards reaching target carbon levels.

Energy Conservation

Urban trees and forests modify the environment, conserve energy and reduce energy consumption in three principal ways:

Shade – In 2011, impervious surfaces covered 36% of the City's total land base (Kirkland, 2011). Shade from trees reduces the amount of radiant energy absorbed and stored by impervious surfaces, thereby reducing the *urban heat island effect*, a term that describes the increase in urban temperatures in relation to surrounding urban infrastructure (Stone, 2012).

Shade from trees also reduces the amount of energy used to cool a structure in summer (Simpson, 2002). Trees and vegetation on rooftops can decrease heat loss through rooftops and provide a beautiful addition to the urban landscape (Department of Energy, 2004).

Well-located trees provide energy savings

Evapotranspiration- Evapotranspiration is the release of water vapor from foliage, cooling the surrounding area. Through shade and transpiration, trees and other vegetation within an urban setting modify the environment and reduce heat island effects. Temperature differences of more than 9°F (5°C) have been observed between city centers without adequate canopy cover and more forested suburban areas (Akbari, et al., 1997).

Wind reduction – Trees reduce wind speeds by up to 50%, influencing the movement of air and pollutants along streets. By reducing air movement into buildings and against conductive surfaces (e.g., glass, metal siding), trees reduce conductive heat loss from buildings, translating into potential annual heating savings of 25% (Heisler, 1986).

Social & Economic Benefits

Trees create livable cities on an aesthetic level, but also in terms of health, safety, and economic stability. Trees contribute to the improved physical and psychological health of urban residents, creating an atmosphere conducive to community participation. Trees contribute to making Kirkland a healthier and more desirable community in the following ways:

Health and well-being – Exposure to nature has a healthy impact on people, including higher test scores with kids and reduced symptoms of Attention Deficit Disorder (Wolf, 1998). Residents of areas with the highest levels of greenery were three times as likely to be physically active and 40 percent less likely to be overweight or obese than residents living in the least green settings (Ellaway, et al., 2005).

Reductions in crime – Results of a Portland crime study found that street trees fronting houses had a net effect to reduce crime occurrences (Donovan, et al., 2010). Empirical evidence shows a connection between trees and reduced violent crime and theft (Kuo, et al., 2001). Urban residents report they feel safer than residents who have fewer trees around them (Sullivan, 1996).

Increased property values – On average, street trees add $8,870 to home sales prices in Portland, Oregon and reduced time on the market by 1.7 days. The increase in property value with trees extends to neighboring houses (Donovan, 2010). A study found 7 percent higher rental rates for commercial offices having high quality landscapes (Laverne, 2003).

The character of downtown Kirkland is enhanced by its trees

Economic stability – In business districts and commercial areas, trees have been shown to stimulate more frequent shopping trips and a willingness to pay more for parking. Consumers travel further, shop longer and spend 9 to 12 percent more in business districts with trees (Wolf, 2005, 2007).

Sense of Place - Urban planners and architects recognize that trees contribute to a great city (Benfield, 2012). A majority of people feel that trees improve one's quality of life by contributing to the attractiveness of a place to work, live, and play (Lohr, 2004).

Numerous other benefits, such as sound control, wildlife habitat, bird migration corridors, biodiversity, and scenic values have been traditionally regarded as free social goods. Undervaluing these services may result in an urban forest vulnerable to development and conversion to other uses.

Costs vs. Benefits & Green Infrastructure

There are also problems associated with urban forests: generation of pollen and hydrocarbons; water and energy consumption; obscured views; and displacement of native plant species. Costs directly attributed to urban forests include tree establishment and care, repair of tree-induced damage to other urban infrastructure (particularly sidewalks and utilities); blocked solar collectors, and foregone opportunities for activities such as gardening and sports.

Comparing costs to benefits is essential for strategic planning and justifying municipal resources. Many cities track costs and quantify the environmental benefits – or ecosystem services - of their trees. This enables managers to plan for acceptable levels of environmental quality and community livability. Seattle's Forest Ecosystem Values Report monetizes the environmental services of its trees in terms of pollution removal, carbon storage, and energy conservation (Ciecko et al, 2012) to balance urban forest management costs with benefits.

On a small scale, green streets, rain barrels, and tree planting is estimated to be 3-6 times more effective in managing stormwater runoff than conventional methods per $1,000 invested (Foster, et al. 2011). On a larger scale, using trees and vegetation as "green infrastructure" capitalizes on these benefits to perform the functions of the built – or "grey" infrastructure. The shift from grey to green infrastructure is increasingly used by cities and developers as a cost saving measure.

Portland, Oregon is saving $64 million by integrating green infrastructure – including the planting of 4,000 trees – into its innovative stormwater infrastructure

National Green Infrastructure Conference, 2011

Throughout this Plan, there is reference to software programs that can be of immense help to understand the benefits of trees. Two, in particular, are widely used: CITYgreen and i-Tree. This sidebar presents a brief summary of each. To gather additional, up-to-date information, consult the respective websites for these software products: www.itreetools.org/ and www.americanforests.org/productsandpubs/citygreen/ .

CITYgreen software is a powerful GIS application for land-use planning and policy-making. CITYgreen calculates monetary benefits of stormwater runoff, air quality, water quality, carbon storage and sequestration. Based on local site conditions, CITYgreen uses the most up-to-date scientific research to calculate the monetary value of trees and vegetation. A CITYgreen generated analysis produces a colorful, easy to understand map and summary report of key findings

CITYgreen is developed by American Forests. It is an extension to ESRI's (Environmental Systems Research Institute) ArcGIS products and works with Windows-based PCs that have ArcGIS.

i-Tree is a suite of programs that can be used by companies of all sizes to inventory, evaluate, and assess the benefits of urban and community forests. Developed by U.S. Forest Service Research, state and private forestry, and other cooperators, i-Tree is offered free of charge to anyone wishing to use it. The i-Tree software suite includes the following urban forest analysis tools:

UFORE (Urban Forest Effects Model) is designed to quantify urban forest structure and numerous urban forest effects and benefits.

STRATUM (Street Tree Resource Analysis Tool for Urban Forest Managers) uses a sample or existing tree inventory to describe tree management needs. It quantifies the value of annual environmental and aesthetic benefits such as energy conservations, air quality improvement, CO2 reduction, stormwater control, and property value increases.

In addition to the analysis programs in i-Tree, the following utilities are also available:

MCTI (Mobile Community Tree Inventory) is a basic tree inventory application that allows communities to conduct tree inventories and analysis at various levels of detail and effort. Data can be collected and entered into the program using paper tally sheets or a Personal Digital Assistant (PDA) using new or existing inventories.

The ***Storm Damage Assessment Protocol*** provides a standardized method to assess widespread storm damage in a simple, credible, and efficient manner immediately after a severe storm. It is adaptable to various community types and sizes, and provides information on the time and funds needed to mitigate storm damage.

- Hand-held Personal Digital Assistant (PDA) programs to collect field data.
- Plot selection programs to determine where to collect sample field data.
- Report writers to generate reports, graphs, charts, and tables to summarize data and results in an easily understandable format.

The wide range of urban forest benefits provides a strong justification to support better management of trees in urban areas. However, in reality, this can be very challenging. To begin, we need to take a close look at our current organization and management approach.

> *"Setting clear goals, choosing an approach, measuring results, and then using those measurements to continually refine our approach—helps us to deliver tools and services to everybody who will benefit."*
>
> ***Bill Gates***

2. Review of Current Management

This section details Kirkland's current management efforts in urban forestry. Divided into four key areas of management, this section describes the current status in each area derived from a consultant's review of City practices. The resulting information is applied in an assessment of Kirkland's current performance in urban forest management (Section 5), which led to the goals, strategies and recommendations for sustainable urban forest management (Section 6).

2.1 The Urban Forest Asset

Asset inventories are important to any organization and business model; they are the basis of tracking all related expenses, defining acceptable levels of service and for strategic planning. The Urban Forest Asset is the individual and collective tree resource and the current level of knowledge about the structure, condition, and benefits of Kirkland's trees.

Measuring the Urban Forest

Urban forests are measured several ways to document individual trees or to view an entire tree population. Methods vary depending on resources and the extent of management in any given area. The two most commonly used methods of measuring urban forests are explained below, with pros and cons of each:

The urban forest asset: the trees themselves

Canopy assessments determine the amount of tree leaf surface covering a large area, usually expressed in acres or square miles. It allows a municipality to see how much of their jurisdiction is covered by trees, regardless if the trees are on public or private property.

Tree canopy reveals quite a bit of information about a city's growth if compared over time or by looking at smaller areas within a larger boundary, such as land-use zones. The data is used with setting canopy goals, planning efforts, and to assess the value and ecosystem services of an urban forest. A shortcoming of urban tree canopy assessments is the lack of detailed information regarding individual trees.

Inventories provide detailed information such as the location, species, size, condition, risk assessment, maintenance needs and history of trees. While this information is very useful for managing public trees, it alone does not provide enough information for long-range planning of the citywide urban forest since public trees account for a fraction of a city's urban forest. In the event of severe catastrophes, the Federal Emergency Management Agency (FEMA) provides financial assistance when tree inventories and damage assessment protocols are submitted by the affected community.

The following three tree inventories describe how Kirkland's urban forest is currently measured by city-wide canopy coverage and for public trees located in the right of way and open space areas.

Kirkland's Tree Canopy

In 2002, a canopy assessment completed by the City's GIS Department estimated that Kirkland had 2,151 acres of tree canopy, which translated to approximately 31.6% coverage. To mitigate the effects of development and to provide urban forest benefits to the community, the City established a 40% canopy goal based on the recommendations in an American Forests report for the Puget Sound Region (Figure 4) (American Forests, 1998).

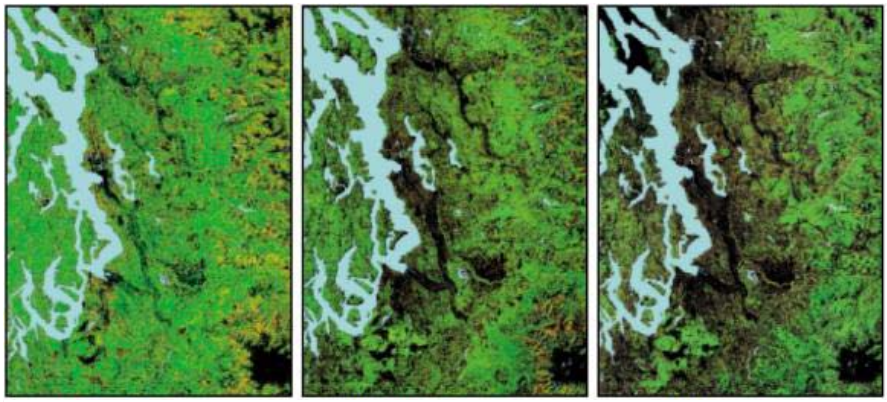


Figure 4. Puget Sound land cover from 1972 to 1996. Black represents impervious surfaces, canopy cover is indicated by green

This report conveyed the dramatic decline in canopy cover associated with the rapid growth in the Puget Sound region from 1972 to 1996. The analysis placed a dollar figure on the increased cost of stormwater management and the cost of air quality controls. Based on these findings, American Forests recommended canopy cover goals for the region as follows:

40% tree canopy overall in the Puget Sound region
50% tree canopy in suburban residential areas
25% tree canopy in denser urban residential areas
15% tree canopy in Central Business Districts

To determine the effectiveness of its tree regulations, the City conducted a comprehensive canopy assessment in 2011 using high-resolution satellite imagery, remote sensing and geographic information system (GIS) mapping. The data from the canopy study has not yet been incorporated into the city's GIS system for use by all departments.

The data showed that tree canopy within the pre-annexation boundary had increased by 299 acres of tree canopy; a net gain of 4.4%. As a result of the 2011 annexation, the City's canopy coverage increased to 40.7%, meeting the canopy goal. This is due to the larger single-family properties and parks with higher canopy percentages located in the newly-annexed area.

Public Tree Inventory

While it's generally not feasible to account for individual trees on private property, documenting public trees on streets, trails, parks, and City facilities is an important step towards proactive management. Initially created in 2004, the City's Street Tree Inventory is a partial inventory of 23,400 trees along the public right-of-way within the pre-annexed city boundary.

Stored as a data layer in the City's GIS, the inventory shows little evidence of having been edited since 2005, suggesting that there have been no follow-up inspections of these trees since they were first inventoried. When development occurs or major arterials are improved, new street trees are installed, typically without recording in the inventory.

Street trees enhance the City's neighborhoods

In late spring 2012, the City's IT-GIS staff recorded the locations of 15,226 right-of-way trees in the newly annexed areas; however, no other tree data was collected. The number of tree locations in the annexed neighborhoods combined with the existing tree inventory suggests the City has approximately 38,630 street trees.

Currently, there is no inventory of trees in active parks.

Two of the most important details obtained through a tree inventory are *condition* and *risk assessment*, which together can alert managers to public safety concerns. When Kirkland's inventory data was collected in 2004, 50 percent of trees were found to be in good condition and 44 percent were found to be in fair condition.

Since the inventory data has not been maintained or updated, the current validity of these ratings cannot be confirmed. Of additional concern, 6 percent of the inventoried trees (1,087) were reported as dead or in poor health; conditions that often pose the greatest risk to public safety.

Size is an indication of a tree's age, a signal to the lifespan of individual trees. *Species* is the type of tree. Diversity in tree size and species is fundamental for long-range planning. Too many trees of any one age or species can be severely impacted by pests or disease, storms, drought and climate change. From a management standpoint, diverse tree sizes and species is desirable so that, as trees age, their removal and replacement costs can be spaced over a number of years. Kirkland does not actively manage for tree age and species diversity.

O*ver one-third of Kirkland's total number of right-of-way trees and all trees in formally-landscaped parks are of an unknown value, size, condition, and risk potential*. The latter issue has raised broad safety questions locally and nationally in cases where municipalities have been exposed to increased liability associated with tree failure (Glaberson et al, 2012) (Marcham, 2011).

Details on Kirkland's inventory are difficult to access in its current format, which is not practical for field personnel. Although Public Works uses Hansen software as a work order program to manage its capital assets, *Hansen or other software is currently not in use to manage public trees*. Hansen can be used to track productivity and costs associated with public assets. Hansen links to the City GIS browser; *however it is not compatible with the City's permit database.*

Public trees are important attributes of the City's infrastructure, just as sewers, light signals and sidewalks are.

-

Trees are different than bridges, roadways and other "gray infrastructure" in that their value APPRECIATES over their useful lifespan.

Natural Areas Assessment

In 2008, the City's 20-Year Forest Restoration Plan identified and categorized 372 acres of natural areas within city parks according to tree composition and invasive species cover (Figure 6). The Forest Restoration Plan is discussed in more detail in Section 2.2; however, the Tree-iage model is included here as an inventory method of trees in natural areas.

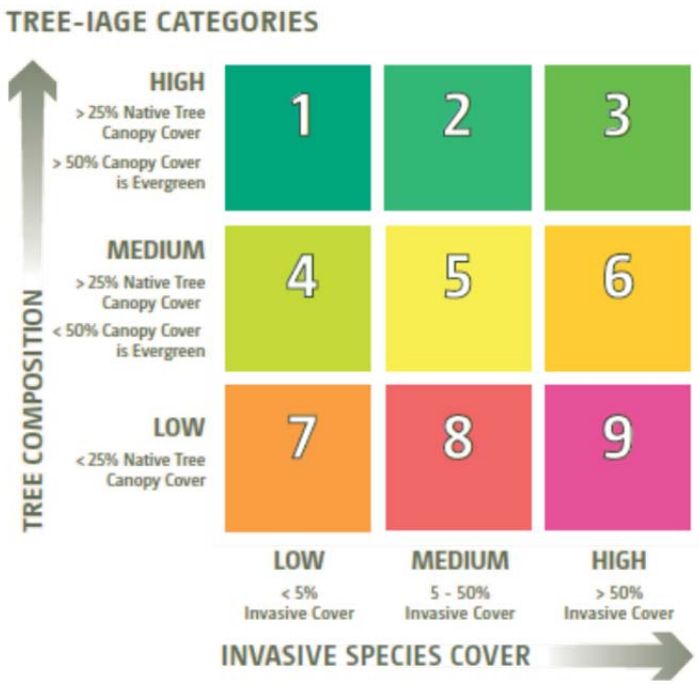


Figure 6. Tree-iage model for tree composition and invasive cover

The Tree-iage model provides a detailed understanding of the ecological structure and function of Kirkland's publicly-owned natural areas, allowing the City to quantify and prioritize the maintenance needs in natural areas for the next 20 years.

Although 60 percent of the city's forested natural areas fall within the "low" invasive threat, the remaining high threat areas amount to *44 acres*.

Only 10% of forested city park land is classified as "high" value, the desired condition for forested natural areas.

Most of Kirkland's natural areas fall within the "medium" value and are managed for invasive weeds and conifer and native plant succession

It is important to note that the 2008 Forest Restoration Plan does *not* address these areas:

- Parks acquired since the Restoration Plan was adopted
- Kirkland parks acquired with annexation
- Significant acreage of parks currently owned or managed by other agencies (such as Bridle Trails State Park, Lake Washington School District and King County's Big Finn Hill and Juanita Woodlands Parks)
- Easements, private tracts, and greenbelts

2.2 The City's Guiding Policies & Regulatory Framework

The City has developed policies to protect its urban forest based on the vision and direction from the community. The current regulatory framework has been developed over the last two decades, some of which was initiated on a state level. For example, in 1990, the State Legislature adopted the Washington State Growth Management Act (Chapter 36.70A RCW). Unique among states, the Growth Management Act (GMA) requires that municipalities plan for growth, using a public process to develop their own comprehensive plans.

City of Kirkland Comprehensive Plan

The Comprehensive Plan reflects Kirkland's intent to meet the requirements of the GMA and attain the community's vision of the future. When Kirkland's Comprehensive Plan was updated in 2005, it included direction to meet a citywide 40 percent tree canopy cover goal (Policy NE-3.1). This goal has played a key role in increasing tree canopy cover over the previous decade. It is the Comprehensive Plan that articulates the City's approach to natural resource management:

> *"We have an opportunity and a responsibility to create a sustainable community that balances urban growth with natural resource protection."*
>
> ***Comprehensive Plan Framework Goal (II.FG-7)***

City Council Values & Goals

In 2009, the City Council adopted ten goals to articulate its key policy and service priorities for Kirkland. Guiding the City's work plans and projects, the 'Environment' goal statement commits to *"protect our natural environment for current residents and future generations."* As a tool for reviewing the City's services, an annual Performance Measures Report serves as a "report card" on the City's progress, using canopy cover as a performance measure.

Natural Resource Management Plan

Adopted by City Council in 2003, the Natural Resource Management Plan (NRMP) has provided further direction for Comprehensive Plan policies for ten years. **Nearly all of the urban forestry-related goals outlined in this document have been achieved; with these exceptions:**

- *Proactively manage public trees – trees in city parks, rights-of-way, and on other city-owned properties constitute valuable public assets*
- *Provide education on the benefits of trees on private property and on the alternatives to [tree] removal*
- *Update street tree planting standards and specifications to accommodate a more diverse palette of tree species*
- *Develop and maintain a Notable Tree Program to identify and preserve notable trees in Kirkland*

Tree Protection Codes

In late 2005, the City established a tree protection ordinance by adopting Chapter 95 of the Kirkland Zoning Code (KZC). The purpose of this ordinance is to support the Comprehensive Plan's city-wide 40 percent canopy goal. The code establishes a permit process and standards for the protection and replacement of trees on private and public property.

No permits are required to prune trees on private property; however, topping is not allowed. Permits are not required for the removal of up to two (2) trees on private property within a twelve-month period; however a permit is required for multiple tree removal on private property. Table 1 summarizes Kirkland's tree code:

Table 1. Summary of Kirkland Zoning Code Chapter 95

	REMOVAL SCENARIO	REVIEW? PERMIT?	MISC.
PRIVATE PROPERTY	Remove 2 trees (regardless of condition)	**No review, no permit Tree removal request recommended**	Notification appreciated to avoid unnecessary Code Enforcement response
	Remove >3 trees Considered hazard or nuisance	**No review, no permit if…**	Hazard or nuisance is obvious in a photo or other documentation
	Remove hazard or nuisance trees in critical areas	**Yes, review and permit required**	Arborist report, replacements may be required
	Emergency/urgent tree removal	**No review, no permit**	Contact Planning Dept. 2 weeks after incident
	Prune or trim trees	**No review, no permit**	-Property owners are responsible for tree care -No topping allowed (>50% live crown removal is same as tree removal)
	Tree removal with development	**Yes, included with land use or development permit (BLD, SPL)**	-Arborist report required for trees potentially impacted by development -Protection measures required on site
PUBLIC PROPERTY	Trees in right-of-way medians/Central Business District maintained by the City. Otherwise, street trees are the maintenance responsibility of the adjacent property owner.	**Yes, review and permit required**	-Public Works staff may prune street trees by property owner request -Public Works staff may remove street trees at their discretion
	Prune or remove park trees	**No permit required; review/service performed by request**	-Staff may prune park trees by property owner request -Most hazard tree removal is contracted out

In regards to tree retention with development, the code is fairly complex. It provides sufficient flexibility for various development scenarios while intending to protect high retention value trees; however most developers feel it is too onerous. Data shows an increase in tree canopy within the pre-annexed city boundary from 2002 to 2010, indicating that the regulations have been effective towards reaching the canopy goal. Based on the comments in the public survey, the City's tree regulations appear to have had a polarizing effect in the community.

The following codes also pertain to tree protection in specific areas:

Kirkland Zoning Code, Chapter 83 - regulations concerning tree protection and restoration requirements within the Lake Washington shoreline jurisdiction

Kirkland Zoning Code Chapter 70 - defines mature tree and native vegetation protection in the Holmes Point overlay area.

Kirkland Municipal Code Title 1, Chapter 1.12 includes the special provisions relating to enforcement of tree regulations

20-Year Forest Restoration Plan

In 2008, the City adopted a 20-Year Forest Restoration Plan, which has successfully guided the Green Kirkland Partnership restoration efforts located in park natural areas. Based on a similar strategy used by the City of Seattle, the Forest Restoration Plan aims to achieve these key goals over a long-term horizon:

Green Kirkland Partnership volunteers

- Establish an oversight role for the Kirkland Park Board
- Educate the community on the threat of invasive plants in urban forests
- Identify how to reverse natural area decline and sustain healthy forests
- Establish a program to engage the community in stewardship projects
- Sustain a volunteer work force and conduct ongoing restoration and maintenance of natural areas
- Acquire land that has ecological and habitat benefits

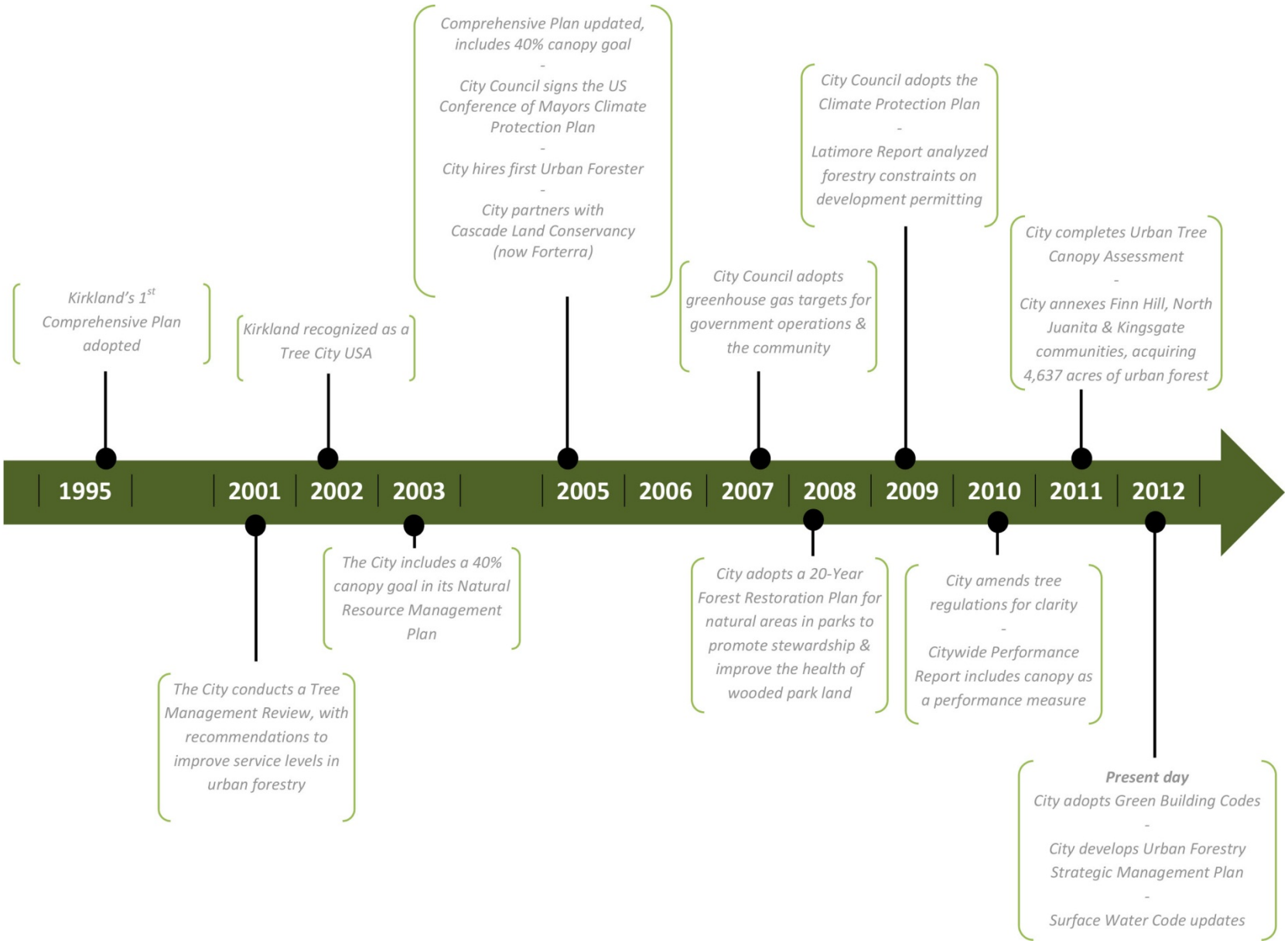
2001 Tree Management Review

In an effort to understand how Kirkland's trees were being managed at the time, a consultant was hired to review the City's management efforts in 2001. Although this document is over 10 years old, it is still very relevant in its assessment of community awareness and staff roles. **Most of the goals outlined in the document have been achieved with the exception of these two:**

- *Determine goals and desired level of service to shift from reactive to proactive management of publicly owned trees*
- *Expand public outreach and the education of residents, business owners, developers, staff, and public officials (regarding urban forestry issues)*

Figure 8 summarizes the City's legacy of placing a high value on its urban forest through its policies and regulatory framework.

Figure 8. Kirkland's guiding policies and regulatory framework for urban forest management



2.3 The Municipal Urban Forestry Program

This section captures *the current organization and the municipal resources dedicated to urban forest management*, mapping out how departments interact with each other, with trees, and with the community on a routine basis.

Current Program Overview

Without a centralized program, urban forest management in Kirkland involves individuals in the legal, IT/GIS, planning, public works and parks departments. Overall, there is evidence of moderate to good communication between staff, especially with the recent formation of an interdepartmental working team.

Interdepartmental working team prevents "silo-ism"

Urban forest priorities have been driven by reactive decisions based on budget constraints, limiting the City's ability to manage proactively with common goals. Generally, Kirkland's forestry-related achievements are due to independent efforts made by individuals or separate divisions' efforts. These include:

- Community Wildlife Habitat certification by the National Wildlife Federation
- Growth Awards from the National Arbor Day Foundation (2005, 2009, 2011-2012)
- State and federal grants for urban forest-related Work Plan projects

Funding Overview - Municipal budgets can be quite complex, as researching Kirkland's urban forestry budget has shown. Without a centralized program or distinct divisions, there is limited accounting of equipment, staffing and other operations as urban forest line items. For example, fees collected for tree removal permits in Kirkland are not tracked and reported as revenue supporting urban forestry staff. Determining actual expenditures for program items and whether or not operations are cost-effective is difficult.

Funding sources include the *General Fund*, *Surface Water Utility, REET funding*, *grants* and the *Capital Improvement Program (CIP)*. Department managers utilize the *General Fund* to balance urban forest management against other operating expenses and needs. New tree planting is typically included in *CIP* project budgets as part of major capital improvement projects.

The City has apportioned funding from the *Surface Water Management budget* to fill the 0.5 FTE temporary Urban Forester position. Kirkland has established a *City Forestry Account,* which receives funds primarily from code enforcement fines and fees paid in lieu of tree planting. This account is intended to fund a variety of urban forestry related projects.

Staffing Overview – DRG outlined forestry-related operations with department managers, identifying over thirty (30) individuals city-wide as persons who work with tree issues on an intermittent basis. About one-third of these, or eleven individuals, were identified as those that work with trees or tree-related issues on a consistent basis (defined as 30-80% of their work week). Two Field Arborists, one each in the Parks Department and the Public Works Department, work with trees on a consistent basis due to other workload demands of their respective departments.

City-wide, five positions are currently dedicated to urban forestry issues, quantified as over 80% of their time on a weekly basis. With the passing of a Park levy in the November 2012 election, three new FTE positions now manage the Green Kirkland Partnership program: a Supervisor, Program Assistant and Senior Maintenance position. The temporary Urban Forester position and the contracted consulting arborist perform bodies of work that amount to over 80% of their time.

Only 'consistent' and 'dedicated' staff services are shown in Tables 2 through 4. The following department reviews are the result of discussions with individuals and managers in the Human Resources, IT/GIS, Planning, Parks, and Public Works departments. The sidebar below may help avoid confusion with the roles and titles used for urban forest professionals.

WHO IS INVOLVED IN URBAN FORESTRY?

Arborists are trained professionals concerned primarily with the management of individual trees. *Commercial arborists* provide tree care and management services on private and public property, utility arborists deal with tree management issues along utility – typically electrical corridors, and municipal arborists are those employed or contracted by municipalities to manage tree programs. Many arborists are also skilled in consulting and appraisals.

Foresters are trained to analyze and understand whole ecosystems of stands or large groups of trees on a systemic level. Traditional foresters are likely to be engaged with forestry as a researcher or scientist.

Community or *Urban Foresters* and *City* or *Municipal Arborists* generally have an overlap in the experience, training and skills of the previous two professionals and are those who oversee a municipal urban forestry program. A city arborist may be placed within a public works department such as in Tacoma; or, to review development plans, an urban forester may be positioned within a planning department such as in Olympia and Kirkland. Some cities may have the oversight of an urban forestry program as in Renton and Vancouver, while others may have urban forestry functions within individual departments such as Seattle or Mercer Island.

Parks Managers work largely in local government to manage public parks and open spaces used for active or passive recreation. How these groups work together or relate to another is determined primarily by how a local government organizes its own departments and workforce, and how lines of responsibility are established.

Naturalists are experts in natural history, botany, or ecology. They are often involved in public outreach and education programs.

Tree Boards or Commissions provide citizen oversight or guidance to urban forest programs in many cities, such as Woodinville or Seattle.

Planning Department Review

Staff in the Planning Department is primarily responsible for development review, permit processing and code enforcement. As part of their normal duties, Planners respond to general tree code inquiries, processing most tree removal requests/permits over the planning counter at the time they are received.

Typically, the Urban Forester has been responsible for overall urban forestry management including policy development and programs and applying the tree code for permit reviews. The latter requires technical knowledge of trees impacted by construction, experience with applying municipal code and the ability to balance growth with urban forest sustainability.

Current staffing levels - Since 2011, Urban Forester responsibilities have shifted to grant administration and project management for special projects outlined in the department's Work Program. The combined efforts of the planning staff and a contracted consulting arborist maintain the current levels of service in regards to permit reviews. Two code enforcement officers respond to illegal tree activities.

Table 2. Planning and Community Development forestry-related services

Division	Staff Services
Development Services & Permitting (Current Planning)	- Plan review for tree code compliance - Public information (online, phone, counter) - Tree removal permit review
Code Enforcement	- Investigating tree removal complaints - Ensuring tree regulations are enforced, including restoration and fines
Comprehensive (Long-range) Planning	- High priority Work Program projects - Tree regulations & related policy - Federal, state grant procurement - Tree City USA applications
Education and Outreach	- Web site content and public outreach - Special projects
Contractor	- Plan review for tree code compliance

Current Funding – Planner time, code enforcement and consultant fees for the contract arborist come out of the General Fund. The temporary .5 FTE Urban Forester position is funded from the Surface Water Utility budget.

Tree protection code administration - Staff noted that the code is generally working; however there are many areas that could be improved to be less confusing. Staff believes that the current code, although quite comprehensive, is sufficiently flexible for property owners to accommodate tree retention in their development plans. There are concerns, however, that many permit applicants and developers do not share that sentiment (Zucker Systems, 2012).

Development plans/permit applications – In regards to tree retention plans and tree removal permits, the City has reoccurring issues with receiving incomplete or poor quality permit applications, resulting in revisions and increased review times. Planning staff attributes this to either a resistance to observe the City's tree codes, or that permit applicants simply overlook or omit incorporating required tree information into their development permit applications. This information includes:

- Trees not shown accurately (or not shown altogether) on site plans
- Significant changes in grade that are unaccounted for
- Installation of utilities that present conflicts with tree roots
- Limits of disturbance/root zones not to scale or inaccurately represented

Code enforcement – Code enforcement staff revealed that the public's most common explanation for tree-code violations is that the property owner or tree companies did not know what the code allowed or prohibited. This lack of understanding of the City's tree code is prevalent, as evidenced in the public survey and focus group findings. Unauthorized tree removals are successfully mitigated with restoration plantings, however code enforcement staff believes higher fines may help to deter unauthorized tree removal.

Tree retention on development sites in Kirkland

Permit fees –Currently, tree removal permit fees and development fees indirectly fund the planners' time and the contracted services of a consulting arborist (see the Public Works review regarding permit fees). To ensure permit fees are appropriate, consistently collected and procedures are well-coordinated between departments, an analysis of tree-related permits needs to occur. The City will be conducting a permit fee study in 2013.

Parks Department Review

Interviews with the Parks Department staff involved their approach to planting trees, maintaining existing trees, and mitigating hazardous trees. Discussions focused on the management of formally landscaped areas, wetlands, critical areas and the natural areas in Kirkland parks. Overall, care of individual trees occurs on an as-needed basis according to urgency and budget availability. The following are summary comments from these discussions:

Current staffing levels - Parks and Community Services currently has four designated positions dedicated to tree care and management in city parks: the Green Kirkland Partnership Supervisor, a Program Assistant, a Senior Grounds person and a Field Arborist. Annexation has greatly increased service requests regarding trees: prior to annexation, Parks might get a few calls for tree-related services each month. Now, Parks receives calls for tree service requests each week and often multiple calls a day.

Table 3. Parks Department forestry-related services

Division	Staff Services
Maintenance	- Tree planting and establishment - Structural pruning on smaller trees - Inspection & ID of hazardous trees
Green Kirkland Partnership	- Native tree & vegetation planting - Implement 20-Year Restoration Plan - Event and volunteer coordination
Contractors	- Pruning/removal of large or hazard trees as needed

Productivity tracking – Currently, labor is tracked manually for timesheets, but work is no longer recorded and tracked for productivity as it had been with the City's formerly-used payroll software. Readily searchable records are not available in regards to tree care productivity (see the Public Works review). Parks staff does track tree-related service requests: in the third quarter from July through September 2012, over 150 written letters, emails, and phone calls regarding tree issues were fielded by Parks staff.

Current Funding – The General Fund supports staffing for tree maintenance, removals or tree risk assessments, which are considered discretionary budget items. Parks budgets $3,000 annually for high or severe risk tree management, which typically mitigates only one or two trees a year. Once the reserve funds have been exhausted, Parks diverts funds from other park activities to contract out work that may be potential public safety risks. In 2012, approximately $25,000 was spent on contracted high risk tree removals, wildlife snagging and other priority tree-related issues.

In November 2013, a park levy was passed, provided funding for three full time positions to manage the Green Kirkland Partnership Program. However, levy funding amounts to $190,000 per year for the program; whereas the 20-Year Forest Restoration Plan estimates that, if the program grows at the same rate, an additional $110,000 in labor and materials will be needed by 2014.

Equipment – Heavy equipment for tree work is shared with Public Works (see Public Works review). In the event of severe storms and other emergencies, the equipment and resources to address these situations are inadequate.

Tree inventory – The City has no inventory of trees in active parks and no formal protocols for inspection. Without any summary data about park trees, the Parks Department is functioning reactively to tree issues as they emerge in parklands. Annexation in 2011 increased forested natural area acreage in city jurisdiction by approximately 31 acres, but these acres have not been surveyed in the City's 20-Year Forest Restoration Plan (2008).

Tree planting – On an annual basis, Parks staff focus on areas where they perceive have deficiencies in tree cover. Staff communicates with the Green Kirkland Partnership Supervisor and with local nurseries about tree planting needs and opportunities. With limited funding for

establishment (primarily watering), Parks' staff focus on planting native trees and describe this as being an effective strategy to grow the forest in city parks.

Tree maintenance – On small trees, parks maintenance staff perform simple structural pruning or mitigate potential tree risk situations. This tree work is not always performed by qualified arborists, but staff is aware of ANSI A300 pruning standards and an effort is made to perform correct tree care practices.

For large trees, Parks staff will collaborate with the Public Works Grounds Division to secure their staff time and equipment as tree issues emerge. When urgent tree work is identified that is beyond the scope or exceeds workload capacity of city crews, Parks uses an annual reserve to contract out this work.

Peter Kirk Park

The Green Kirkland Partnership Program – Since 2005, over 40 acres have been restored. By the end of 2012 over 42,200 volunteer hours contributed to the management of Kirkland's forested open space. These volunteer hours translate into a total estimated value of $867,700. To support this level of community engagement, Green Kirkland Partnership currently staffs 3 FTE positions.

In addition to volunteer management and support, staff conducts activities not suitable for volunteers, such as removal of invasive trees and the application of chemicals to kill invasive weeds, required for successful forest restoration efforts. By the end of 2012, a total of 1,881 invasive trees had been removed.

Green Kirkland Partnership currently staffs 3 FTE with funding from the recently-passed parks levy. Still, without increased funding, the program will fall short of plan goals. The newly-annexed natural areas (including King County and Finn Hill Neighborhood Alliance-managed lands), Big Finn, O. O. Denny or Juanita Woodlands parks are currently not in the City's jurisdiction; however any transfer of responsibility or ownership will likely increase service demands on Kirkland Parks and Green Kirkland Partnership management.

Public Works Review

The staff in Public Works discussed urban forestry from both the perspective of street tree (right-of-way) maintenance, stormwater mitigation strategies and capital improvements. The Public Works Grounds Maintenance Division is responsible for managing trees in the public right-of-way.

Aside from other grounds-keeping tasks, the Lead Grounds person and a Field Arborist are responsible for the pruning, removal and other maintenance of trees, review of tree permits, maintaining the street tree inventory, evaluating potential tree failure and responding to emergencies and storm events. These individuals routinely cooperate with Parks Department staff to share equipment and perform tree work on parks trees.

Current staffing levels – Public Works has 1 FTE solely dedicated to forestry operations and no dedicated urban forest budget. Staff in the Street, Grounds and Surface Water Maintenance divisions is responsible to clear trees and vegetation blocking the right-of-way.

Table 4. Public Works forestry-related services

Division	Staff Services
Street Maintenance/ Grounds Maintenance Division	- Street tree pruning and removal, including hazard trees - ROW tree service requests/inspection, including permitting - Brush clearance for pedestrian & vehicle clearances - Stump grinding - Replacement tree planting & establishment - Tree grate maintenance - Spray/weeding tree wells - Street tree inventory updates
Surface Water	Stormwater facility vegetation maintenance
Contractors	- Hazard tree pruning/removals as needed or when workload exceed crew capacity - Spraying when needed

Productivity tracking – Currently, labor is reported on manual timesheets, but not recorded and tracked for productivity. Readily searchable records are not available in regards to tree care productivity. Staff describes maintaining or removing approximately three (3) trees per week as a typical production rate, but could not compare the rate in response to work orders or demonstrate tracking in an electronic system like Hansen or the City's permit database. The majority of tree work is reactive, with little to no time to implement planned maintenance strategies.

Current Funding - The General Fund and Surface Water funding support the Field Arborist position and Grounds staff responsible for tree care. When the City undertakes major capital improvements, trees are typically planted as part of the project. CIP projects are funded on a project-by-project basis but not necessarily aimed at achieving overarching urban forestry and community goals, nor do they include maintenance contingencies.

Equipment – Public Works Grounds Division has access to an aging surplus signal truck to perform tree work. Shared with the Parks Department and signal crew, its usefulness and availability is very limited. The City's one chipper, although suitable for minor brush clean-up, is inefficient for a wider range of purposes such as corridor pruning or clearance associated with storm emergencies. Its availability is limited as it is shared with the Street Division and Parks. It is not towed by a dedicated truck that enables efficient load dumps. The crew has access to an air excavator and compressor (for root excavations), climbing equipment, and small tools such as chainsaws and blowers. When enough stump-grinding is needed by both Parks and Public Works, the two departments rent a grinder and split the cost.

Emergency response - The 2010 Comprehensive Emergency Management Plan establishes structure for an organized and effective response to emergencies and disasters that may occur

within the City. The Plan does not explicitly address trees, but effectively considers them with an operational plan for debris management. With respect to emergency preparedness and risk management, the City's partial public tree inventory may be problematic in emergency situations.

Certifications & safety training – The Field Arborist and Lead Grounds person maintain their Certified Arborist and Tree Risk Assessor certifications. Contractors pruning public trees are required to adhere to ANSI pruning standards, however no such requirement exists for staff. When DRG initially reviewed Kirkland's tree care operations, safety training was achieved through self-directed learning. This is undocumented safety training and presents a liability for meeting Occupational Safety and Health Administration (OSHA) requirements. City staff was unable to readily produce documentation that demonstrates all City employees working with trees had been trained on OSHA standards. The new Public Works Field Arborist has been moving the division towards greater safety compliance with weekly safety meetings and skills training. An informal collaborative relationship has developed between Public Works and Park departments' Field Arborists that has leant itself to more efficient and safe tree operations.

Tree inventory –According to the database, over 12,000 right-of-way trees have not been revisited since initially inventoried in 2004. Public Works staff does not perform planned cyclical inspections or regularly update the tree inventory; potential public hazards become known to the Public Works department through service requests. Most formally-documented street tree inspections occur as a result of permit reviews.

Public Works inspecting a street tree

The City's IT-GIS department recorded the location of over 15,000 tree sites located in the annexed right-of-ways. However, no further information has been collected such as species, age, condition, maintenance history, or potential hazards - basic information to effectively manage the asset for public safety.

A mobile tablet computer is available to update the street tree inventory. However, the data is not automatically or easily downloaded into the City's GIS system. The tree inventory is not compatible with the City's version of work order software (Hansen) or the City's permit database, EnerGov, hindering productivity tracking and the ability to easily communicate permit status to staff and the public.

Tree planting – Public Works does not have a tree planting program or planting goals; consequently, crews plant trees on an occasional basis. No formal tree planting programs have been developed for the rights-of-way since the Centennial Tree Project in 2005. Exceptions include trees planted by the Surface Water division when conducting volunteer stewardship projects and those planted with capital improvement projects. Street trees are required as frontage improvements with development on adjacent private property.

Tree maintenance and removal – By code, trees in the right-of-way are the maintenance responsibility of the abutting property owner, with two exceptions: if public safety is threatened or the maintenance of trees located in Central Business Districts. Permits are required for public tree removal and pruning. Procedures for public tree care have been confusing to the public and

not standardized for staff (Zucker Systems, 2012). Issues with permit application completeness, delays in permit processing, and staff responding to pruning and removal requests without fee collection occurs on occasion. See the Planning Department review on Permit Fees/Fee Study.

2.4 Municipal-Community Interaction

Community interaction describes *the groups and individuals outside the general management structure of the City who are aware and engaged in urban forest sustainability, advocacy, volunteerism, and partnerships*. These are the committees, community groups, business groups, non-profit organizations and other agencies that may interact with the City on urban forest issues:

The Green Team – is a City service team (committee) that serves to increase interdepartmental communication and improve the City's efforts on sustainable issues, sometimes externally with partners and the community. Typical meeting agendas do not focus on forestry issues.

Developer's Partnership Forum - The City's Development Services committee hosts a forum for developers to keep up to date with development regulations and development-related topics. Once enrolled on the group's listserv, participants receive the latest information about development regulations in Kirkland via email. Participants are also notified about upcoming meetings with the Partnership Forum, which are held typically a few times a year. Typically, this resource is not utilized to communicate urban forestry issues.

Green Kirkland Partnership - Since 2005, the Green Kirkland Partnership (GKP) has built a successful program that engages the Kirkland community in urban forest restoration. The partnership is an alliance between the City of Kirkland, nonprofit partners, businesses, and the community to restore natural areas in City parks. Organizations that support the Green Kirkland Partnership include:

Forterra
King Conservation District
EarthCorps
Washington Native Plant Society
UW Restoration Ecology Network
National Wildlife Federation
Kirkland Neighborhoods
Kirkland Community Wildlife Habitat Team
Kirkland Sunrisers Kiwanis Club
Eastside Preparatory School
Finn Hill Neighborhood

Adopted by six cities in the Puget Sound region (Seattle, Kirkland, Tacoma, Redmond, Kent, and Everett) the Green Cities Partnership model has become the most successful urban reforestation program in the state. The Green Kirkland Partnership supports other municipal-community interactions such as annual Arbor Day celebrations.

Neighborhood Groups - The Finn Hill (formerly Denny Creek) Neighborhood Alliance is a good example of a neighborhood group that is a strong advocate for sustainable urban forests. Since 1996, this non-profit group serves to "preserve, protect, and restore the natural resources of the area and promote stewardship of wildlife and the environment" by

- Leading efforts to restore Denny Creek
- Drafting a King County ordinance protecting mature trees and native vegetation
- Raising funds to help purchase Juanita Woodlands, a 36 acre parcel of wooded land
- Producing a detailed study of watershed issues (Finn Hill Neighborhood Alliance, 2012).

The City has utilized all its neighborhood groups to solicit public feedback for this Plan and other urban forestry projects.

Tree City USA - This designation shows a community's commitment to protecting its urban forest resource by meeting criteria established by the National Arbor Day Foundation annually:

- A community forestry program with an annual budget of at least $2 per capita
- A tree care ordinance
- An Arbor Day Observance and Proclamation
- A Tree Board or Department

The City of Kirkland has shown a commitment to responsible urban forest management by celebrating its eleventh consecutive Arbor Day in 2012, maintaining its status as a Tree City USA. Going beyond the requirements for Tree City USA, Kirkland has received four Growth Awards from the National Arbor Day Foundation (2005, 2009, 2011-2012). Aside from the recognition and community pride in this designation, maintaining Tree City USA status enables cities to be competitive for grant funding. Without this support, Kirkland could not have conducted its 2011 canopy assessment and this strategic management plan.

The City of Kirkland website has a webpage dedicated to urban forestry interests and issues. It is updated as needed, such as with policy changes or with the completion of a special project. Visitors to the City website must navigate from the home page to the 'Community Link' and then to the 'Kirkland Green' link to access the page. Although this page is an excellent starting point to accessing other City webpages regarding trees, visitors to the Kirkland website must know to navigate through the Planning Department to learn about tree related policies. This could be a very useful informational resource if adequately maintained and updated on a regular basis.

A recurring concern observed during this analysis was the lack of resources available to educate and engage the community on urban forestry issues. A greater emphasis on community outreach can help generate the support and community vision necessary for a sustainable and successful urban forestry program. The opportunity to combine efforts or provide mutual support through collaboration and partnership is extremely valuable to government operations; these groups can make significant contributions towards the City's goals.

"Urban Forestry can be defined as the art, science and technology of managing trees and forest resources in and around community ecosystems for the physiological, sociological, economic and aesthetic benefits trees provide to society."

Helms, 1998

3. Public Feedback

To reflect the values of the community as a whole, public input was solicited to provide residents and other stakeholders an opportunity to express their views about urban forest management, policy and priorities. The intent of the public feedback was to gauge the community's:

- Vision and overall sentiment related to trees and ecological systems
- Understanding of tree-related codes and policies
- Priorities for managing the urban forest resource

To do this, an on-line survey was sent to several City email listservs, through news releases and on the City's website. The survey results are summarized below and shown in Appendix C. In addition, Kirkland partnered with Forterra to conduct a series of focus group discussions on the Plan, summarized below and shown entirely in Appendix B .The most recent revision of the Draft Plan was linked through the City website, and an article in the Fall 2012 City Update newsletter featured the September 2012 Draft Plan. In addition, public comments on the Final Draft Plan will be provided to City Council in July 2013.

Citizen participation & engagement are critical for maintaining democracy –fostering it is a key task of municipal officials.

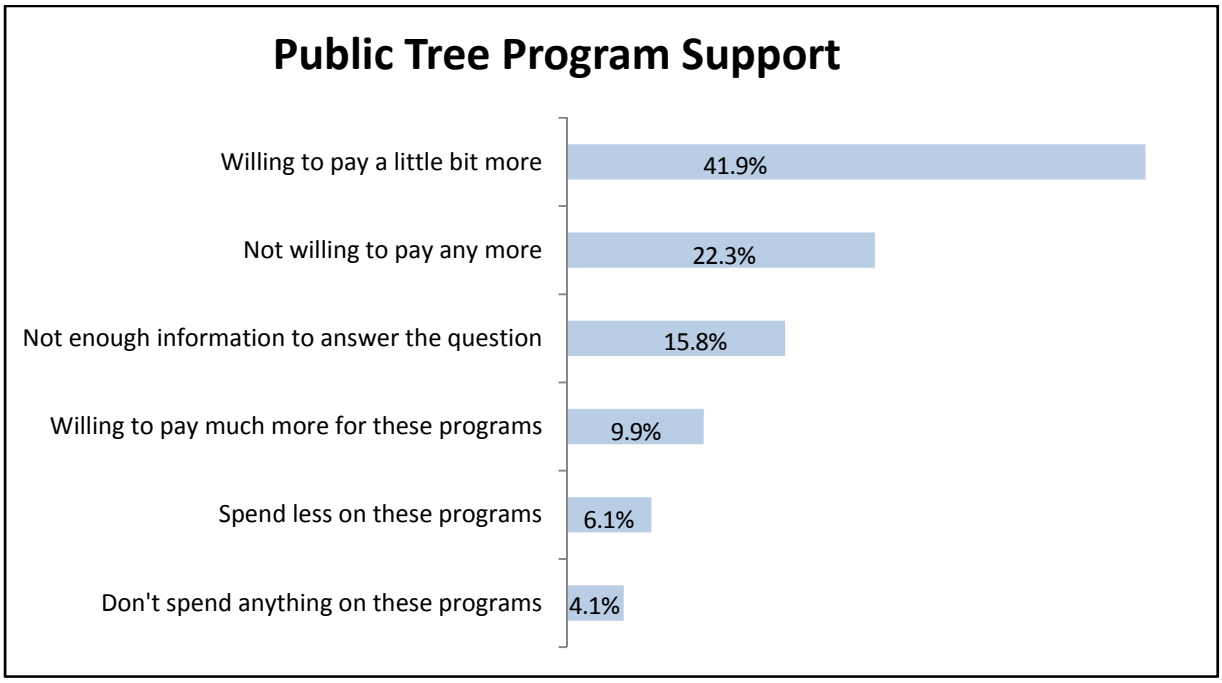
3.1 Survey Results Summary

The online public survey was conducted between August 21, 2012 and September 14th, 2012. A total of 665 people responded, with 484 (72.8%) indicating that they were residents of Kirkland. Another 24% of survey responders live and/or work only in Kirkland. Of residents, the greatest response (18.6%) came from those living in the Finn Hill neighborhood.

The majority of those surveyed (>93%) are satisfied with the overall condition of trees in formally-landscaped parks and in forested parks. In contrast, when it comes to trees in the right-of-way, only 20% thought that the "trees look great." Nearly forty-eight percent (47.7%) of those surveyed understood that they have a responsibility to care for the trees located in front of their property, between the street and the sidewalk. However, twenty-three percent (23.2%) believed that the City's tree crew was responsible for these trees and 29.1% were not sure who is responsible.

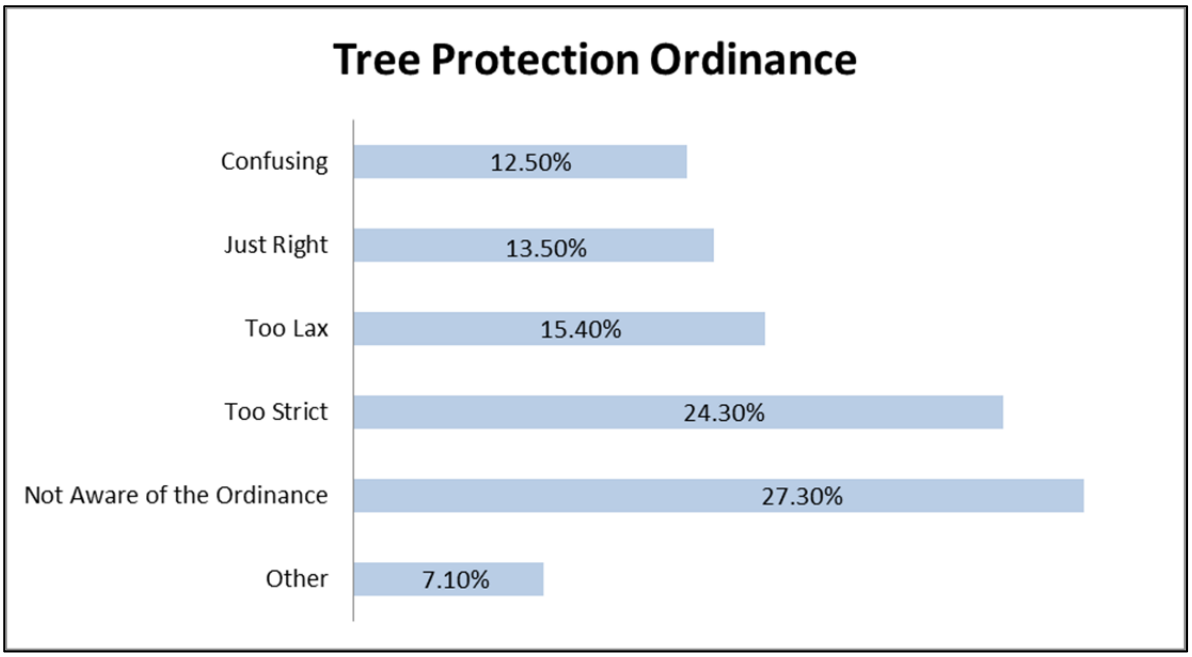
About forty-two percent (41.9%) of those surveyed indicated that they would be willing to pay a little bit more to support public tree protection, planting and maintenance programs versus 22.3% that were not willing to pay any more for public tree support (Figure 9).

Figure 9. Survey results on public tree program support



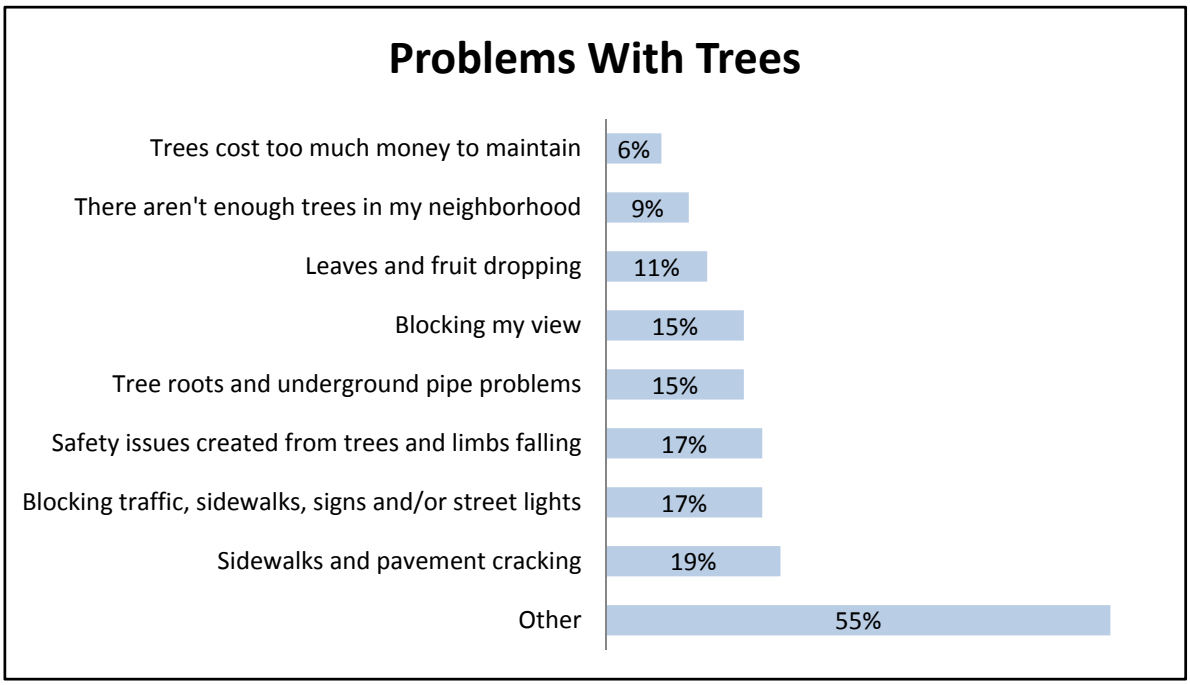
When asked to provide an opinion about the City's tree protection ordinance, the majority response (27.3%) indicated that they were not aware of the city ordinance enough to comment. Twenty-four percent (24.3%) of respondents believe the ordinance is too strict, as it limits what can be done on private property. More respondents (15.4%) feel the tree regulations are 'too lax' than those that feel the ordinance is 'just right' (13.5%) (Figure 10).

Figure 10. Survey results on Kirkland's tree protection ordinance



When asked to rate a series of problems generally encountered with trees, fifty-five percent of respondents chose 'Other' as their major problem, using the comment section to indicate their concern with a variety of problems, including power outages and onerous regulations (See Appendix C for a complete list of comments). The cost of maintaining trees was of least concern (Figure 11).

Figure 11. Survey results on the perceived problems with trees



3.2 Focus Group Meetings Summary

Three focus groups were held in September, 2012 at Kirkland's City Hall. Key stakeholder groups that were targeted include:

- Developers, builders, architects and the business community
- Tree care professionals, consulting and utility arborists and landscapers/nursery persons
- Neighborhood groups and Kirkland residents

All focus group comments are included in Appendix B. The meetings were facilitated to get feedback on:

- The City's outreach, education and communication efforts regarding urban forestry
- The Draft Urban Forestry Management Plan
- Opportunities to improve urban forest management in Kirkland

All groups spent a large amount of time discussing opportunities and weaknesses around outreach, education and communication. Many of the respondents were not familiar with current tree removal and permit requirements, especially in the annexation areas. Clear, concise text, easily understandable graphics and outreach efforts to make residents more aware of the current requirements for tree removal, recommended species and replacement was requested.

There was an expectation amongst all focus groups that the City provides an adequate level of service (primarily staff) to respond to code questions, perform outreach and support urban forest management efforts. It was suggested that a workshop partnering developers and tree care professionals would be a good first step.

Many participants were unsure about what goals and recommendations were made in the draft Management Plan, requesting that the report use less jargon and present a balanced, professional tone that is understandable by the public and professionals alike. Additionally, the Plan should clearly convey the benefits of maintaining and enhancing the urban forest along with the potential costs such as maintenance and reduced development flexibility.

It was requested that the Executive Summary be more concise. Many participants stressed a need to identify how existing tree canopy will be maintained as parcels develop, especially in the annexation areas, and whether neighborhoods, watersheds and/or zoning types could have varying canopy goals towards an overall citywide average. The takeaway regarding the Plan was that it should be much more concise, fully articulate the value/costs of the urban forest in Kirkland and make clear recommendations.

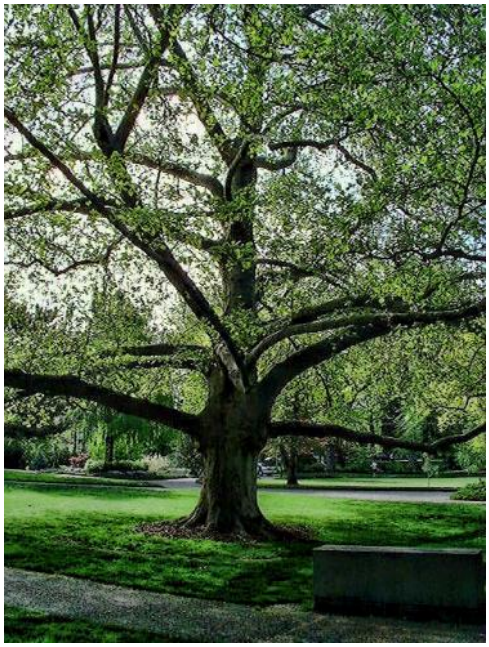
Participants from each focus group discussed management opportunities on both public and private lands in Kirkland. Tree professionals stressed that codes should look at function instead of tree size when it comes to tree retention and replacement. All groups stressed the need for some level of flexibility including the opportunity to cluster homes to conserve trees, in-lieu fees instead of retention and incentives to preserve heritage trees.

Concerns were expressed that trees on private property and property rights need to be respected. Many participants thought the City could devote more resources to managing existing public tree canopy in rights of way and parks.

> *"The key to urban conservation is to find the balance between the seemingly conflicting goals of allowing development density and protecting natural resources."*
>
> ***Metropolitan Greenspaces Program, Portland, Oregon***

4. Program Development Considerations

Other factors to consider when developing an urban forest program include regional consistency amongst municipal forestry programs, funding strategies, and industry standards/best management practices (BMPs).



Large London Plane tree

4.1 Municipal Comparisons

This Plan includes a limited comparison of regional and local municipal forestry programs. Most cities in this section have completed tree inventories and performed tree canopy studies; many have drafted management plans and developed tree protection ordinances. The areas in which these cities differ are in how much they spend on urban forestry, how they are organized and how they staff their programs.

Information on funding levels for urban forestry programs is difficult to obtain. City budgets may not tell the entire story about the total forestry resources. To start somewhere, municipal forestry budgets submitted to the National Arbor Day Foundation were utilized as a basis for comparison (Table 5).

To be awarded Tree City USA status, cities must report their spending on urban forestry program elements to the Foundation. The standards for reporting are identical: *all expenses related to tree planting, maintenance, removal and management are to be included, even volunteer hours are accounted for at a standardized hourly rate.*

However, many cities – especially those that have multiple departments responsible for various program elements - may not report all aspects of their urban forest budget. For example, the City of Bellevue submits the budget amounts from their Natural Resource Division budget, which does not include tree work performed in developed parks, right-of-way vegetation management by the Street Maintenance staff or the new trees and landscaping from the Transportation Department capital projects.

In 2011, the City of Kirkland reported a total forestry budget of $553,907. With annexation, this equates to a normalized $6.86 in per capita spending. This is lower than other municipalities in the region of varying sizes and urban forestry programs. It should be noted that these numbers include volunteer time at a rate of $15 per hour. The high level of community involvement in the Green Kirkland Partnership program accounts for about a third of Kirkland's annual urban forestry expenses.

This data is not prescriptive as to what would be the most appropriate spending level for Kirkland. As different as these programs may be, it provides a starting point for determining what might be reasonable for program funding in Kirkland.

Table 5. 2011 funding levels for local urban forestry programs

City	Annual Spending	Total Population	Spending per Capita
Bellevue	$4,475,153.00	123,400	$36.27
Lake Forest Park	$347,662.55	12,598	$27.60
Olympia	$569,409.85	46,478	$12.25
Portland, OR	$5,440,112.69	550,560	$9.88
Redmond	$524,645.10	54,144	$9.69
Renton	$794,192.00	92,590	$8.58
Kirkland	**$553,906.55**	**80,738**	**$6.86**
Vancouver	$982,991.10	162,300	$6.06
Woodinville	$68,822.60	11,350	$6.06
Seattle	$3,336,175.00	608,660	$5.48

Source: National Arbor Day Foundation

How municipal urban forestry programs are organized and how they staff their programs varies greatly. In Bellevue, Renton and Vancouver, an urban forestry division is positioned within one department with oversight or close collaboration with other departments' urban forestry functions. Vancouver's Urban Forestry Division is made possible through a partnership between the City's Public Works Department and the Vancouver-Clark Parks and Recreation Department.

Cities like Mercer Island and Seattle have opted to designate forestry units within multiple departments. This allows each department to meet their specific objectives and urban forestry goals. However, if individual departments undergo budget cutbacks or constraints, certain aspects of the overall program may suffer. One challenge for cities with multiple forestry units is communication internally between departments and to the public.

In Kirkland, there is no centralized urban forestry program or distinct forestry divisions in each department, making it difficult to gauge program efficiency and effectiveness. Currently, tree management involves many departments where staff priorities for urban forestry operations are often driven by reactive management tactics due to budgetary constraints. This limits the City's ability to realize efficiency gains from proactive management. Some operations involve a moderate level of informal, intra-departmental cooperation and communication. This lack of more formalized leadership results in a general disconnect between staff's understanding of the City's urban forestry policies and the public's understanding and application of them.

For comparative purposes, Table 6 shows the program lead or management positions for urban forestry divisions in local and relevant municipalities.

Table 6. Urban Forestry Statistics in select Washington cities (2012)

Municipality	Population (rank in state)	Area (mi^2)	Canopy % (year)	Tree Regs?	UF Mgmt. Plan?	Tree Board? (#)	UF Program Lead Positions (Dept)
Seattle	608,660 (1)	142.5	23% (2007)	Yes	Yes	Yes (9)	8 (Parks, SDOT, Seattle Public Utilities)
Tacoma	198,397 (3)	62.6	19% (2009)	Yes	No	No	2 (Metro Parks, Environmental Services)
Vancouver, WA	162,300 (4)	46	19.7% (2002)	Yes	Yes	Yes	3 (Public Works)
Bellevue	122,400 (5)	34	36% (2007)	Yes	No	Yes	4 (Parks; 1 in Development Services)
Renton	93,910 (8)	22.3	28.6% (2010)	Yes	Yes	No	1 (Community Services)
Kirkland	80,738 (13)	18	40% (2010)	Yes	No	No	.5 (Planning)
Redmond	54,144 (19)	16.6	No data	Yes	No	Arborist	3 (Parks)
Olympia	46,478 (17)	19	Data pending	Yes	No	No	.5 (Planning)
Bothell	33,505 (30)	12	No data	Yes	No	Yes (7)	1 (GIS department)
Mercer Island	22,699 (42)	13	41% (2007)	Yes	Yes	Yes	2.5 (Parks, Public Works, Development Services)
Kenmore	20,460 (45)	6.3	No data avail	No	No	No	1 (Planning)
Lake Forest Park	12,598 (66)	3.6	43% (2004)	Yes	Yes	Yes (9)	1 (Planning)
Woodinville	10,938 (72)	5.7	~34% (2007)	Yes	Yes (1998)	Yes (5)	2 (Development Services, Public Works)

4.2 Potential Funding Strategies

Now more than in the past decade, municipal programs compete for reliable and sustainable funding and attention from community leaders. City leaders and urban forest managers need to explore new and creative opportunities for sustainable funding, volunteerism, partnerships, and collaboration both internally and within the region (See Section 4.6). Aside from the municipal general fund, which is generated from a tax base, these funding strategies have successfully generated stable and predictable financial resources for urban forest management in other jurisdictions:

Shared Resources - Collaborative relationships between City departments can yield greater funding when resources are pooled. Kirkland Public Works and Parks departments have formed a cooperative relationship to share the City's limited heavy equipment and address heavy workloads. A more formal approach may help to finance equipment purchases and address staffing issues to implement urban forestry goals.

Emergency Funding – The City's Emergency Fund may be an appropriate source for the replacement of aging or more efficient equipment needed to clean up after storms, accidents or other unplanned events. In the event of severe catastrophes, the Federal Emergency Management Agency (FEMA) and other agencies provide financial assistance for urban forest restoration when a tree inventory is in place, justifying the use of emergency funding for inventory updates and acquisition of equipment. Many cities have adopted the FEMA-approved i-Tree STORM for a damage assessment protocol.

Surface Water Utility Funding - Some cities utilize stormwater utility funding to actively manage green infrastructure. Bellevue and Vancouver, Washington are currently using this funding model. For over two decades, the City of Bellevue has combined the maintenance of parks with stormwater management to fund mandates that protect riparian open space. In Vancouver, surface water management fees are used to provide city services for its urban forestry program. Using surface water utility is justified to meet Clean Water Act, Clean Air Act, and Endangered Species Act compliance.

Capital Improvement & Other Large Projects Large-scale building or improvement projects such as roads or bridges often have an impact on existing trees. If trees are identified as a capital asset, funding can be guaranteed as part of the construction project for tree protection, replacement or relocation. Examples are the Park Lane improvements, Kirkland Transit Center, and major park improvement projects such as in Juanita Park. This funding strategy, however, has been a matter of exception rather than a matter of policy in Kirkland.

Park & trail land acquisitions for public benefit

Excess Levy - Another fund raising strategy is the use of citizen approved levies. Washington law allows cities to levy property taxes in excess of limitations imposed by statute when authorized by the voters. Levy approval requires 60 percent majority vote at a general or special election. Excess levies by school districts are the most common use of this authority.

In Kirkland, a park levy ballot measure was passed in the November 2012 election. The measure funded park land acquisition, supports tree maintenance and provides stable on-going funding for the Green Kirkland (GKP) program.

General Obligation Bonds - For the purposes of funding capital projects, such as land acquisitions of facility construction, cities and counties have the authority to borrow money by selling bonds. Voter-approved general obligation bonds may be sold only after receiving a 60 percent majority at a general or special election. If approved, an excess property tax is levied each year for the life of the bond to pay both principal and interest.

Real Estate Excise Tax (REET) - Washington law authorizes the governing bodies of counties and cities to impose excise taxes on the sale of real property within limits set by the statute. Two (2) taxes of ¼ of 1% may be imposed; however, the funds can only be used on capital projects listed in the capital facilities plan. Specifically related to urban forestry, such projects would likely need to be associated with one of the following project types to be eligible: parks; recreational facilities; trails; or river and/or waterway flood control projects. Currently, REET can be used for maintenance or operations on a limited basis. Unless reauthorized by the legislature, this will expire at the end of 2016.

Utility Company Partnerships - Collaboration with utilities such as Seattle City Light (SCL) and Puget Sound Energy (PSE) can provide additional cost savings to both parties. Where community values of electric reliability and sound tree care intersect, partnerships between utility and municipalities often emerge. In Kirkland, this has included financial support for Arbor Day celebrations by PSE and preliminary discussions to develop vegetation management strategies to align Kirkland's tree protection codes with the needs of the utility.

Landscape Maintenance District (LMD) - This funding source can be used by property owners who vote to assess themselves an annual fee to pay and receive services beyond what the City normally provides. In 2002, ballot measure Proposition No. 1 was presented to voters in the King County general election that resided within the Finn Hill park boundaries. It passed, authorizing a tax levy for the creation and maintenance of the Finn Hill Park and Recreation District.

LMDs can also be formed when a new subdivision is built. The City can require the developer to pay the assessments until they are turned over to a homeowner's association or LMD. When a LMD is created, it is specifically documented what additional services will be provided for the assessment. This can include such items as regular tree pruning, litter cleanup, and planting projects. LMDs are also known as maintenance assessment districts, lighting and landscape maintenance districts, or local improvement districts.

Business Improvement Districts (BIDs) - Similar to the LMD strategy, Business Improvement Districts (BIDs) provide increased services in an assessed area. BIDs are formal organizations made up of property owners and mixed-use commercial tenants dedicated to the improvement of quality of life within their districts. A downtown Spokane, Washington business district manages a Clean Team and a Green & Beautiful program with BID funding. Seattle and Tacoma have BIDs

that operates separately from the City government with their own full-time staff providing neighborhood maintenance.

These differ from LMDs in that BIDs are usually self-managed entities as opposed to being managed by the City. BIDs are often compared to residential homeowners associations. Many cities and their contractors allow their BIDs to obtain services such as tree maintenance, street maintenance, and litter cleanup at the same discounted rates as the City pays

Street Repair Funds - The City of San Diego, California has been successful in leveraging street repair funds to contribute to the maintenance of their right of way (ROW) trees. San Diego's code provides that, when street maintenance activities are conducted, all City assets within that ROW receive any required maintenance, including maintenance to the trees within the ROW.

Frontage Assessments - Based on the amount of street frontage a property occupies, fees are collected annually and dedicated to the program for which they are being assessed. Unlike general fund monies, frontage assessments can be created to provide a consistent funding source to support ongoing maintenance and enhancement of street trees. The City of Pittsburg, California receives its entire urban forestry budget from a $0.17/foot frontage assessment.

City Forestry Account - As part of the City's tree ordinance, a fund was established for all tree-related civil penalties and other revenue sources such as the sale of trees or wood. Funds in the City Forestry Account can be used for acquiring, maintaining, and preserving wooded areas, establishing a public tree nursery, and conducting urban forestry education. Additionally, grants and donations received can be placed into this fund.

Grants & Private Fundraising

Fundraising projects are used to support special projects and programs. Tree climbing tournaments and plant sales are two examples of successful fundraising efforts.

Endowment / Trust Fund - Many trusts and private foundations provide funding for park, recreation and open space projects. The Casey Tree Endowment Fund is a funding source for tree planting projects and maintenance operations. Aggressive capital campaigns can raise seed money to establish the initial fund, where interest provides revenue thereafter.

Business Sponsorships/Donations - Business sponsorships for programs are available throughout the year. Sponsorships and donations can be of any value.

Grants, Donations & Gifts - Grant funding from the USDA Forest Service is available through the Washington State Department of Natural Resources. Over $330,000 in grant money was available in 2011-2012 for ordinance development, tree inventories, and development of management plans. Kirkland has obtained grants from these sources for urban forest projects, including the development of this plan.

Other grant monies are available through organizations such as the National Tree Trust (NTT) and the National Urban and Community Forestry Advisory Council (NUCFAC), two prominent national urban and community forestry nonprofit organizations.

Interagency Agreements - State law provides for interagency cooperative efforts between units of government. Agreements between Kirkland and neighboring jurisdictions and King County are an example.

4.3 Industry Standards & BMP's

The tree care industry has developed comprehensive standards for maintenance and care, safety, and professional certification. Compliance with these standards can decrease exposure to risk, reduce injuries to workers and the public, increase consistency of maintenance, and improve urban forest health.

ANSI Z133 Safety Standard (2012) – Developed by the American National Standards Institute (ANSI), this universally-recognized industry safety standard provides detailed criteria for safe tree care operations. It is reviewed and revised periodically by a committee of industry experts and is accepted as current safety standards for tree care in the United States.

The Occupational Safety and Health Administration (OSHA) is very specific about the personal protective equipment (PPE) that tree workers are required to wear and employers are to furnish. OSHA also requires reporting of workplace injuries and imposes fines on employers that are found to be allowing unsafe work environments or practices.

Tree Care Standards – The ANSI A300 Series take precedence over all previously existing tree care industry standards. The standards cover all tree care operations, including standards for pruning, construction management, and tree risk assessment standards:

Best Management Practices - The International Society of Arboriculture (ISA) publishes the Best Management Practices (BMP) Series as companions to the ANSI A300 Series. These BMPs are written as guides for applying ANSI A300 standards in daily tree care:

Arborists' Certifications – ISA certifications standardize tree care professionalism throughout the world. ISA-certified Arborists and Certified Tree Workers are individuals who have demonstrated a level of knowledge in tree care through experience and by passing a comprehensive examination. Certified arborists must continue their education to maintain their certification and agree to adhere to a code of ethics.

The Tree Risk Assessor Certification, formerly known as TRACE, 'TRAQ' is now the ISA standard for assessing trees for potential for failure.

Whole tree failure on Central Way, 2012

Emergency Preparedness – Storm events can cause significant damage to the urban forest, resulting in unexpected emergency response situations. Debris, leaves, limbs or whole tree failure can block the right-of-way, clog storm drains, increasing the risk of flooding, and cause utility infrastructure and property damage.

Tree failure resulting from accidents, hazardous tree conditions, and insect and disease outbreaks such as Dutch elm disease and Emerald Ash borer can have devastating and expensive consequences. A comprehensive Emergency Management Plans addresses reforestation and prevention in addition to debris management.

5. Current Performance Assessment

Using the review data (Section 2) and the Clark model (Appendix A) for sustainable urban forest programming, Kirkland's performance was assessed with a rating from low to optimal. The current status of each performance measure is summarized below, along with the risks of inaction and the benefits of increased performance. Note: there are three performance indicators of urban forest health in which the City has no data to accurately perform an assessment.

Criteria: Accessible Canopy Cover Data

Performance	Good
Current Status	High resolution imagery analysis conducted in 2011. Compares canopy at several levels (watershed, neighborhood, zoning type, parcel, etc.) from 2002 to 2010. Data has not been fully integrated into the City GIS system. No subsequent canopy studies are planned.
Risk	Cannot track community sustainability goals. Limits interdepartmental effectiveness & services. Limits green infrastructure, Smart Growth, climate action planning.
Benefit	Baseline data. Can optimize coordination of development services, improve internal efficiency, is a tool for public outreach and positions Kirkland for regional collaboration

Criteria: Existing Canopy Cover Status

Performance	Optimal
Current Status	40.7% canopy cover following the 2011 annexation; consequently the City has met its 40% canopy goal. The City can shift towards maintaining its canopy cover and achieve acceptable levels of urban forest health and sustainability.
Risk	Unknown status can result in low canopy %, causing increased flooding, urban heat island effects, energy use; reduced air quality and degraded asphalt road surfaces. Canopy reductions also negatively impact wildlife travel corridors and decrease habitat.
Benefit	Optimized ecosystem services and equality between zoning, land use, watersheds or business district canopy cover % goals.

Criteria: Public Tree Inventory

Performance	Low to Moderate
Current Status	Outdated; does not include trees in the annexation area or trees in active parks. The City does not have enough information to manage resource for three criteria: age, species suitability and diversity (see below).
Risk	Cannot proactively manage public trees and monitor service levels. Without condition and value of trees on record, cannot efficiently resolve accident claims and reimbursements for damage caused by

	extreme weather events, etc. Prioritizing urban forestry activities is based on institutional knowledge, conjecture and anecdotal evidence.
Benefit	Managers can develop work plans appropriately and justify funding needs. City can quantify assets, risks, and liabilities. Lower public tree maintenance costs. Plan proactive tree management strategies and distribute workloads efficiently.

Criteria: Uneven-Aged Tree Distribution

Performance	Not enough information to determine
Current Status	Unknown. Need complete public tree inventory.
Risk	Substantial maintenance and tree removal costs result from even-aged populations reaching the end of their useful life simultaneously. Tree failure from disease, extreme weather events, and pests can be catastrophic in even-aged tree populations. Neighborhoods and business districts can become devoid of canopy.
Benefit	Age distribution facilitates long-term budget forecasting. Annual costs for care of public trees can be more evenly distributed over many years. A varied age-class distribution is important for optimizing environmental benefits and results in a healthier, more resilient and sustainable urban forest.

Criteria: Species Suitability

Performance	Not enough information to determine
Current Status	Unknown; need complete public tree inventory.
Risk	Unsuitable species require substantial maintenance and must be replaced more frequently.
Benefit	Poor performing tree species do not continue to be planted, reducing tree maintenance and removal costs.

Criteria: Species Diversity

Performance	Not enough information to determine
Current Status	Unknown. Need complete public tree inventory.
Risk	Predominance of fewer species can lead to substantial impacts or catastrophic loss from pests or disease. (Dutch elm disease and Emerald Ash borer are examples of why cities diversify tree species). The risk of ignoring species diversification can be costly for municipalities.
Benefit	Healthier, resilient and sustainable urban forest.

Criteria: Condition of Public Trees

Performance	Low
Current Status	Condition of public trees is largely unknown. Trees in the right-of-way or in parks do not typically receive routine planned inspections. Request-based, reactive management system.
Risk	Lack of proactive hazard tree evaluations can compromise public safety and increase risk of property damage or injury.
Benefit	Successful budgeting. Increased public safety. Reduced risk.

Criteria: Management of Trees & Vegetation in Public Natural Areas

Performance	Good
Current Status	The 20-Year Forest Restoration Plan outlines the structure & function of forested parkland. It does not include the extensive acreage of natural areas in the annexation areas. The ecological structure and function of all publicly-owned natural areas is not documented in the citywide GIS system.
Risk	If services are not tracked, the value of the asset is unknown and preservation and maintenance is more difficult to rationalize.
Benefit	Healthier, more resilient and sustainable natural areas.

Criteria: Tree Planting & Establishment

Performance	Low
Current Status	Current tree planting in the City is ad hoc, no formal tree planting goals or programs except in open space areas. Plantings through development frontage requirements, GKP, CIP and major park projects (e.g. Juanita Beach Park) are not tracked consistently.
Risk	The number of trees decline in urban settings without active replanting. Without data to quantify tree mortality, the number of trees that should be planted annually cannot be determined.
Benefit	Healthy urban forest succession guides the value of ecosystem services. Control costs by proactively managing the tree inventory.

Criteria: Native Vegetation

Performance	Good
Current Status	This criterion is well managed through the Forest Restoration Plan, which IDs the composition of native stands and recognizes the dangers of invasive species. Use of native vegetation is encouraged on a project-appropriate basis. Use of invasive species is discouraged but not prohibited.

URBAN FOREST ASSET

Risk	Reductions in native species decrease wildlife habitat (example: declining native range of Pacific madrone).
Benefit	Resilient urban forest. Native vegetation often requires less maintenance and optimizes ecosystem health.

Criteria: Tree Planting Guidelines

Performance	Low to Moderate
Current Status	Tree species selection list is limited. No guidelines exist for the improvement of public tree planting sites; no specifications exist for soil quality, quantity, and growing space.
Risk	Improperly planted trees and unsuitable species increase future workloads and potential hazard trees.
Benefit	Achieve greatest potential of asset, ensuring maximum current and future benefits. Control costs of public investment.

POLICIES & REGULATORY FRAMEWORK

Criteria: Effective Tree Protection Codes or Ordinance

Performance	Optimal
Current Status	Adopted tree protection regulations (KZC 95) in 2005. Code amended for clarity in 2009. Adequate staffing resources dedicated for code administration and enforcement. Canopy increased from 2002 (32%) to 2010 (36%) prior to annexation.
Risk	Loss of canopy results in decreased ecosystem benefits.
Benefit	Increased desirability to live, work, recreate in Kirkland vs. adjacent communities with less aesthetic character

Criteria: City-wide Urban Forestry Management Plan

Performance	Low; shifts to good or optimal pending acceptance
Current Status	No citywide formally-recognized Urban Forest Strategic Management Plan.
Risk	Uncontrolled costs associated with tree maintenance and removal, inefficient and ineffective public service, increased risk associated with tree failure.
Benefit	Provide a framework for consistent, efficient City operations. With periodic reviews and updates, Plan maintains relevance to the community and City staff. Creates pathways to stable and predictable funding.

Criteria: Stable Municipality-wide Funding

Performance	Low to moderate
Current Status	Funding for reactive management. Diverse funding sources are used: General Fund, Surface Water Utility, grants and capital improvement program.
Risk	Plan objectives will not be attained.
Benefit	Controlled costs, as funds are allocated to urban forestry programs strategically.

Criteria: Adequate Qualified Urban Forestry Staff

Performance	Moderate
Current Status	Municipal tree maintenance staffing is ad hoc. There are a number of ISA-certified arborists in Parks and Public Works and a limited number of staff with TRAQ credentials. Permitting, code enforcement and development review staff attend to urban forestry issues but are not formally trained in arboriculture.
Risk	Some staff unaware of current BMPs, tree industry safety standards, and tree risk assessment protocols.
Benefit	Staff can effectively manage urban forest risks and control costs using the best available science and practices.

Criteria: Formally-recognized Urban Forest Program

Performance	Moderate
Current Status	No centralized urban forest program, no designated urban forest divisions within multiple departments. More institutional knowledge than formal protocols. Some common goals when functioning on a project-specific basis, but no leadership between departments. More effective with the recent formation of interdepartmental team.
Rationale	All departments cooperate with common goals/objectives with leadership across all urban forestry projects. Municipal policy implemented by formal interdepartmental working team or program.
Risk	Misaligned and uncoordinated procedures and policies, misinformed public.
Benefit	Greater accountability, cooperation and resource-sharing; greater stewardship of public investment. Improved operating efficiency on urban forestry projects. Plan obstacles can be addressed through collaborative problem solving. Improved levels of public service.

Criteria: Stakeholder Cooperation

Performance	Low
Current Status	Damage to trees on development sites occurs frequently. No adherence to industry pruning standards in many commercial landscapes, no vegetation management plans with utility providers. Issues with development permit applications not meeting professional standards or City requirements.
Risk	Damage to public trees and canopy loss.
Benefit	Partnerships with stakeholders, alignment with City urban forestry objectives. Stakeholders operate with high professional standards. Creates advocates of proper tree care.

Criteria: Neighborhood Level Action

Performance	Moderate to Good
Current Status	Regular interaction city-wide with GKP and Kudos Kirkland; otherwise isolated or limited number of active groups. With the recent annexation, all neighborhoods are not unified in their understanding of the City's urban forest management objectives.
Risk	Failure to engage with neighborhoods can lead to misunderstandings and citizen distrust of City staff and policies.
Benefit	Stewardship can be one of the most cost-effective methods for creating a sustainable urban forest and foster volunteerism in the community, which lowers costs associated with urban forest management through voluntary cooperation.

Criteria: Municipal-Citizen Interaction

Performance	Moderate
Current Status	Aside from GKP, interactions are on a project-by-project basis or with general cooperation. Tree vs. view issues and the tree codes have been polarizing amongst constituencies. Permit processing is often a main point of interaction for urban forestry issues.
Risk	Public does not have a way to voice opinions, are left out of important urban forestry decisions.
Benefit	Improved community support for urban forestry funding and a public forum to resolve tree conflicts.

Criteria: General Awareness of Trees as a Community Resource

Performance	Low and optimal
Current Status	Trees are often seen as a problem by developers and homeowners, while others recognize trees as vital to community, creating very polarized views. Public education on the City's tree codes is not readily available.
Risk	Limited effectiveness of plan, conflict or affect funding.
Benefit	Citizens and developers are more likely to invest their energy and resources to help achieve program goals of Plan and support urban forestry projects.

Criteria: Regional Cooperation

Performance	Low to moderate
Current Status	Kirkland's forestry goals should be consistent with Washington State, King County, the Puget Sound Partnership, and neighboring municipalities Bellevue, Redmond, Bothell and Woodinville.
Risk	Conflicts with regional planning efforts.
Benefit	Ensures Kirkland's urban forest management is an integrated component of larger regional planning efforts. Regional partnerships can create pathways to stable and predictable funding.

6. Goals, Strategies and Recommendations

Based on the review findings, broad *goals* were developed to guide the City's long-term efforts towards sustainable urban forest management (Figure 2). Each management goal is further defined by a *strategy* that specifies how to attain each goal:

Document Kirkland's urban forest asset. Improve the safety, quality and sustainability of the asset by obtaining a greater understanding of the condition, risk potential and benefits of the urban forest asset.

Protect and enhance Kirkland's urban forest, an integrated natural resource, through a balanced approach using regulations, education and incentives.

Build an urban forest program to increase public accountability, efficiency and collaboration between City departments, and to standardize public tree management.

Promote stewardship of the urban forest to emphasize regional partnerships and community outreach. Involve the community with long-range decisions regarding the urban forest.

To connect daily operations with long-term goals, *recommendations* were developed within each urban forest management focus area as the basis for annual work plans, ensuring City departments are cooperating with common goals and objectives.

Many of the recommendations support more than one of these goals. This section describes all the recommendations that were prioritized by the interdepartmental working team. Table 8 illustrates the strategies and recommendations that can be accomplished within a Six-Year Work Plan and further broken down into annual work plans.

Figure 2. Plan framework

6.1 Urban Forest Asset

These are the individual and collective trees and what we currently know about them, as outlined in Section 2.1.

CURRENT STATUS: In the last decade, the City has conducted a partial street tree inventory, performed a vegetation assessment of its parks' natural areas, and completed an urban tree canopy assessment. However, the outdated street tree inventory does not include the additional 2,187 acres of tree canopy in the annexed area, and no inventory exists for trees in active parks. The 20-Year Forest Restoration Plan does not include the significant acreage now under Kirkland jurisdiction. Consequently, Kirkland's public tree inventories are limited in both scope and utility, and the lack of sufficient hazard tree assessments on public trees poses potential safety risks. Aside from the GKP efforts, no formal tree planting programs have been developed since 2005.

RECOMMENDATIONS:

1. **Update Public Tree Inventory in active parks, open space areas and in the right of way of annexed neighborhoods, include hazard tree assessments to prioritize**

management efforts. Inventory the asset to obtain reasonably current knowledge of street trees, active parks and open space areas to

- Reduce the potential risk for property damage and injury resulting from public tree failure
- Facilitate access to Federal Emergency Management Agency (FEMA) funding
- Improve accountability
- Facilitate with accident claims
- Effectively manage for overall health of the asset
- Integrate with a system for maintaining data and tracking workflows, making it easy to search, generate reports, and update inventory data on a regular or as-needed basis.

2. **Make minor improvements to current tree planting efforts as a short-term interim strategy.** Until further information of the asset is known, continue planting trees with frontage improvements, CIP projects, as replacements for trees removed with development, and when tree replacement is triggered by tree removal on private property. Review of current tree planting efforts may reveal areas of improvement with BMPs or species suitability.

3. **Determine the value, functions, and benefits of Kirkland's urban forest** - Current inventory data can be used in conjunction with software to analyze the structure, value, and ecosystem benefits for urban forests and can assess a cost versus benefits ratio.

4. **Develop a long-term planting program** to increase canopy in key areas and to manage the asset for sustainability and urban forest succession. Managers can focus tree planting resources in the most efficient manner, where they will provide the greatest benefits.

   Species diversity must be considered in planting programs. Dominance of any single species or genus can have detrimental consequences in the event of storms, drought, disease, pests, or other stressors, which can severely affect the urban forests' benefits and costs over time.

   A varied-age tree population allows managers to allocate annual maintenance costs uniformly over many years, assuring continuity in overall tree canopy coverage and associated benefits. A desirable age distribution has a larger proportion of young trees as the percentage of older trees declines over time (Richards, 1982/83). Mature trees should be maintained and protected whenever possible, since the greatest benefits accrue from the continued growth and longevity of larger trees.

> *Generally, the larger the tree, the greater the benefits, but both benefits and costs increase with the size of a tree. A large tree such as a red oak is estimated to provide $50 worth of benefits annually for the first 20 years of its life and around $100 per year for the next 30 years, effectively producing around $4,000 worth of benefits over a 50-year lifespan*
>
> ***McPherson, 2002***

Developing a planting program also involves:

- Identifying appropriate public spaces for tree planting
- Setting annual planting targets for street and park trees
- Supporting neighborhood and volunteer efforts
- Considering incentives for tree planting
- Continuing support of the Green Kirkland Partnership program
- Considering incentives for tree planting such as a rebate (Tree-bate) program
- Enlisting public support for the protection and establishment of newly planted trees

Understanding these relationships can help Kirkland determine where best to focus tree planting resources that will maintain and enhance the existing canopy cover and associated benefits.

Large oak tree in the Houghton neighborhood

5. **Plan for a subsequent canopy assessment (2020).** Trees respond to external pressures, including development, weather, climate, pests, disease, and patterns of use by humans and wildlife. Periodic updates to the landcover GIS map layer allow planners and urban forest managers to identify changes in canopy. Integration of canopy data into the City's GIS system will provide staff with tools to monitor canopy cover, anticipate threats and challenges to canopy preservation, and respond perceptively to requests for tree removal.

6.2 Guiding Policies & Regulatory Framework

These are the formal guidelines for managing the resource outlined in Section 2.2.

CURRENT STATUS: The City's Comprehensive Plan provides a clear vision for Kirkland's future urban forest by establishing a target canopy goal. Recognizing that over 50 percent of the City's canopy is on private property, the adoption of code requirements for tree retention sought to achieve a city-wide 40 percent canopy goal. Kirkland Zoning Code Chapter 95 requires a permit to remove multiple trees and a review process for trees impacted by development. The code, while comprehensive and somewhat complex, provides adequate flexibility to accommodate various development scenarios. As a program asset, Kirkland's regulatory framework and code enforcement has played a role in canopy preservation and expansion over the previous decade: Kirkland's tree canopy coverage increased from 2002 to 2010. *Having met the canopy cover goal through annexation, the City may now want to shift its focus to maintaining its current canopy cover while achieving optimal health, safety and sustainability of the urban forest resource.*

RECOMMENDATIONS:

1. **Conduct Public Outreach/Education on Tree Protection Regulations -** The City currently has a strong regulatory and policy framework. However, a more balanced approach using education and outreach may be as effective and less polarizing within the community.

Increasing awareness and educating residents about the goals and challenges of managing the urban forest is instrumental for developing tree protection policy support and may reduce misunderstanding with regard to tree permit requirements. Increasing public outreach on tree regulations involves:

- Providing educational opportunities for City staff, developers, landscapers, consulting arborists, and homeowners on city requirements and development review procedures
- Developing presentations, workshops, and materials to help better understand Kirkland's tree protection regulations
- Establishing a recognition and awards program for builders, developers and sites that exemplify excellence or innovation in tree retention

2. **Update Codes and Ordinances to Simplify and Provide Clarity -** The city should conduct a periodic review and update of codes and ordinances that relate to the management and preservation of Kirkland's urban forest. Review should include consideration for current industry standards, recognition of the intended consequences, and simplification of language to promote greater clarity and compliance. Other elements to consider include:
   - Compare codes and ordinances with similar communities
   - Evaluate the effectiveness of current regulations and policies
   - Consider feedback from staff, residents, and developers
3. **Establish Tree Planting and Maintenance Guidelines for utility, contractor and City compliance to BMPs and codes -**
   All contractors and City staff involved in the installation, protection, care, and maintenance of public trees adhere to industry accepted standards and best management practices (BMPs) for tree care operations. Developing and promoting tree planting guidelines will promote greater tree health and longevity, increasing economic and environmental benefits. Tree planting guidelines detail the following:

Installing Silvacell to increase soil volume for urban trees

   - Soil volume and compaction specifications essential for healthy, long-living trees
   - Selection of species based on size at maturity and available planting space
   - Species selection based on landscape application and desired benefits
   - Identify specific applications and standards for structural soils, suspended pavement (e.g., Silva Cells), pervious pavement, and stormwater management strategies
   - Planter design and installation specifications and details that in compliance with industry standards for best management practices

   All contracts, bid solicitations, and internal maintenance policy guidelines should reference and require compliance with the following specific standards:

   - ANSI Z133 Safety Standards

- ANSI A300 Series Standards for Tree Care Operations
- ISA Best Management Practices Series
- OSHA Standards, Sections 1910.132, 190.133, 1910.135, and 1910.95

Collaboration with utility companies for tree maintenance within City utility corridors can provide additional cost savings to both parties. Working with Puget Sound Energy and Seattle City Light to develop vegetation management plans can provide Kirkland forestry managers with an opportunity to address concerns about protecting tree health under utility lines (where possible), reducing and avoiding tree-utility conflicts, and addressing issues where utility clearance is needed in critical areas. Ideally, the resulting plans

- Align Kirkland's tree protection codes with the needs of the utilities
- A cooperative program for tree replacement when removal is necessary
- City codes, industry standards and BMPs into utility pruning guidelines

6.3 Municipal Urban Forestry Program

This is the municipal organization and resources dedicated to urban forest management as outlined in Section 2.3.

CURRENT STATUS: Tree management involves many departments within the City of Kirkland; there is no centralized urban forestry program or distinct divisions. Staff priorities for urban forestry operations are currently driven by reactive management tactics due to budgetary constraints, limiting the City's ability to achieve common goals and operate with high levels of efficiency. Some operations involve a moderate level of informal, intra-departmental cooperation and communication.

RECOMMENDATIONS:

1. **Establish a Formal Urban Forestry Program –** for greater accountability, cooperation and resource-sharing. It is important to distinguish the urban forestry program as an entity within the organization and for the community. Establishing a formal forestry program provides a centralized point for organized outreach and public education about the value and benefits of trees. In a defined urban forestry program, individuals and City departments cooperate with common goals and objectives, increasing efficiency and providing higher levels of service. Program establishment should provide authority for:

   - Implementing the Plan
   - Increasing stability and efficiency of funding, staff, and other resources
   - Leadership for interdepartmental cooperation and coordination with external groups
   - Establishing education and outreach efforts involving urban forestry

   The creation of a formal interdepartmental working group provides a platform for discussing the goals, objectives, and challenges related to managing Kirkland's urban forest. With representation from Planning, Public Works, Parks, and the City's Urban Forester, the team can ensure that urban forestry issues receive appropriate consideration with regard to community planning, development, maintenance policies, and work planning.

2. **Provide Adequate Public Tree Maintenance Resources -** Public tree maintenance is critical to ensure that residents receive a high return of benefits on their investment and long-term success and health of the urban forest. Tree maintenance (including structural pruning), providing for clearances, and mitigating hazardous conditions is a vital part of urban forest management. The City will need to justify and establish dedicated funding for the staff and equipment necessary for meeting the safety and maintenance expectations of the community. To establish dedicated resources for public tree maintenance, it will be necessary to:
   - Establish efficient systems for tracking productivity and generating work orders
   - Identify the number of staff needed to fulfill current and desired levels of maintenance
   - Identify and provide equipment resources necessary for tree care operations
   - Train and certify staff to maintain expertise, professional performance, and compliance with industry safety standards

-

42% of Kirkland survey respondents indicated that they would pay "a little bit more" to support public tree protection, planting and maintenance, and 10% responded that they would be willing to pay "much more" versus 10% that think we should spend less or not spend anything at all on public trees, 22% of those who were not willing to pay any more. (16% indicated that they "didn't have enough information to respond.")

3. **Develop annual work plans with tracking & performance measures and deliver an annual report to City Council -** Annual work plans can help to focus and track the long-term goals and objectives outlined by the Urban Forest Management Plan. In addition, having an annual plan can facilitate budget forecasting and justify program funding. Each department should develop an annual work plan aimed at accomplishing their 6-year objectives outlined in Section 7.1.

   Annual Urban Forest Reports communicate progress or setbacks and milestones, providing an opportunity to update City Council, citizens and stakeholders on the status of the Urban Forest Management Plan.

4. **Monitor and revise this Plan every 5-6 years -** Designed to be adaptive to change and adjust to new criteria and indicators, this Plan should be regularly monitored to analyze progress towards reaching long-term goals. A comprehensive review should be taken in the final year of each management planning cycle, ideally in consultation with a technical advisory committee and key stakeholders. The successes and shortcomings experienced after each planning period should be reviewed, and the findings incorporated into the subsequent Six Year Management Plan.

6.4 Municipal-Community Interaction

This is the relationship between the City and the groups/individuals who are engaged in urban forest advocacy, volunteerism, and partnerships.

CURRENT STATUS: Under the Green Kirkland Partnership program, the City has successfully engaged the community to steward Kirkland parks' forested areas; however other partnerships and community interactions for urban forestry are limited. A recurring concern observed during this analysis was the lack of resources to educate and engage the community on urban forestry issues, especially with the development community and other partners.

RECOMMENDATIONS:

1. **Identify the community's roles in urban forest management (i.e.: volunteer base, citizen advisory board, etc.) -** Citizens should be involved in the important, long-term decisions about the urban forest. Many communities establish a citizen steering committee or tree board (see Table 6) to advise urban forest managers and decision-makers on urban forest issues, oversee the urban forest program, meet Tree City USA standards, and obtain input from the community as a whole. There is even an online Tree Board University (treeboardu.org) to support and educate community tree board members. In lieu of a formal committee, focus groups can convene on a project-by-project basis.
2. **Dedicate resources for ongoing public outreach that connects the community with urban forestry issues -** A sustainable program relies on the support of advocates, partners and special interest groups. Establishing a Notable or Heritage Tree program would be one way for citizens to celebrate and recognize trees of distinction.
3. **Support further growth of the Green Kirkland Partnership program with adequate funding -** The Green Kirkland Partnership works to restore the community's natural forest areas. This successful program, an alliance between the City of Kirkland, nonprofit partners, businesses, and the community, relies heavily on volunteer participation. Staff resources are required to leverage community engagement to help meet the goals identified in the 20-Year Forest Restoration Plan.
4. **Maintain Tree City USA status and strive to earn Growth Awards** - Tree City USA recognition from the National Arbor Day Foundation (NADF) demonstrates Kirkland's commitment to protecting its urban forest and can play a role in the successful acquisition of grant funding. The designation has specific requirements, including:

   - Spend $2 per capita annually on an urban forest program or tree related expenses
   - Adopt a tree protection ordinance
   - Proclaim and celebrate Arbor Day annually
   - Establish a municipal urban forestry program or a Tree Board

   To obtain Growth Awards, cities must earn a total of 10 points from activities in Education & Public Relations, Partnerships, Planning & Management and Tree Planting & Maintenance categories.

7. Plan Implementation

The intent of this Plan is to examine Kirkland's efforts towards its long-term vision and lay the foundation for well-coordinated, consistent, efficient and sustainable urban forest management. Over-arching goals and objectives must be distributed into incremental management plans with oversight, regular monitoring and revisions to ensure day-to-day operations are associated with long range goal achievement. To correlate with Kirkland's budget and CIP cycles, six annual work plans form a Six Year Work Plan, which is distributed over a twenty-*four* year framework (Figure 3).

Figure 3. Framework for an adaptive plan that includes monitoring and revisions

7.1 Work Plan Objectives 2014-2038

In May 2013, a newly-formed interdepartmental urban forest team ('Tree Team') prioritized urban forest objectives, ranking them into the first six year increment of a 24-year strategic plan. Discussions centered on high priorities – safety, accountability, and sustainability – and the most feasible accomplishments that could be addressed in the next six years.

From this Six Year Work Plan, each department develops its annual operating work plans so that urban forest goals and strategies are coordinated, linked to specific actions, and directing efficient operations on a daily basis. Previously, urban forest efforts have not been well-coordinated or tracked using meaningful performance measures. The intent of this Plan is to lay the foundation for cohesive, efficient and sustainable urban forest management on a daily, annual, and long-term basis.

The lead department assigned for each objective was based on the current organization and staffing levels. The political and managerial structures of the City have not fully implemented the resources that support all actions outlined in this plan. Many of these objectives can be attained by utilizing current funding or the alternative funding sources outlined in the Plan. Estimated costs for each objective are provided for the development of work plans; costs for reaching these objectives are shown below in Table 7.

Table 7. Key to estimated costs

SYMBOL	ESTIMATED COST
$	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.

Table 8. Work Plan Objectives for 2014-2038

	WORK PROGRAM OBJECTIVES & SUPPORTING GOALS	~ COST	DEPT
THE ASSET	**Update & maintain the public tree inventory** GOALS: Document the urban forest asset / standardize public tree care/build an urban forest program	$-$$$	*PW, Parks IT*
	Continue with current tree planting as a short-term interim strategy GOALS: Maintain & enhance Kirkland's urban forest/ promote stewardship of the urban forest	$	*PW, Parks*
	Determine the value, functions, and benefits of the urban forest GOAL: Document the urban forest asset	$	*PCD Parks, PW*
POLICIES & CODES	**Conduct public outreach re: tree regulations** GOALS: community partnerships in long-range decisions/ protect, maintain & enhance the urban forest	$$	*PCD*
	Update tree codes and ordinances to simplify &clarify GOAL: Protect, maintain & enhance the urban forest	$$	*PCD, PW*
	Update tree planting guidelines GOAL: Protect, maintain & enhance the urban forest	$	*PCD, Parks, PW*
THE PROGRAM	**Develop a formal interdepartmental working team** GOAL: Build a comprehensive urban forest program	$	*PCD, Parks, PW*
	Provide adequate public tree maintenance resources GOALS: Improve safety, quality & sustainability of asset/ protect, maintain and enhance the asset/ build an urban forest program	$$-$$$	*PW, Parks*

	Develop annual report /work plans with tracking and performance measures GOAL: Build a comprehensive urban forest program	$	*PCD, Parks, PW*
COMMUNITY INTERACTION	**Identify the community's roles in urban forestry** GOAL: Promote stewardship of the urban forest	$-$$	*PCD, Parks, PW*
	Dedicate resources for ongoing public outreach regarding the urban forest. GOAL: Promote stewardship of the urban forest	$	*PCD, Parks, PW*
	Support further growth of the Green Kirkland Partnership with adequate funding GOAL: Protect, maintain & enhance the urban forest/ promote stewardship	$$$	*Parks*

7.2 Oversight & Accountability

Oversight is needed to develop work plans, monitor performance measures, report on progress, and interpret plan elements whenever necessary The oversight of a department, position, or designated working team is ideal to achieve the highest level of Plan effectiveness. For greater accountability, **the creation of a formal interdepartmental working team with a citizen steering committee is recommended, accountable to the City Manager or City Council.**

7.3 Monitoring & Revisions

Reviews should be undertaken in the final year of each planning cycle, ideally in consultation with a technical advisory committee and key stakeholders. **Operational and management priorities should be reviewed on an annual basis and the annual report should be appended to the strategic plan document**. When unsuccessful in accomplishing goals, further explanation is warranted along with adaptive strategies that may include establishing new priorities.

The result is that the plan remains effective and relevant to the community through 2037, while providing a template for the next 24 years.

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Appendix A: Performance Measures

The following table reflects the Clark et al model for sustainable urban forest programming. Using this matrix, Kirkland's performance was assessed in Section 5. The performance measures and criteria indicators below can be used for subsequent analysis and goal-setting.

Criteria	Justification	Performance Indicators			
		Low	Moderate	Good	Optimal
Accessible Canopy Cover Data	For effective planning, management and service	No inventory	Visual assessment.	Sampling of tree cover using aerial photographs or satellite imagery	City-wide tree cover using aerial photographs or satellite imagery in GIS for citywide use
Existing Canopy Cover Status	Gauge of balanced growth, development and natural resource protection	Equals 0%-25% of the potential	Equals 25%-50% of the potential	Equals 50%-75% of the potential	Equals 75%-100% of the potential
Complete tree inventory	Infrastructure asset management	No inventory	Sample-based inventory of public trees	Complete inventory of publicly owned trees	Complete inventory of publicly owned trees and sample-based inventory of privately owned trees
Uneven-aged tree distribution	Diverse age distribution of trees for long-term succession	DBH (trunk size) class represents more than 75% of the tree population	DBH (trunk size) class represents between 50% and 75% of the tree population	No DBH (trunk size) class represents more than 50% of the tree population	25% of the tree population is in each of the four DBH (trunk size) classes
Tree species suitability	Resilient tree population suitable to the urban and regional environment	Less than 50% of trees are species considered suitable for the area	50% to 75% of trees are species considered suitable for the area	More than 75% of trees are species considered suitable for the area	All trees are species considered suitable for the area.

Criteria	Justification	Performance Indicators			
		Low	Moderate	Good	Optimal
Tree species diversity	Genetically-diverse species for greater resiliency	Fewer than five species dominate the entire tree population	No species represents more the 20% of the entire tree population citywide	No species represents more than 10% of the entire tree population citywide	No species represents more than 10% of the entire tree population at the neighborhood level.
Public Tree Inventory with condition	Increased efficiency, better planning. Lower risk of property damage/injury resulting from tree failure	Reactive, request-based tree maintenance or risk assessment. Outdated or no tree inventory	Proactive tree maintenance. Sample-based inventory, no tree condition and risk level in place.	Proactive maintenance with regular inspections and updates to inventory. Sample-based inventory with tree condition and risk level in place.	Complete tree inventory that includes detailed condition and risk ratings, proactive tree maintenance with regular inspections.
Tree & vegetation management in public natural areas	Healthier, more sustainable public natural areas.	No information about publicly owned natural areas	Publicly owned natural areas identified in a "natural areas survey" or similar document	The level and type of public use in publicly owned natural areas is documented.	The ecological structure and function of all publicly owned natural areas are documented in the City's GIS.
Tree planting programs	A healthy, resilient urban forest is ensured when tree planting is driven by canopy status, age distribution and species diversity objectives	Tree establishment is ad hoc	Tree establishment occurs on an annual basis	Tree establishment is directed by needs derived from an inventory	Tree establishment is directed by needs derived from a tree inventory and is sufficient to meet canopy cover objectives
Tree planting guidelines	Public trees are planted in appropriate locations to maximize current and future benefits	Trees planted without consideration of site conditions	Tree species are considered in planting selection	Community-wide guidelines are in place for the improvement of planting sites and the selection of suitable species	All trees planted in sites with adequate soil quality and quantity, and growing space to achieve their genetic potential.

Criteria	Justification	Performance Indicators			
		Low	Moderate	Good	Optimal
Native Vegetation	Preservation and enhancement of local natural biodiversity	No program	Voluntary use of native species on publicly and privately-owned lands; invasive species are recognized	The use of native species is encouraged on a project-appropriate basis; invasive species are recognized and their use discouraged	The use of native species is required on a project-appropriate basis; invasive species are recognized and prohibited.
Effective tree protection codes	Supports community vision as stated in local policy documents	No codes	Public tree protection but minimal land use protection	Land use and public tree protection	Effectively enforced land use and public tree protection; tree removal limitations on private property.
Citywide urban forest management plan	Consistent, efficient long-term management of the urban forest resource	No Plan	Existing plan limited in scope and implementation	Comprehensive plan for publicly owned forest resources is accepted and implemented	Strategic plan with adaptive management mechanisms for public and privately-managed forest resources accepted and implemented
Stable municipality-wide funding	Achieve plan goals, strategies and recommendations; control costs	Funding for reactive management	Funding to maintain existing urban forest	Funding to provide for net increase in urban forest benefits	Adequate private and public funding to sustain maximum urban forest benefits
Adequate qualified urban forestry staffing	Employ and train adequate qualified staff to manage the resource	No Staff	Adequate staff to maintain/manage the resource for risk, no training.	Certified arborists and professional foresters on staff with regular professional development	Multi-disciplinary team within the urban forestry program or units
Formally-recognized urban forest program	City cooperates with common goals & leadership. Greater accountability, cooperation and resource-sharing	Conflicting goals among departments or agencies	Common goals but little or no cooperation among departments and/or agencies.	Informal teams among departments are functioning and implementing common goals on a project-specific basis	All municipal projects, including policy implemented by formal interdepartmental working team and leadership

Criteria	Justification	Performance Indicators			
		Low	Moderate	Good	Optimal
Partnerships with key stakeholders	Developers, landscapers, utilities and tree care professionals operate with high standards and commit to City goals	Ignorance of issues, no cooperation. No adherence to industry standards.	General cooperation, some adherence to industry standards and city codes.	Specific cooperative arrangements. Educational materials and advice available to stakeholders, incentives for preservation of private trees.	Same as 'good,' plus stakeholders participate to develop codes and tree management plans, operate with high professional standards
Neighborhood level action	Citizens understand and cooperate in urban forest management	No Action	Isolated or limited number of active groups	Citywide coverage and interaction	All neighborhoods organized and cooperating.
Municipal-citizen interaction	Public roles include partners, advocates, volunteers and decision-makers regarding the urban forest	Conflicting goals among constituencies.	No interaction among constituencies	Informal and/or general cooperation	Formal interaction, such as a tree board with staff coordination.
General awareness of trees as a community resource	The urban forest is linked to community character, recognized as vital to social, environmental, and economic well-being.	Trees seen as a problem, a drain on budgets	Trees seen as important to the community	Trees acknowledged as providing social and economic services	Urban forest recognized as vital to the community's environmental, social and economic well-being
Regional cooperation	Supports City Council goals to provide for cooperation and interaction among neighboring communities and regional groups	Communities cooperate independently	Communities share similar policy vehicles	Regional planning is in effect	Planning, coordination, and/or management plans are a regular part of a regional interaction among neighboring communities

Appendix B: Focus Group Meeting Responses

Neighborhoods and Forest Stewards

Tuesday, September 26th, 2012 at 6:30pm in the Peter Kirk Room, Kirkland City Hall

Question: What are the opportunities/threats around urban forest management on <u>private</u> lands in Kirkland?

1 Permitting process on tree removal—need to have education on the process and the requirements
2 Most people are not even aware of the regulations
3 Regulations are new to the annexation area—most people were under and overlay or King County regulations
4 New construction tree requirements are confusing-it is hard to know what are the tree replacement requirements
5 Can the city monitor whether people are complying with tree regulations/requirements?
6 What about "tree credits"
7 Need to consider the high density areas
8 Different requirements in multi-family and single family is confusing
9 Need monitoring of trees in the right of way and on public lands
10 Need good examples and graphics to explain current regulations
11 Clear recommendations on preferred tree species for private lands, streets trees
12 Offer Incentives for valuable trees (mature, unique species, heritage trees)
13 Need resources (staff) to manage the urban forestry program
14 It's difficult to balance the private property rights and protecting the resource (trees)
15 I don't know what is protected in development regulations already?
16 It's a challenge because each jurisdiction (King County vs. Kirkland) has different regulations and requirements
17 Tree planting programs---giving away free trees for people to plant on their property would be a good step
18 Broaden the cities education efforts to raise awareness of those benefits

Question: What are the opportunities/threats around urban forest management on <u>public</u> lands in Kirkland?

1 Invasive species are a huge problem, currently this is mainly addressed by a group of volunteers in the City of Kirkland
2 We need to invest in long-term health of natural areas
3 The city needs to take a more pro-active approach regarding funding, maintenance staff and planning
4 Other green cities (re: Green Kirkland Partnership) have a much larger paid staff component (vs. volunteer) labor
5 City has done enough large, fancy parks (Juanita Beach) and improvements. Now they need to invest in restoration along with the quality and connectivity of the tree canopy

Question: What opportunities/threats do you see with Kirkland's plans for balancing walkable, compact development with retaining and enhancing tree canopy coverage and ecosystem functions?

1 I have concerns about more and more regulation and fees
2 Keep it simple---people need to understand the regulations that apply to their property
3 Need clear and consistent message/answers from all city departments
4 Big houses on smaller lots are a threat to trees
5 Can new developments be clumped to make room for trees?
6 Need to keep working towards the 40% canopy goal in "old" Kirkland (pre-annexation)
7 Kirkland needs to accommodate higher density, but where do trees fit as more development occurs
8 Need to balance new density and infill with new open space within the city
9 We need density to prevent sprawl, therefore need to invest in city open space as well. It's about quality of life
10 Use green roofs to offset loss of tree canopy
11 Allow off-site mitigation for tree removal
12 Opportunities to educate developers on regulations and incentives
13 Highly visible properties need special protection, such as the area above Goat Hill (base of Finn Hill). City should conduct outreach for acquisition of future park land here or overdevelopment will occur.
14 These properties are under threat of future development and we can't count on this canopy just being here---it could be developed

Question: What are the strengths/weaknesses in the draft management plan?

1 The plan needs clear, simple goals that tie into larger city goals and council goals
2 It's unclear what the point of this plan is.
3 What is the overall goal?
4 Include data in the plan on how trees increase property values
5 The plan needs a short executive summary, around 2 pages that is much more readable and makes the recommendations in the plan much clearer.
6 "Adaptive" on page 15 is a powerful explanation (*unclear what this was referring to*)
7 Need measurable goals which are much more clear and concise
8 Sort out the difference between goals and strategies in the plan
9 Should the 40% goal be split into smaller geographies (neighborhoods or zoning types)
10 This goal (40%) may not be realistic

11 Why is 40% the goal
12 Style and tone of the report feels like corporate speak
13 Quality of urban forest and trees are more important than quantity (i.e. percentage of canopy cover)
14 Need to address community benefits of trees and the ecosystem services
15 Report should help us understand what benefits are currently being provided
16 Direct plan consultant to be more clear and concise in their writing

Tree Care Professionals

Thursday, September 28th, 2012 at 6:30pm in the Rose Hill Room, Kirkland City Hall

Question: What opportunities/threats do you see in regards to maintenance of trees in the City of Kirkland?

1 Concerned about the loss of large trees being replaced with small trees that have less function
2 It takes time for replacement trees to provide the value of mature trees that have been lost
3 Kirkland has a tough tree code compared to other jurisdictions, which is good for trees
4 The tree ordinance is based on tree diameter, but canopy loss may be a better metric
5 The site conditions affects ability of trees to survive and function, so should influence design & selection of tree
6 Large trees that are removed should be replaced with native species
7 A tree's contribution to site should influence preservation prioritization, not necessarily strict size requirements (staff should review Bellevue's system)

Question: What are the opportunities/threats around urban forest management on <u>public</u> lands in Kirkland?

1 Adjacent landowners are responsible for trees in the right-of-way (ROW), but it is unclear how (legal speak)
2 Plan needs to clarify this responsibility
3 Many residents are not aware of the existing ordinance – need to educate on ROW responsibilities
4 The right tree/right place should be driving factor for ROW & public utility trees
5 We need a long-term vision with trees selection and the effect of forthcoming needs of utilities above and below ground
6 Was glad to see both above ground and below ground utilities addressed in the plan
7 There is a need to develop a strategy for communicating the ordinance and regulations
8 How do residents know who to hire/trust for tree care
9 Can the city provide an assessment of street trees
10 There is a need for consistency of hazard/risk assessments which could be addressed by the city doing all of the hazard/risk assessments

Question: What are the opportunities/threats around urban forest management on <u>private</u> lands in Kirkland?

1 Many developers are unaware that they need a tree plan
2 There is a need to educate developers that a tree plan is needed & should be planned for early on
3 There should be upfront reporting - during short platting, and retention requirements should be known beforehand
4 It's unclear/confusing as to what needs to be reported in the arborist's UF plans
5 We (arborists/urban foresters) expect that we will be able to call a planner to receive interpretation of the code
6 Plan should convey that this expected level of service leads to a resource need (staff) that should be recognized
7 Municipality should be flexible in their site-specific requirements: arborists should work with parties to develop a reasonable plan based on desired function, rather than driven completely by ordinance
8 Expect redevelopment in the annexation area, which will lead to canopy loss – how to balance strong preservation?
9 The city needs to consider health of the current canopy and plan for succession of the forest

Question: What are the strengths/weaknesses in the draft management plan?

1 Consider having a focus group/review session with other municipalities – regarding the urban forestry management plan
2 There is a need to facilitate outreach and engage community around the plan
3 Strengthen the Executive Summary and realize that some people won't and don't want to read beyond that point
4 A factoid/summary sheet should be created that highlights the essential pieces; distribute this to residents
5 Use language that the general public can understand
6 Make the goals and recommendations clear and obvious
7 Consider training sessions for arborists on the codes/permitting process
    a. workshops are more engaging & effective
    b. walk through of the what & how of codes
    c. take attendance and create a resource for arborist recommendation
        i. incentivizes arborists to attend
        ii. creates knowledge & trust

Developers and Builders

Friday, September 28th, 2012 at 12:30pm in the Peter Kirk Room, Kirkland City Hall

General Comments/Questions about the plan:

1 Now that the goal for canopy has been met, is there intent to increase?
2 Is there a plan to divide the city into areas (by zoning type, neighborhood, or watershed) with specific canopy goals?

Question: What are the opportunities/threats around urban forest management on <u>private</u> lands in Kirkland?

1 Options for replacement and relocation of trees are needed for flexibility
2 Property rights and public good are often in conflict around urban forestry issues
3 Regulation for retention and/or replacement could be based on size/merit or location
4 Views are not included in code as a reason to remove a tree
5 Trees of high retention value in setbacks present challenges, including creating a potential hazard tree
6 Regarding views, safety, number of lots, I should be able to move things around to maximize the parcel.
7 Small lots is where development is going, so need codes that recognize that a 3600 square foot lot is the new normal
8 Codes should allow replacement of significant trees using a calculation value
9 Is there a size of tree that is more appropriate for the urban forest?
10 Private and public rights should be able to find a win-win solution regarding trees on private parcels
11 Using master landscape plans on individual lots would give more control to the process
12 The city should take into account the trees' likelihood of survival, based on location
13 How does the 40% goal resolve down at the lot level
14 Development as an opportunity to balance slowing loss and providing for future growth of canopy
15 Regulations that require changing plans or reducing views have large budget implications.
16 Losing a lot or having to change a plan is not an inexpensive option
17 Outreach and education is important, but other times there are just dead ends in the code and even carefully planned projects that carefully review regulations and requirements well in advance cannot go forward
18 Should have classes of tree retention based on value
19 Mitigation banking or funding benefits off—site may provide options (tree fund or in-lieu fee)
20 A third option is needed (1=all trees cut, 2= all trees retained)
21 There could be value of bringing arborists and developers/builders together to look for options
22 Health, location and species should factor into tree value
23 The code needs to take topography into consideration, especially in sloped side yards
24 Despite outreach and education, dead-ends still exist and need solutions
25 City needs to make sure it avoids unintended consequences with codes that violate the spirit of the regulation
26 Lack of equity in that regulations for homeowners on an existing parcel vs. developer on a new development or remodel allow for different levels of tree removal
27 Public comment is not balanced in terms of development.
28 It is important to make sure that public trees are adequately maintained
29 Resources needed to care for existing trees—can this be compensated?
30 Liability of potential hazard trees is expressed by clients<<<should this liability be passed to city in cases of required retention
31 Compensation possible for other community good or stewardship ---value of canopy and forest health providing opportunities for enhancement.
32 The City could step up around pre-treatment and maintenance of trees
33 It is the City responsibility to maintain these trees

Question: What are the strengths/weaknesses in the draft management plan?

1 The final report should read as an unbiased document---much of the current draft reads like propaganda and the studies' cited are not always fully honest
2 It is good to have documented information about city's tree resources, personnel needed etc. in the plan draft
3 New city processes (such as this plan) need the budget and staffing to vet them and make they will work in the way intended
4 Inclusion of solar potential, rain gardens etc. and also cost of trees would provide good perspective in the plan
5 All regulations need to be as objective as possible with respect to city staff implementing and enforcing so that the answers are clear and don't depend on who is staffing the counter
6 The report should contain more information about canopy studies conducted and expected future development will impact canopy including things like complete streets and other development that will potentially increase canopy

Appendix C: Public Survey Results

The following responses are the results of an online survey that closed on September 14, 2012. A total of 665 respondents completed the survey. All responses appear in descending order.

1) What is your relationship with the City of Kirkland, do you:

72.8% Live in Kirkland
18.6% Live and Work in Kirkland
5.4% Work in Kirkland
3.2% Neither

2) What neighborhood do you live in?

18.6% Finn Hill
10.5% North Rose Hill
10.4% Other (please specify)
8.4% North Juanita
7.8% South Juanita
7.3% Central Houghton
6.9% Norkirk
6.1% Bridle Trails
5.2% Kingsgate (Evergreen Hill)
5.2% Market
3.7% Highlands
2.9% Moss Bay
2.3% Everest
1.8% Totem Lake
1.7% None
1.4% Lakeview

Comments sorted in alphabetical order:

11506 NE 113th Pl. 98033
Bellevue
Close to 132nd Square Park, south of Kingsgate
Denny Plateau, between Juanita Dr. and Holmes Pt. drive.
Downtown
Downtown
Edmonds
Enatai
Finn Hill
Finn hill
Finn Hill
Firloch near Kingsgate
Goat Hill
Holmes Point
Holmes Point
Holmes Point
Holmes Point
Holmes Point
Holmes Pt.
Houghton
Juanita - I don't know north and south
Lake Forest Park
Mercer Island
Mill Creek
Mukilteo
Ne70th and 126th Ave
Norway Hill
Not Kirkland
Other (please specify)
Point on Yarrow Bay
Redmond Microsoft area
Ridgecrest
Rocky Point Heights Camano Island, WA 98282
Shoreline
So Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill
South Rose Hill (thanks for remembering us)
South Rosehill
Springbrook Square
Totem Lake
Very near to Bridle Trails
Wallingford
West of Market
West of Market
West Seattle
Woodinville
Work at Yarrow Bay

3) How would you rate your knowledge about trees?

68.0% Some
25.7% Extensive
3.6% None
2.7% Professional

4) Can you identify by name the trees near your home?

66.6% Some of them
29.6% All of them
3.8% None of them

5) Kirkland's urban forest consists of:

82.5% All of the above (below)
19.7% The native forest areas all over
19.6% Trees in formally-landscaped parks
19.1% Street trees or trees located along the road and the public right-of-way
14.0% The trees in my neighbor's yard
6.7% I'm not sure

6) Understanding which benefits are most appreciated by residents can help guide long-term management strategies. Please rate the following benefits according to their importance, with 1 being the most important and 5 being the least important.

Urban Forest Benefits	Rating Average	Most Important
Provide habitats for birds, animals, and fish	**1.57**	**64%**
Reduce erosion and stabilize hillsides	1.58	62%
Protect water quality and reduce stormwater runoff and flooding	1.61	61%
Other	1.66	53%
Carbon reduction or sequestration	1.96	50%
Filter air pollutants and reduce vehicle emissions	1.87	50%
Help define city character and make it a desirable or more livable place	1.95	43%
Improve human health and provide social benefits	2.06	41%
Save energy by cooling homes and neighborhoods	2.17	38%
Provide shade	2.36	26%
Increase property values	2.51	25%
Enhance the shopping experience in business districts	2.91	14%

Comments:

1 A place for kids to learn to climb trees.
2 Recreation
3 A trees provide a place for children to play and stay connected to nature
4 Nature connection for kids
5 Provide a forest for kids to play in and others to use for trail runs and/or biking
6 Absorb traffic noise, enhance local environmental awareness and appreciation especially fragrance, wind sound, weather, season, and biological dynamics, e.g., leafing, bird and wildlife behavior and changes, leaf mulch, fruit, etc.,
7 Buffer Freeway noise
8 Buffer noise, create a sense of privacy
9 Noise reduction
10 Add character to mono-cultured landscaping trends
11 Trees and landscaping reduce visual impacts of urban development
12 Reduce traffic noise, provide visual buffer for roads
13 The impact on water views must be considered
14 Get rid of view blocking trees, trim, or top. The views of Kirkland are what make it special.
15 Block views and lower property values. Wrong trees for the area
16 Block views, so property value is increased when they are useful, but a problem when they just block the view
17 Not too high to block views

18 Adds privacy from neighboring houses
19 Privacy
20 Privacy from neighbors; Don't have shades
21 Aesthetic beauty / offset asphalt & concrete
22 Aesthetically beautiful
23 Beautiful to look at
24 Beauty
25 Enhance beauty. Maintain Northwest identity. Screen undesirable parking lots, night lighting, etc.
26 Esthetics
27 Esthetics
28 Trees are what makes our city green and beautiful
29 Trees can make a yard/house look nice
30 Trees are beautiful!
31 Provide seasonal color to brighten our year
32 Simply beautiful to look at
33 Helps bring normalcy to our hectic city environment
34 Historically significant trees enhance livability
35 Overall quality of life
36 Make sidewalks/streets more walking friendly
37 It is why I live here, trees go - I go
38 Education benefits---nature field trips without leaving the city; major benefits to bees and other insects that collect pollen.
39 Establish corridors that link open space
40 Produce oxygen
41 Respect and care for nature.
42 Reduce the urban "heat island" effect
43 Shade creeks to keep temperature down
44 Wind breaks
45 Habitat for wildlife
46 Wildlife Corridors
47 Have roots that destroy houses and yards, and create the need for massive cleanup all year long
48 Tress can also reduce the value of the area as the water view and sidewalk safety are also important
49 Plant trees that are evergreens less to clean up. Cedar
50 Help improve patient recovery. they help increase the amount of time people spend in business districts and how much they spend
51 I have an immediate calm feeling driving through Holmes Point and N. Juanita from the forest.
52 Trees help us relax and enjoy the outdoors by improving the landscape-- for example; commuting down a highway lined in trees is far more pleasant than driving past monotonous concrete walls.
53 Trees help with our peace of mind, and help to keep peace in our relationships by absorbing negative thoughts. They help the planet hold the energy of “Light”, Love and goodwill towards ourselves and others. Every time I hear the saws cutting another tree in my neighborhood, I wince.
54 Trees are emotionally stabilizing - they make people happy.
55 We have something unique that international visitors can't understand why we can't appreciate and why we destroy them. I think we end up taking them for granted when we live here. The trees are very special and unique and our little area of Holmes Pointe is sacred and special to preserve.
56 Maintains the character of the PNW.
57 More trees more green spaces build businesses up not sprawls less asphalt parking
58 Must be balanced with other important needs of the community
59 Open areas around homes also provide sunshine to warm homes in winter/cool days reducing the need to run the furnace.
60 Provide food
61 Provide fruit
62 Provide fruit, nuts, and wood products
63 They are usually the only source of fresh, healthy foods in our urban areas.
64 Reduce crime
65 Reduce crime
66 Reduce housing congestion
67 None
68 Other (please specify)
69 Personally, I would rate all of the benefits Extremely Important, but have attempted above to segregate significance levels to give you a sense of my priorities
70 Question are slanted to producing a result desired by the forester
71 These questions are obviously all skewed to support what you want to say... All are important... At the same time allowing sunny areas and views are just as important. Planting the right tree in the right place is essential.
72 Stop building so many condos. This would be more effective than trees in reducing air pollution. More people=more traffic=more pollution

7) What problems do you encounter with trees? (1 being the most important, 5 being the least important)

Tree Problems	Rating Average	Major Problem
Other	**2.38**	**55%**
Sidewalks and pavement cracking	2.76	19%
Blocking traffic, sidewalks, signs and/or street lights	2.92	17%
Safety issues created from trees and limbs falling	3.06	17%
Tree roots and underground pipe problems	3.07	15%
Blocking my view	3.64	15%
Leaves and fruit dropping	3.25	11%
There aren't enough trees in my neighborhood	3.82	9%
Trees cost too much money to maintain	3.93	6%

Comments:

1 Ability to cut trees when necessary without burdensome regs
2 Again a skewed question obviously written to get anticipated results to report. Cost of trees planted by city and sidewalk repair should be borne by the city not the local homeowner.
3 All the nice old HEALTHY trees are being cut down for big box homes. Not necessary.
4 Birds "planting" English holly and laurel
5 Block sun when over planted and over grown (Red Maples)
6 Block sunlight making me depressed
7 Blocking sightline views at certain intersections
8 Blocking sun from garden
9 Blocking sunlight
10 Cause power outages when they blow down. Blot out the sun. Ugly stumps remain.
11 City does not seen to distinguish benefit of removing invasive holly as opposed to Douglas fir; only trunk diameter matters. Just look at what "trees" are selectively fenced off on development projects. City does not seem to value/understand benefits of citizen supplied solar energy, which can be combined with shorter trees, but does require removal of some older trees. "Canopy percent cover rules all" is myopic view that does not consider all sustainable land use.
12 City of Kirkland reluctant to allow removal and replacement of trees that are a nuisance or near the end of their lifespan.
13 City plants but doesn't maintain trees in their own parks
14 City regulations
15 City required trees are wrong type and destroy build infrastructure.
16 City rules and fees for cutting on private property
17 Constant property damage due to moss, pine needles, lack of sunlight and fallen tree limbs
18 Continuing loss of tree canopy
19 Cottonwood trees leave a thick carpet of white sticky blooms that cover *everything* in area, it invades our house and driveway, and is very difficult to remove. This is a nuisance.
20 Cutting and destruction of trees
21 Declining health creates safety issue but those who 'love' trees without adequate knowledge and without common sense make it almost impossible for those trying to do the right thing by replacing an ailing urban tree that we ultimately are impeded from helping promote a healthy tree canopy for the area.
22 Decreased property value by trees blocking views
23 Diseases that reduce the health and affect the appearance of trees
24 Downed branches causing power outages
25 Effects and potential problems vary per species
26 Fir needles are a pain in the back side. They make a mess every where
27 Fir needles in my gutter (sucks)
28 Fire hazard with accumulated downfall in near area; abundance of shade causing moisture problems with house
29 Growing into power lines
30 Having to seek permission to replace diseased or poor choices of varieties of trees.
31 Hazard trees that are not dealt with
32 High costs associated with Tree Ordinance requirements
33 I consider trees to be part of the "view"
34 I rake the leaves into my garden, providing habitat and food for worms and enhancing the productivity of my vegetable garden.
35 Ignored apple trees that spread codling moths
36 In appropriate trees (such as Leland cypress) planted as landscaping cause dangerous situations
37 Increased home roof maintenance

38	Invasive nonnative trees
39	Kirkland has Water; Mountain and City views I use to love driving into Kirkland on 85th and see the mountains and water view now All I see are the huge Maple trees. Nothing special about that I still love driving into downtown Edmonds for the sound view.
40	Lack of knowledge and trust of who to hire to care for my trees
41	Large trees have huge branches falling on creek and my yard. Looks like cottonwood trees over 100 feet that drop leaves, sticky covers for leaves, which is hard to get off lawn, lawn furniture, patios, deck and hot tub. The trees are in an easement that butts up against Juanita-Woodinville Rd. The creek use to have fish and frogs but nothing except branches, leaves, and lots of wild ivy that is growing up the trees. I feel it would be better to have the trees topped, trimmed and clean up the creek to return it to the original way it was. With the trees that have been planted in the middle of Juanita-Woodinville Road, it makes impossible to trim those trees unless the road is closed as there is only 2 lanes. The trees in the middle of the road have grown so much that it is hard to see clear ahead to the crosswalks and there have been accidents due to the low visibility. Trees are great. They are a great buffer for noise, home to many birds, clean the carbon in the air, pretty to look at and provide shade but they are hard to deal with when they get so big you can't do anything.
42	Leaves are a problem not fruit.
43	Many of these questions are irrelevant to trees on public lands. Trees on private property should not be subject to government control
44	More trees needed
45	Most ROW widths are not sufficient for street trees. Shoehorned trees conflict with more important ROW uses and become harmful.
46	My neighbors have large trees on their property and they don’t take the time or spent the money to care for them properly so I fear their tree could fall on my house.
47	Need to get permits and $$$ to remove problem trees. They are pretty in the summer (cottonwood and poplar), but they are a massive problem.
48	Needles clog gutters and storm drains.
49	Neighbors cutting down trees that provide shade or privacy for my yard.
50	Neighbors cutting down trees thoughtlessly or without a permit
51	Neighbors cutting too many trees
52	Neighbors intent on cutting down vast majority of trees on their property, thereby reducing Kirkland green cover
53	Neighbor's trees blocking solar panels
54	New home construction does not do enough to protect trees. Many are removed and more disturbing, many die post construction
55	None
56	Non-native trees can be very invasive!
57	Not allowed to cut trees down
58	Not enough clusters of trees for wildlife habitat due to in-building
59	Not maintained.....pin oaks are nasty all around
60	Nothing else
61	Old trees need to be removed/maintained
62	Other (please specify)
63	Overhang blocks sunlight for garden and solar panels
64	People clear-cutting property for development
65	People don't know how to prune trees properly, and that includes utility workers.
66	Pollen and sap dirties up my car
67	Poor pruning practice from others on street trees
68	Power outage due to limbs falling
69	Provides haven for crime
70	Recently eight (8) old Douglas Firs were ripped out by a construction next to our property. I objected to this because the demolition workers had not yet submitted to the city to remove these trees. They used an excavator to slash the trees down which was an extremely dangerous practice within 9 feet of my house. I do though object to neighbors planting fast growing trees as fencing and which they allow to grow 40 or 50 feet obscuring a diminishing view of the lake and which reduces the value of homes above the offending house. If the city has code that states you cannot erect a fence more than 6 1/2 feet, then the city should have the same code for trees that are being used for no other reason but as fencing.
71	Removal of sick trees in areas city and parks department are responsible for
72	Restrictions on tree maintenance and trimming/topping - Big but not Major problem
73	Restricts residence construction
74	Ridiculous ordinances that prohibit property use
75	Should be tree/hedge height limit in view areas
76	Some "protected" views aren't being protected.
77	Some trees drip sticky substances that damage cars
78	Strict city rules about trees that aren't well understood by the neighbors
79	Tall trees with large canopies block light entering our homes, are huge safety concerns, and prevent grass from growing in our yard. Lack of useable yard due to too many and too large of trees lowers my property value.
80	The City of Kirkland is preoccupied with trees. We need to focus on reducing traffic congestion and limit building of new condos
81	The city spends too many resources to keep trees that should be removed or replaced, many times to the detriment of

	the homeowner
82	The city takes down more trees than the neighbors.
83	The power company butchers the trees because of the lines
84	The small inconveniences caused by trees are minor compared to the very large problems caused by the trees being taken down. There was an old, large, gorgeous tree in the front yard of someone's house near my house. It was an unusually beautiful tree. The owner of the tree had it cut to the ground recently - exposing a very ugly house. The large old trees should not be at the mercy of the ignorant person who owns the property
85	The trees are disappearing continually.
86	The trees behind my house are a problem! They are too tall
87	There are TOO MANY trees in our neighborhood
88	There aren't enough NATIVE trees in Kirkland
89	They can get too big for the property/surroundings, and one they do it's hard to deal with (especially if you're prohibited from cutting them down).
90	Too close to houses so increase fire risk
91	Too many cottonwoods are allowed to remain. One of the biggest culprits is the City of Kirkland allows all the cottonwoods to stand along the shores of Lake Washington near Juanita Beach Park and trail.
92	Too many large ones cut to open for development or "better landscaping" and not taking into consideration what might happen if the support trees are removed. Seen too many firs standing alone in someone's yard, waiting to fall in the next storm.
93	Too many large windbreak trees have been removed; now my street experiences very strong winds.
94	Too many non-native trees (e.g., English Laurel)
95	Too many trees are being cut down by developers, AND the beautiful old trees on Kirkland Ave are being cut down because they don't meet the current sidewalk code. What a terrible decision. Those trees are priceless and have been in Kirkland longer than many human residents. I am disappointed that the city couldn't find another solution to level the sidewalk.
96	Too much city time and money spent on this non problem
97	Too much shade reduces sun and solar warming of homes
98	Too much shade, moss damage to roof
99	Tree fall during wind storms does knock out power.
100	Trees *ARE* the view
101	Trees are the view. Don't be so arrogant and self-absorbed.
102	Trees are too close to the house - should be able to remove them.
103	Trees blocking view of cross traffic at driveways as well as street corners
104	Trees do cause some maintenance issues but it's worth it
105	Trees do cost money, so we must be realistic and practical
106	Trees overhang into the road and on power lines this is a major problem, with a simple fix.
107	Views should be protected too
108	Watching some Kirkland trees being removed
109	We are required to maintain trees in the strip along our sidewalk, yet we have no rights to trim them which is not fair.
110	We keep cutting them down in mill creek to make way for new homes. We're losing our natural forests here
111	When the City requires developers to plant street trees, it needs to specify trees that are NOT shallow-rooted and that WILL BE of an appropriate scale in 20 years or more.
112	Wrong kinds of trees...e.g. Cottonwoods
113	Wrong types of trees planted in sidewalks and near buildings

8) To your knowledge, who is supposed to care for trees that are located in front of your property between the street and sidewalk?

47.7% Me: the adjacent property owner
29.1% I'm not sure
23.2% The City's tree crews

9) Do you think the City's tree protection ordinance is:

27.3% I'm not aware of the ordinance enough to say
24.3% Too strict - you can't even remove trees on your own property!
15.4% Too lax - It's sad how many tree are getting cut down everywhere
13.5% Just right - Kirkland has actually increased its canopy coverage
12.5% Confusing - It's not clear what is allowed and what's not
7.1% Other (please specify)

10) Overall, which statement represents your sentiments regarding the condition of trees? (1 Most important-5 Least Important)

Tree Condition Statement	Rating Average	Trees look great!
Trees in forested areas in parks	**1.62**	**47%**
Trees in formally-landscaped parks	1.64	43%
Trees in the right-of-way (along streets)	2.05	20%

Comments:

1 After car accidents street trees that were eliminated/destroyed are rarely replaced
2 Along Market Street median trees need to be trimmed. There are many dead limbs.
3 Always wonder what markings and ribbon mean on some of the trees in the woods
4 Block view of traffic. Icy streets slow to melt because they are shaded.
5 Bridle Trails park is an absolute gem.
6 Carillon Woods needs to have fewer trees in the children's play area vicinity for safety, visibility and warmth.
7 City should focus on basic services, not trees
8 Cottonwoods should be removed and replaced with desirable trees
9 Dead trees all over the place that no one seems to be responsible for; that goes for severe pruning needed.
10 Do general a question if it pertains to existing. Right-of-ways vary all over the city.
11 Don't know
12 Don't use these parks.
13 Established trees are being cut down at an alarming rate, especially during new home construction because the fines are too low to discourage clear cutting. Spindly saplings take decades to mature. Some trees can live hundreds of years. We need laws that protect our grandchildren's natural tree heritage.
14 Existing large trees in most rows need to be removed.
15 Greenbelt area trees are safety issue with windstorms.
16 I cannot respond because I am unsure
17 I don't live in a neighborhood that has a public right-of-way
18 I feel strongly that government should have no right to dictate the use of plantings on private property unless it presents a public safety issue
19 I know we are working on the forest trees so I put generally satisfied to keep supporting that work
20 I live on the greenbelt and there are dead trees that should be thinned. One fell onto my house years ago.
21 I think our trees seem to be healthy, but I wish we were doing more to replace the old growth trees that periodically get cut down.
22 I think there should be more limits to which kind of trees can be planted as street trees next to sidewalks.
23 I think trees and other landscaping are incredibly important to the overall feel and appearance of a community.
24 I would like more street trees and a way for neighbors to coordinate street tree planning/planting on their street.
25 I would like to see concern for the trees be a high priority over convenience of people. The cherry trees along 130th could use some attention. They need to have the ivy pulled off them.
26 I'd love to see power lines go underground which would allow our trees to grow naturally and continually get topped.
27 It's not the condition of trees; it's the cutting of trees. We are obsessed with controlling things. I moved here because of the firs and cedars and we keep cutting them and replacing them with maples.
28 Kirkland needs to do landscaping and plant trees along 124th Ave in Kingsgate. Not nearly enough landscaping is done there.
29 Lack information. Requires both a case-by-case and a general perspective, intelligence, management response(s)
30 Looking forward to trees along 85th St. Rose Hill
31 Many have overgrown their living spaces, damaged sidewalks, blocked views. They need to be replaced with less invasive types of trees or even shrubs
32 Many trees in the Kirkland streets cover signs and street name, this is not ok. The city should maintain these trees.
33 More trees please in parks - especially natives. Please replace trees when they fall.
34 Most residents will agree that views of the city and lake are more important than trees
35 Need more trees spread out in parks, e.g. Peter Kirk Park, etc.
36 Need to deal with sidewalk damage and eradicate the ivy that damages trees in some forested areas.
37 Not enough diversity.
38 Noticing some serious invasive English ivy on some large trees. Doesn't ivy usually kill the tree eventually? If so, seems like a hazard down the road. Earth Corps and other orgs often organize work parties to do invasive removal . . .
39 Oak trees never should have been planted. Too dirty and leaves cause problems.
40 Obviously budget restraints in Kirkland limit the amount of time given to maintaining the trees. There is room for improvement. Also I think there are zones between jurisdictions (like the edges of parks next to roads) where the trees are not well maintained because (I'm guessing) that neither Parks (Dept) or the Public Works knows who is responsible. (Along Forbes Creek Drive is an example)
41 One of reasons we bought a house here was because of the trees, both on our lot and in our surrounding forests.
42 Other (please specify)
43 Owners of properties should have the right to remove their own trees.

44	Parks ok, street and right of way totally out of control, forested areas?? Ok if old growth only. No crowding.
45	Pay maintenance workers; employ fewer city planners.
46	PSE make a point of butchering our street trees, we should require them to do a better job. The pruning they perform cheats our community.
47	Question wisdom of planting true firs on beach at Juanita Beach Park. Why use more native species in public parks.
48	ROW trees are in bad need of pruning away from the container trucks that damage the limbs and for the health of the tree.
49	Seems to make more sense to plant dwarf trees under utility lines, rather than fighting a losing battle with topping them.
50	Should use more native species maybe shrubs along with trees
51	Some forested areas on Finn Hill need restoration
52	Some of the trees are a driving hazard when they have grown so big they are hard to see around when close to intersections for pedestrian and bike riders.
53	Spotty--some are fine, some are not well cared for--again, who cares for those?
54	Street tree appearance is compromised by pruning for power lines. Push under grounding!
55	The City Arborist should be made available at no cost to evaluate the health of street trees that the property owner has concerns regarding
56	The City should not be creating easements for trees on private property. That right should lie solely with property owners.
57	There are many dangerous, untrimmed trees and poorly trimmed "preserved" trees in our city, particularly under utility wires. These trees should be allowed to be removed (even at personal homeowner expense). Why should we be preserving trees (trimmed like unhealthy mangled shrubs)? These mangled "trees" are actually publicly shameful (!) Examples of our professed love of trees as a "tree city." City should allow and perhaps even promote private homeowner paid removal of these ugly eyesores.
58	There are plenty of places for trees that do no block residences' views.
59	There are too many fast-growing trees planted too close together and they block views, block sunlight and crack pavement.
60	There should be serious penalties for persons/entities who plant potentially tall trees directly under utility lines.
61	Too many forests are being ruined to put in neighborhoods
62	Too much ivy killing trees
63	Tree planning should consider a very long term plan so the trees will be able to age.
64	Trees are allowed to grow too close to power lines along streets resulting in severe power outages throughout communities at a high cost
65	Trees are often overgrown with Himalayan blackberry & ivy
66	Trees by my house look terrible- they are not trimmed
67	Trees generally look like they're butchered!
68	Trees in Parks: YES! Trees in Right of Ways: Yes! Trees on Private Property: Give the owner a break!
69	Trees near traffic signs are not being taken care of
70	Trees on private property are very important since that's the largest area
71	Unfortunately a lot of trees at Juanita Bay Park are at the end of their life cycle and are deteriorating.
72	Very unsatisfied with decision to cut down trees on Kirkland Ave and possibly other areas I'm not aware of. Find another solution to level sidewalks! Don't sacrifice the trees. It seems very hypocritical to say the city has a tree protection policy and acts like it cares with these surveys and then will cut down important, established trees.
73	We have a long way to go in terms of invasive weeds education and reduction in our green spaces.
74	We have sidewalk heaving on 84th Avenue NE and plants growing into the sidewalk, also obstructing views of street signs.
75	We should have more NATIVE trees along streets, in green belts, in parking lots, etc.
76	We should try to keep mature trees, rather than removing them and replacing with small species.
77	When the trees block or partially block sign this is a problem.
78	Where our parks contain views, the irreplaceable and valuable views contribute to tourism and higher property tax dollars collected. Trees in these areas need to be carefully selected so as to maintain this economic benefit to Kirkland (plus the benefit where citizens and visitors feel there enjoyment of the area is enhanced by the water views, the Views of Seattle and the views of the Olympics.
79	Where they block cross walks, lighting and driver vision, the trees should be trimmed or removed.
80	Would like to see more natives in right of way, parks and in new developments. I usually see small non-native maples and other "Junk" or cheap Home Depot style trees used, especially in new housing.
	You don't keep right of ways and intersections safe because you don't trim trees in and around intersections-you're asking for problems.

11) Overall, do you feel the City is planting enough PUBLIC trees?

34.3% Enough
33.5% Not enough
22.8% I'm not sure
9.4% Too much tree planting

12) What ways of encouraging PUBLIC tree protection, planting, and maintenance would you favor?

PUBLIC Tree Support	Rating Average	Most support
Other	**2.00**	**67%**
Education to increase awareness of the benefits of trees	2.21	39%
Neighborhood volunteer tree planting	2.27	32%
Dedicated funding for City tree crews to plant, prune, and remove public trees	2.28	38%
Incentive programs to encourage citizen tree planting in parks and planting strips	2.33	35%

Comments:

1 A program to help neighborhoods understand what trees they CAN plant in common areas.
2 All the above costs money - Kirkland can't afford
3 Allow an Association to remove trees that are too big.
4 Allowing public to remove nuisance trees
5 Annual expert assessment of trees to be removed (city removes them making wood available to public), and where some should be planted by volunteers
6 At this time of dwindling resources, tax payer funding for tree planting and maintenance is a non-priority. When the economy improves, then the city can indulge in stuff like this.
7 Boy Scout tree planting
8 Bring in an organization like Friends of Trees
9 Budget shortfall DOES NOT ALLOW
10 Buy trees for residents to plan
11 Caring for the trees is great but I do not want to see them cut down!
12 Citizen science based reporting
13 City maintaining trees of neighbors that are hanging over roadways
14 City should focus on basic services, not trees
15 City should have a more balanced approach to trees and vegetation. If trees are planted then resources need to be made available BEFORE they go in so that the expense doesn't fall on the homeowner or they go unattended to like many of the green spaces have.
16 Community partnership with city
17 Dedicated funding to maintain the trees would improve the health of the canopy and provide consistent maintenance to avoid limb breakage and tree falls
18 Definitely protection for the existing old cedars and other old trees
19 Don't spend any more money trying to educate the public, put money in places that are better spent for the community. I these economic times don't stress trees and such.
20 Easy ways to call in illegal cutting by developers
21 Educate neighbors to plant appropriate trees in appropriate locations!
22 Educate public about pruning, removal--regulations, best practices
23 Eliminate tree ordinance to reduce cost of maintaining trees
24 Focus on reducing traffic congestion. This should be the priority.
25 For Developers, INSTEAD of requiring them to save trees on lots where they may not be wanted, have them pay into a fund for planting trees in parks or other green belt areas.
26 Generally people buy the biggest, cheapest tree they can and the result is something too tall and too big for the space after about 10 years.
27 Get the word out -- we need volunteers to remove trees overgrown with invasive species
28 Have a plan and people gift prized specimen trees instead of benches. And remove the dirty old benches.
29 Home owner incentive to cut or remove problem trees.
30 How can one be supportive of both planting and removing public trees? Very confusing.
31 I am so discouraged having fought for SDOs and they have absolutely no consequences. A beautiful old tree that eagles sat in was cut and sold to a logging company. It managed to squeak by and I feel absolutely helpless to stop it.
32 I do not know if you have laws to protect the trees in planting strips that the city planted. Either way, do not allow people like my neighbor to remove planting strip trees.
33 I think the plan has to be by neighborhood. More trees in areas w/ out view opportunities, less in areas with property values tied to views. One size does not fit all.
34 I would be very pleased if all public schools had a naturalist, someone who specialized in teaching children about nature and how it is important.
35 I would encourage tree maintenance
36 I'd like to have more public trees, but I know $ is tight.
37 Impact fee on new development, where appropriate
38 Incentive vouchers for saplings of appropriate trees given out to those who would be willing to adopt a tree.

39 Include trees in any new development, e.g. the Houghton Business District. Get an Olmsted book.
40 Just make it easy for us to do it - organize events and the smaller the tree that's planted, the more successful it will grow.
41 Kenmore recently planted the Blue trees along 525, and tree sweaters draw attention. Kirkland could come up with their own arboretum
42 Less building, more trees
43 Let's get rid of damaged dying trees and prune existing trees large shrubs before we plant too many more. Only spend money on keeping them safe and tidy. People can donate extra to plant new trees. People can memorialize loved ones with tree dedications.
44 Maintain trees so branches don't break off
45 Many urban tree programs are co-opted by tree cutting contractors and tree farms anxious to sell starter trees. I'd prefer a citizen-run volunteer program dedicated to preservation. Kirkland needs a proper legal mechanism for citizen-initiated land marking of trees.
46 Meaningful penalties for topping trees
47 More flexibility in owners' maintaining own trees
48 Neighborhood level planning so that the rules apply to the needs & priorities of the neighborhood
49 Neighborhood volunteer tree maintenance.
50 No view blocking trees!
51 None of governments business to dictate to private land owners when most of the cities beautification looks in shabby shape. Clean your own house before pointing the finger at others.
52 Notify all Kirkland residents that they need to take care of trees in parking strip
53 Once educated, soften your strictness about pruning and replacing right of way and boulevard trees.
54 Other (please specify)
55 Planting street trees that have huge root systems are not an improvement. Bigleaf maple trees, cedar trees and cottonwoods need to be banned as they clog gutters and drop debris all year long.
56 Protect what we have, especially in annexation areas
57 Public awareness of the benefits of trees is important and I feel a voluntary citizen involvement much like that in some of the parks would be beneficial and helpful to keeping our PUBLIC trees planted and maintained would be a welcome opportunity and help contain public costs.
58 Public instruction on how to care for trees, as well as selecting trees and locations for planting. (Perhaps a partnership with the schools? Or an online class? Perhaps completing the class would allow the person to earn a badge on a social network such as Facebook or Google+.)
59 Purchase easements for City trees to be planted on private property abutting streets, 1/2 the canopy diameter off the CL of the sidewalk.
60 Re-prioritize spending to maintain/replace what we have
61 Require new developments to plant trees and keep existing ones when possible
62 Require trees planted on rooftops of businesses.
63 Rules that if you can't care for the trees, don't plant them!
64 School curriculum projects to engage family, neighbor, neighborhood, youth and senior engagement
65 Shrubs and ground cover also
66 Some trees just have to come down. Especially when then are too close to a house.
67 STOP CUTTING TREES ALONG CITY STREETS!
68 Stricter tree policy. I've seen groves of established trees wiped out for new housing development with small ornamental trees and bushes planted here and there to replace them. It does not replace what was lost. The city needs to be held accountable for trees cut on/near sidewalks.
69 Support City knowledgeable crew to plant native trees which are drought-tolerant, pest-resistant, right height for visibility (so don't have to come back and prune); support biodiversity so we don't lose a bunch of the same trees to climate change, pest.
70 The City needs to stop planting trees in the middle of sidewalks. The City needs to maintain their public trees the same way they ask private home owners to maintain those in right of ways.
71 The City provided saplings that we planted on Peter Kirk property. The school and PTSA had no budget for those trees. Volunteers did the work. Seems like a good partnership.
72 The general public is not interested in trees unless it affects their property or right of way.
73 There are more important issues than trees, let's keep trees in perspective with our other responsibilities
74 There are plenty of trees in Kirkland - use public money and staff time to reduce development costs and repair infrastructure.
75 Tougher restrictions on cutting down old healthy trees
76 Tree sponsorships, like benches, in honor or memory of someone
77 Trees along 124th Ave in Kingsgate. Helps to also beautify an ugly street due to massive power lines
78 Unsure what else is required
79 Volunteer planting in public areas should include city governance.
80 We are big on dedicating benches in parks to individuals, how about tree dedications?
81 You are mixing issues and teeing up the idea of tree planting in public parks. Good idea if done without blocking views. That can be accomplished.
82 Zoning rules for Shopping and Assembly Uses

13) For PUBLIC tree protection, planting, and maintenance programs, which of the following reflects your views?

41.9% I'd be willing to pay a little bit more for these programs
22.3% I'm not willing to pay any more
15.8% I don't have enough information to answer the question
9.9% I'd be willing to pay much more for these programs
6.1% I think we should spend less on these programs
4.1% I don't think we should spend anything on these programs

14) How should the City encourage PRIVATE tree protection and planting?

PRIVATE Tree Management	Rating Average	Most Support
Other	**1.83**	**69%**
Education to increase awareness of the benefits of trees	2.13	45%
Incentive programs to encourage tree planting on private property	2.24	44%
City ordinance changes	2.9	26%

Comments:

1 Allow interested landowners to plant orchards within the City.
2 Allow owners to cut too large trees if they replace with decent-sized new slower growing ones.
3 Allow property owners to be stewards of their own trees.
4 Allow trees to be planted on private property abutting streets, 1/2 the canopy diameter off the CL of the sidewalk.
5 Also continuous laurel hedges should be trim down to 6 ft. to show more tree linese di
6 Are commercial landscaping regulations adequate? Developers should have to improve the greenery when they build.
7 Better enforcement of existing ordinance
8 By forcing density (too many houses on too small lots), we are also pushing the trees out. No one wants a tree towering over a structure as it is asking for trouble (everything from falling branches, masses of leaves clogging gutters, to severe structural failure). We have a massive oak tree that was planted in 1964 too close to our house and it will unfortunately have to go later this year. It is a majestic tree, an asset for the city, but in being too close to the house, the risk in retaining it is just too great.
9 Change city policies. Change apparently inflexible tree rules to allow for reasonable tree removal and replacement. Removal of invasive holly should be encouraged, especially when there are plans to replace with other species. Planned solar installations that include tree replacement should be encouraged.
10 City should focus on basic services, not trees
11 Clarity on the laws. Example: If I plant a tree, am I disallowed from removing it in 10 years without a permit?
12 Discourage mega mansions like the remodel on Waverly.
13 Do more to make homeowners aware of regulations governing tree maintenance and removal on private property.
14 Do the procuring and organizing for us. Work with scouts, schools, and other civic groups.
15 Don't allow developers to cut so many trees down or plant so close to the property line (so as to impact the neighbors)
16 Don't know enough about ordinances to comment
17 Don't know ordinances
18 Don't mess with the citizen's rights to do what they wish with their property
19 Don't spend the money on this; there are more important things to spend money on. I love trees, I have trees, but if I have a sick tree I don't want to have to pay for the city to come and tell me it is sick before I cut it down. Too much legislation, too much Gov. looking over our shoulders.
20 Double-down on Arbor day.
21 Educate on type of trees that do not cause problems and damage to property.
22 Educate the public on beneficial genera/species that are appropriate to the space in height, width, cultural requirements and disease resistance.
23 Educating the general public on the benefits of trees would be a waste of money during this poor economy.
24 Encourage people to do less cement and pavement, clean storm drains and rain gardens
25 Encourage residences to top, prune hack off view blocking trees!
26 Enforce the city ordinances.
27 First stop the removal of common public assets
28 Fliers listing great cultivars for residential use mailed out.
29 Have a tree "exchange" - if one gets cut down, another gets planted
30 Help people maintain healthy trees on their property
31 I and my neighbors were thrilled to get a Backyard Wildlife Sanctuary designation and sign
32 I don't know what City currently does nor what is most effective, to comment.
33 I feel the future of Kirkland's aesthetics when it comes to trees will probably come more from land use ordinance and insuring that the city owns enough land to maintain a long term plan. Otherwise land will be developed without

	regard to overall public enjoyment.
34	I need more information
35	I need to read the existing ordinance to be better informed.
36	I think we have more than enough trees, especially in my area; I'd like to be able to remove some
37	I'm not sure what the city ordinance would be? Something like mandating more trees would not be good. Offering prime species of trees at a discounted price would be good. Also ordinances that encouraged the elimination of problem species if they are replaces by prime species would be good policy as well.
38	In addition to huge fines for healthy tree removal and penalties for falsifying disease reports, you need to reach out with pro-tree education -- on TV/radio/online, in public schools, at local nurseries, etc.
39	Incentive program should provide the appropriate size and species of NATIVE trees for the appropriate space
40	Incentive programs to encourage proper care of private trees to discourage cutting them down
41	Incentives and education for planting NATIVE trees
42	It is one of my biggest values and a reason I live here.
43	It's important to save existing trees, though it's also important for neighbors to understand or the city to promote a "good neighbor program, wherein folks can become more mindful about blocking neighbors views and/or taking care of their own trees growing into other properties.
44	It's not the city's job to tell private citizens how to landscape their private property.
45	Let me cut more trees down, when the initial planter did something stupid like put the wrong tree in (40ft tree next to house)
46	Like I said earlier. If people can purchase trees and plant them with city approval to plant in public spaces in order to memorialize their loved ones, I think people will care for that area more. This is all privately funded and can get city planning approval to make sure plantings are happening in the best areas. We have several dead or dying trees in our greenbelt area. One went down in the last major windstorm. Other trees have been damaged from that storm and are dying. They are a hazard to the homes. We have had a neighbor who had a tree fall on their house from another neighboring greenbelt because they do not get wind sail pruning. We love our greenbelts but need direction on how these trees can get some attention since they are on city property.
47	Limit tree height/width to prevent property damage to others
48	Lot size - with big house on small lot tree become a nuisance and a danger
49	Make it easier to cut a wrong tree and plant a right tree
50	Make it easier to take down problem trees that can be replaced
51	Make it financially possible rather than excessively expensive to follow your rules to replace ailing trees. Otherwise we have to wait for impending damage to structures to replace an unsafe tree without paying what is an exorbitant fee for most of us (remember you just incorporated a bunch of 'normal' blue-collar working folk in the new incorporated area).
52	No more ordinances!!!
53	Not sure on the city ordinances. Feels like lots of opposition to additional regs these days, so would have to be carefully crafted to provide what folks can do vs. can't do, in my opinion.
54	Nothing else
55	Only allow trees that won't grow out into the street and look bad and share debris with neighbors
56	Ordinance change should not be more strict
57	Other (please specify)
58	Perhaps lead by example in public areas then encourage private involvement to attain a more complete result... perhaps becoming noted as green and beautiful enclave such as Leavenworth is noted as a Bavarian enclave.
59	Police & fire should take priority over spending money on this issue
60	Prevent developers from cutting established trees
61	Protect the mature trees we have in addition to adding new
62	Protecting trees from ?!* construction crews.
63	Protection of view should certainly be considered on private property
64	Provide solid guidelines for developers on what trees or how many to keep. Most new infills and subdivisions simply clear cut!
65	Public instruction on how to care for trees, as well as selecting trees and locations for planting. (Perhaps a partnership with the schools? Or an online class? Perhaps completing the class would allow the person to earn a badge on a social network such as Facebook or Google+.)
66	Purchase and preserve undeveloped land for urban wildlife habitat.
67	Reduce the size of house we allow on a lot
68	Remove $200 fee to be told by a city arborist if a nuisance tree (planted by the homeowner) can be removed
69	Remove Tree ordinance so people will want to plant trees
70	Repeal of the current tree ordinance
71	School curriculum projects to engage family, neighbor, neighborhood, youth and senior engagement
72	See concern in # 9.
73	Soften your strictness overall. It’s ridiculous people have to jump through so many hoops just to make their property safe in terms of tree intrusion and overgrowth. Not everyone has the $ for this, and it invites non-adherence to your city codes.
74	Stay out of private property!
75	Stop allowing wholesale removal of trees in developments
76	Stop wasting tax payer money on printed information material...that's what they made internet and email for.
77	Survey areas and issue action recommendations for WHICH private actions would most benefit the area surveyed
78	The city does not need to focus on private property owners. I think the time and energy needs to be put towards

other issues, let's not create new ones. I feel this would be a waste of tax dollars

79 The City has more pressing issues to spend time and money on. There is no shortage of trees in the PNW. It's insane that the City has spent tax money on this survey; quit fretting about trees and solve real problems.

80 The City needs to acknowledge that large trees near a house, sidewalk or underground utilities are a health and safety issue for homeowners. The City and/or other neighbors should not have the right to tell a property owner what he can or cannot do to keep his property or family safe and healthy.

81 The City should let homeowners decide which trees should be retained/removed/planted on their own.

82 The City should not require saving trees that a private property owner doesn't want. Mostly, people don't want a tree that is too large, they feel is a safety hazard, blocks light into the home, or prevents them from having a yard w/ sunlight. Allow them to take those trees down IF they plant new trees elsewhere on their yard where they will be appreciated.

83 The city should stay out of what people do on private property.

84 The tree cutting companies come around with their full color fliers with pictures of huge trees squashing the house - all photo shopped. The next thing you hear is the sound of buzz saws. They are manipulating people by fear to have their large old trees cut to the ground. The way those companies market their services should be illegal. I have found a few good companies who really care about trees and you can tell that they understand and love the trees.

85 The very few trees that were left by developers were removed by homeowners. Acres on two sides of us have almost no trees now. The man next to us even removed the trees required in the planting strip. When there are only one or two trees in the 7,200square foot lots anyway, it is legal for all the trees to be wiped out in a development. It is happening all around our Bridle Trails neighborhood. This needs to be changed.

86 The word PRIVATE means Private. Too much government, too much control. Let Private homeowners do what they want with the property they purchase.

87 The wrong kind of trees can cause big problems. So education has to have some sort of check on it or people will plant trees that end up costing money to maintain. Such as blocking views when driving, blocking sun in neighbor's yard etc.

88 Trees on neighbor's property are danger to ours plus continually dropping limbs, cones and needles on our property

89 Unsure of what else is needed

90 We already are too restrictive in tree ordinances and encouraging private planting may go astray and have a neighbor plant a tree that will block public or private views... which is bad.

91 We already have enough trees

92 We have plenty of trees! The City is OBSESSED!

93 We need to give the authority of decision making for private tree planting into the hands of the property owner. Many people find their yards overgrown after many years and need to have the freedom to landscape/re-landscape to enhance the value and beauty of their property.

94 Who do I find out what the ordinance is?

95 Why should the CITY get involved with PRIVATE tree protection and Planting???

15) What public outreach or communication methods do you prefer to stay informed of urban forestry issues?

65.3% Email or listserv
53.9% City Update newsletter
52.9% City website
22.1% Posters, notices
14.6% Currently Kirkland on TV
14.1% Facebook
10.9% Webinars/online presentations
8.8% Other

Comments:

1 Add to utility bills etc.

2 Articles in local paper or local online blogs

3 Articles in reporter an Kirkland views

4 Booth at Farmer's market, special event at Farmer's market, offering tabling/seminars from outside orgs like Native Plant Society, Audubon, Plant Amnesty

5 Bus posters

6 Community hand on workshops and work parties

7 Deputize the homeless to promote forestry issues instead of their hard times. Costumes would not hurt.

8 Direct mail

9 Email from neighbors

10 Enjoyed the recent PW sustainability workshop on recycling

11 Google+

12 Have City give presentation on urban forestry issues at Finn Hill Neighborhood Alliance member meetings!

13 Having events for public tree planting would increase ownership by the citizens.

14 I am not certain of the best way to reach its citizens other than what I've checked

15 I didn't know I could. I just had my own tree issue - that's how I knew about the urban forest. The city arborist was

	very helpful to me personally.
16	I read your newsletters but wonder if others do. Email Newsletter might work as one pager? Feeding the info slowly.
17	It's hard to find documents about tree ordinances on city web sites.
18	Kirkland courier
19	Kirkland patch
20	Kirkland patch
21	Kirkland patch
22	Kirkland reporter
23	Kirkland reporter
24	Kirkland reporter
25	Kirkland reporter
26	Kirkland reporter
27	Kirkland reporter
28	Kirkland reporter
29	Kirkland reporter
30	Kirkland reporter
31	Kirkland reporter
32	Kirkland reporter
33	Kirkland reporter
34	Kirkland Reporter/ Kirkland Parks and Rec Guide
35	Kirkland Views is a wonderful resource.
36	Kirkland Views, Kirkland Patch
37	Kirkland Views, the Kirkland Patch
38	Kirkland websites like Kirkland Views or Kirkland Patch, Kirkland Reporter newspaper
39	Local blogs and web sites
40	Mailings specific to issue
41	My neighborhood association listserv (south rose hill/bridle trails)
42	Neighborhood associations
43	Neighborhood associations
44	Neighborhood e-mail lists
45	Neighborhood meetings
46	Neighborhood presentations of tree importance/value
47	Newspaper
48	Newspapers
49	None of these will reach me. I don't have cable, use Facebook, and get so much junk email it'll get lost.
50	None.
51	Notices, mailed to homes.
52	Online news in Komo and/or Seattle Times
53	Other (please specify)
54	Park tours and lectures about the urban tree and its environs. A festival in the parks celebrating the wonders and beauty of trees.
55	Patch/Kirkland views
56	Plus venues for people to supply input and reactions to policies which directly affect the citizens.
57	School curriculum projects to engage family, neighbor, neighborhood, youth and senior engagement
58	See comments
59	Send me an email
60	Snail mail
61	Stop printing city new letter. Newsletters are made from paper...once known as trees.
62	Story in Kirkland Review
63	That little newspaper we get... The Kirkland Reporter, and on Kirkland.Patch.Com and (South Rose Hill/Bridle Trails) srhbt.nextdoor.com
64	The City Council needs to intervene and make coherent bylaws regarding tree maintenance and a "good neighbor" policy of sorts.
65	The Kirkland reporter
66	The most cost effective method
67	The Patch and Green Kirkland
68	Tree info page on Kirkland Views.
69	Twitter
70	Twitter
71	Urban forestry sounds like logging - how about another name?
72	Utility bill inserts
73	Via the utility bill
74	We are old school; we read books to educate and inform ourselves.
75	You need to reach out to Condo and housing associations, corporations and individuals, those without computer access.
76	YouTube Currently Kirkland

16) Do you have any additional comments?

1	Removal of diseased trees is not inexpensive. I have to go through head ache of getting a permit.
2	1) Trees are valuable, but they are not more important than people. 2) Private property rights need to be balanced with goals for tree planting. 3) The lake views in parts of Kirkland are more important in keeping property values (and the tax base) high and should be protected as much as trees are. There should be view corridor set asides that are at least as important as tree regulations. 4) The existing tree regulations are overly expensive and burdensome.
3	A lot of the trees, planted by the City, are blocking views. Why did you do that?!
4	A real life story: A young family was building a new single family home in Kirkland and a tree was right in the middle of their home design and building envelope. This family had to spend 30K (Yes $30,000 THOUSAND DOLLARS) for all that it takes to go through the City's tree ordinance requirements and eventually get a NO from the City that they could not take out the tree, resulting in a plan redesign. In total, this is what they got from the City of Kirkland over ONE TREE: 1) They can't build their house the way they wanted. 2) $30,000 of consulting and redesign costs that they can't afford. 3) Huge delays in their project. All for ONE TREE because of the overreaching tree ordinances by activist leaders with no perspective on reality. Please figure it out.
5	After serving on the Planning Commission and living in Kirkland over 30 years, the city arborists and codes are not adequately fair to the public, do not protect our infrastructure and are required in places that are in direct conflict with public utilities. It is time to get it right.
6	algae > trees
7	All these strict tree laws are discouraging builders to develop our area
8	As a volunteer in Kirkland parks, I am impressed with the city support and commitment to its parks. Can serve as a model for other cities.
9	As Kirkland becomes ever more densely populated, it is increasingly important to maintain and expand the greenery throughout our community if it is not to become an urban grey-scape.
10	As you can tell from my other comment, I am aghast at the amount of trees being cut down for no good reason. Friday the people next to us cut a huge Douglas down so they could make their deck bigger. Across the street three new homes are going in and we were told all the trees were going down. Really Kirkland? You have to do better than that. The 32 pages of tree ordinance are not doing any good as far as our street is concerned.
11	By forcing density (too many houses on too small lots), we are also pushing the trees out. No one wants a tree towering over a structure as it is asking for trouble (everything from falling branches, masses of leaves clogging gutters, to severe structural failures). We have a massive oak tree that was planted in 1964, too close to our house, and it will unfortunately have to go later this year. It is a majestic tree, an asset for the city, but in being too close to the house, the risk in retaining it is just too great. If it was 10 feet further away, I'd keep it - but it would then just be a problem for our neighbor to the East.
12	City employees enforcing tree planting are not knowledgeable about tree choices and are creating landscape nightmares. Residents in my neighborhood are rightfully proud of our beautiful gardens and would be better off managing our own trees!
13	City needs to do a better job on pruning overgrown bushes along sidewalk. Most homes don't know it is their responsibility.
14	City rule/regs on trees especially needs to be conveyed to the recently annexed areas of Kirkland.
15	Come and see the oldest and most beautiful trees in Kirkland on my property. MD
16	Diversity of trees is as important as the acceptance of the diversity of people.
17	Don't overplant. The Heritage Park walkway no longer has views of the lake. A shame.
18	Don't suggest increased funding in some areas and then leave direct mail off the list of options for public outreach.
19	Encourage accessibility and use of the current parks, such as Bridle Trail and watershed.
20	English holly should be declared noxious weed and not protected. It is not native and invasive. Mangled street trees should be allowed to be removed. Dying and old street trees that are no longer pretty should be allowed to be removed without a fight.
21	Falling trees do cause power outages and PSE should be more proactive in taking problem trees down before the wind does!
22	Finn Hill residents are more knowledgeable about trees than the average urban Kirkland resident. I know from talking to arborists (we deal with at least 6) that Deb is stretched thin with the annexation. I personally think she should concentrate on conflicts between neighbors, and not worry about intervening to enforce the code where the neighbors agree on the proper tree management. For example, we should be able to quickly deal with dangerous trees (we have had quite a few) without going through red tape.
23	For control of environmental quality we should stop additional development rather than planting more trees which block views.
24	For Q4, I know most trees and I know the native ones. I don't know some of the cultivars. For Q8, my understanding is that the homeowner does routine care and the City provides resources for extensive care like disease control, limbing, planting and removal, though the homeowner can plant too
25	Glad you are thinking about this!
26	Go green!
27	Homeowners should be allowed to cut as many trees on their property as they please. (Without paying the city for a permit) You get enough of our money.
28	How about an enormous Swiss-Family Robinson tree house to house city hall? :)
29	I also value open space.
30	I am a former downtown resident and developer. Trees were getting too tall and blocking view of lake.
31	I am amazed and dismayed that people don't have the right to do what they want with trees on their own property

	here. We lived in unincorporated King County for 25 years and cut as few or as many trees down as we felt were necessary. However, I understand that some people would cut them all down, which is not acceptable. Therefore, there needs to be SOME regulations!
32	I am generally satisfied with trees / urban forest area in Kirkland. What I am not satisfied is with city of Kirkland's ability to maintain greenery along city sidewalks and along the roads. They are generally overgrown with weeds at least in my neighborhood. No maintenance is provided by the city. The city needs to figure out on how to maintain these public green areas as it gives a very bad outlook on the neighborhood and ability of city to provide livable neighborhood. Rather than spending time and money on trees I think the city should consider maintaining of existing green belts.
33	I am glad this issue is on the radar!
34	I am glad you are doing this survey. We need to keep our trees and keep them in good condition. I am very interested in helping with this effort.
35	I appreciate what the City has done to protect its trees and to accomplish the goal of increasing its total area of tree canopy. But, beautiful heritage trees are still being lost!
36	I appreciate your concerns and this survey
37	I attended the free class the city did on water gardens. It was very well attended. A similar class relating to urban tree selection and care would be great!
38	I believe that, given the opportunity, people will plant and maintain trees in their yard. Currently City ordinances force residents to keep trees that they don't want to keep.
39	I believe the City of Kirkland needs to drive through the neighborhoods to take a look at the state of the sidewalks, how trees are or aren't being maintained by some, mediate view issues, and make sure traffic signs are always visible or fine warn and/or start fining folks who don't comply.
40	I can't look in any direction without seeing at least 50 trees for every person in Kirkland. Enough already!
41	I chose where I live because of the number of trees. I don't know the ordinances but I do know that education is best with some laws of protection. I don't want too many laws as they get in the way of common sense at times and they are too rigid. I already find the Kirkland police to be that way.
42	I feel strongly that trees aren't just a matter of aesthetics. They are an important part of the survival of the planet and the web of life.
43	I have lived here 20 years and I have no knowledge of what the city regulations are. Where was I expected to pick that up?
44	I have lived in Kirkland for 15 years and have witnessed a dramatic increase in traffic congestion. There has been a noticeable decline in the quality of life in my neighborhood and this has little to do with trees and everything to do with unlimited building projects. More buildings mean more people and more people mean more cars and more cars mean more traffic and more traffic means more pollution. And you can't expect trees to solve these man made problems!
45	I know there are many who want THEIR view protected and see tree removal as the way to do so. However, what they rarely acknowledge is that the "view" they want protected includes all the trees that are not specifically blocking THEIR view. The trees ARE our view! In addition to all else they do. I would say that anyone who prefers a treeless view needs to move to Arizona.
46	I like to understand my right when my neighbor's trees overgrown and dropping leaves on my property. Also pruning requirements to maintain view & vista.
47	I live on the edge of Juanita Bay park and feel very fortunate to live in a vibrant urban forest. Kirkland did a great service in acquiring so much of Forbes Creek valley to preserve as forest land. I think it would be a great benefit to the community and do much to promote awareness of the importance of urban forests by developing a simple trail the length of the park up the valley. Getting people up into this diverse area would teach also about the dangers of invasive and noxious weeds that are becoming established in this and other urban forests.
48	I love trees, but as a condo owner with a view, I know that in 4-5 years, evergreens on my neighbors' property will block my view. I'd like to know if there are any ordinances in place to keep neighbors' trees from blocking views.
49	I myself love trees but when i plant a tree on my land I should have the right to cut it down if needed.
50	I need a better understanding of if and when the city is going to prune the trees on and adjacent to my property that are growing into utility lines. Over 30+ years, this has always been a mystery to us.
51	I object strongly to the use of Roundup/pesticides at our parks. It is known information (and very available) that this causes birth defects and various health side effects. With educating people will understand we are in this together and need to help with weeding. Promoting to schools to get kids out there to help! With stewardships we could solve this! Earthcorp and Green Kirkland are awesome. To inform folks with the info would be great. Thank you for all you do already, realizing $ and paid folks can’t do it all.
52	I realize that not everyone uses the internet, but please don't spend money and paper advertising the incentives of saving trees. It's counter-productive. Still with electronic notification methods and maybe informational meetings at libraries in the area.
53	I see new developments where large trees are fenced and protected during the building process. But in the long run, many of these trees are/will be too large. Instead of insisting on keeping existing trees, I believe developers should be required to replace existing trees with new trees that are more appropriate to the location. Plant more mature trees that have been chosen for their appropriate size in the development.
54	I see this as a biased survey. I don't think the city government should be spending my tax money to promote the planting of trees. I like trees and I've planted them in my own yard; I don't need the city now telling me how or if I decide to take one out. I also see it as a false premise that trees increase a house value. In fact, overgrown or fully mature trees are as likely to lower property values if they drop debris on the house or block a view. This survey didn't seem to survey my feelings about a tree policy in Kirkland; it seems to be a survey to see how willing I am to

	spend more of my city taxes on public policy to increase tree coverage. This would have been more useful to give a paragraph of education first. Kirkland spends $xx / year on tree policy and forest support. This is Y% of the total budget. Some like to live in a mature forest. Some like to have a view. I can't imagine everyone has a common view of tree policy.
55	I think an urban canopy greater than 60% is an achievable goal. It would be wise to assess the canopy in neighborhoods, rather than average the whole city.
56	I think Kirkland should continue to strive for its original goal of 40% coverage (in the original city limits). There are no more trees in the area as a result of annexation. This is a rather capricious reason for declaring victory on this issue, don't you think?
57	I think the city of Kirkland does a wonderful job with its landscape and hope that the attention to detail I see eventually propagates to Finn Hill. Thanks!
58	I think the city policy on restricting tree removal or requiring tree replacement on a private homeowner site is overboard. I know trees have benefits, but we've gone too far in Kirkland with in tree requirements on private property.
59	I think the council has given the city too much say into tree's and whether people can keep or cut trees. Our neighbor has a big Cotton wood and the roots are raising havoc with our patio, our yard. The tree is approx. 30 feet away from our house and the roots are surpassing our home looking for water. I have small cotton woods growing in my yard, roots 3 to 4 inch in diameter growing near our foundation all from our neighbors' trees.
60	I think the removal of cottonwoods on private property should be allowed at any time. Their removal should be encouraged on public property that are not wetlands/forests (street & formal parks)
61	I think trees are an important part of the city's landscape and character.
62	I think we have too many trees in some areas and don't need people to plant more in these areas. I don't think citizens should be encouraged to plant more trees. It could be that their property already has enough trees and adding trees would be unhealthy for the existing trees, etc. Expert assessments should be made as to where trees would benefit thinning and where more trees should be planted, not just planting whatever, wherever by default. Property owners should perhaps get a subsidy from the city for a periodic tree expert assessment. Our neighbors have several huge trees that appear to be unhealthy with large dead branches hanging near the edge of our property. They could use an expert opinion about what to do about it. They certainly don't need to plant more trees.
63	I understand that the city likes lots of trees and vegetation and so do I but the policies are totally out of balance. The homeowner's hands are tied when needing to take down a tree even when it's obvious the tree is either dead or a hazard to the property. Many areas have been designated wetlands/green spaces then just left to grow wild where rogue trees and vegetation is out of control. When we call the city about taking care of their areas I frequently hear that they can't do that anymore because they don't have the money. That's a problem for me because they shouldn't have been designated in the first place. It's kind of like a builder going out to build a house are not setting aside enough resources to finish the project.
64	I want my view back ... Willing to donate if trees are topped or pay for it.
65	I was able to get the City of Santa Monica, CA, my home town, to enact new tree land marking legislation that made it legal to landmark trees on private property. They had lost about 75% of their tree cover in 40 years due to new construction of whole-lot condo complexes. Without strict laws, trees inevitably fall victim to the whims of owners and construction speculators. I'd like to see property tax credits granted based on the number and size of trees maintained! Stronger anti-cutting penalties, more rigorous tree protection enforcement, and some new planting incentives would set the tone while building new community awareness of the importance the City of Kirkland places on its urban forest.
66	I will spend over $2000 just for permits and professional care of trees required by the Kirkland Tree Ordinance. I will never plant another tree in Kirkland as long as there is a Tree Ordinance that prevents me from taking care of my trees myself as long as I am able. The cost and inconvenience is just too much, and it is totally unnecessary. The annexation area had higher percentage of canopy than Kirkland, without such an ordinance. Urban density is a bigger factor. The city needs to have more open spaces where trees can grow without being a hazard to structures.
67	I wish it was easier to report sign blockage due to overgrown trees and vegetation.
68	I would like the city to think in terms of forest and habitat, instead of "just trees." Diverse, intact properties such as Woodlands Park are more important than planting strip trees. The city should purchase and maintain existing wooded properties. These are far more important to wildlife and water quality.
69	I would like to see an increased and continued focus on maintaining the mature tree cover in the city of Kirkland.
70	I would like to see consistency in pruning of trees at the power/phone lines. Or, not allow planting under power/phone lines. Some of the pruned trees are now misshapen and not as attractive.
71	I would like to see the Finn Hill green belts developed into a trail system.
72	I'd like to see more attention paid to using fruit trees as landscaping. We do this in our yard and it's great to have trees that also provide food. With the help of City Fruit, there should be volunteers to pick the fruit as well.
73	I'd like to see more fruit or nut trees
74	If a developer has to retain certain trees on a property, be sure that the subsequent owner retains them as well, or eliminate the requirement for all. Trees seem to disappear as soon as a redeveloped property is sold. Consider a stormwater credit on the utility bill for properties with exceptional canopy coverage.
75	If the city requires trees be planted they must have a program to clean up after the trees and maintain the trees of our city. Bottom line this is a city not a forest. Streets signs and street lights should not be blocked by over grown trees.
76	If the City wants more trees, do it on public property owner and quit regulating private trees
77	If there was a way to provide an incentive for property owners to maintain conifers properly to avoid future property damage that would go a long way toward encouraging residents to care for trees instead of cutting them down.

78	If we organize could have a balance for most cherished lake views and nice trees to complement our environment. Right now too messy, lower branches of pin oaks everywhere. Not pretty at all.
79	I'm a big fan of trees in Kirkland. They add a lot of character. I am NOT a fan of taxes. We pay too much already. If we need more money to help with tree maintenance or education cut something else.
80	I'm glad the city cares about trees. It's a wonderful "cause"!
81	I'm glad you are doing this!
82	In addition to tree, I'd like to see city take some action on discouraging the usage of weed killer and pesticides. Those post a big impact on our environment for our future generations too and they are hidden dangers!
83	In my opinion, I feel the survey is slanted for further protecting or enhancing tree development. Trees grow like weeds. Trees along public streets are hazardous; they can fall on cars passing by and on power lines causing extreme power outages that can last for days sometimes a week or more in addition to the cost of labor to restore the lines - these costs are then passed on to the consumer. Trees disrupt views - the magnificent vistas in the Pacific NW are reasons why people populate to the region. Yes, trees provide many health and aesthetic qualities, but a balance needs to be implemented. The mountain and lake views are substantially diminished with so many trees; we've gone crazy in my opinion. The management plan needs to be seriously reviewed to enhance our vistas while helping to preserve our habitat and erosion issues. Restricting dirt bikes and motor scooters from protected areas needs to be reviewed; it would eliminate the need of planting more trees if the natural habitat were not damaged by such activities. More dog parks for dog owners to avoid the trampling of our forestry areas; enforce the leash law restricting dogs from having a free run through our forests and damaging the wildlife. Not an easy task but one that needs serious revamping.
84	Individual property owners should not have the city dictate what they can and cannot do with trees on privately owned property. Too much legislation already.
85	Instead of encouraging the public to plant inappropriate trees in all the wrong places, why don't you encourage the proper planting and maintenance of the trees that already exist? There should be restrictions on tree height/width in certain locations in residential neighborhoods. The public needs to be educated about the growth habits and eventual size of the trees they are planting! I love trees, but spend too much time and money dealing with the damage caused by misplanted and unmaintained trees in my neighborhood!
86	I really do think there are too many trees which obstruct excellent views such as the water and mountains which are truly wonderful. I come from a country (England) which has an excellent balance of trees in the countryside so that views are not obscured. Frankly, I think there are far too many trees. I would almost say that some people are obsessed with trees. They cause many power outages; in many first world countries, trees are not allowed within falling distance of a power line. In fact this survey is slanted towards the view that more trees are better, when perhaps the opposite may be true.
87	It is currently too easy and too cheap for residents to cut down trees without consequences.
88	It seems like recently most building sites in Kirkland are going in and taking every bit of vegetation out, thus removing old, but healthy growth trees
89	I've been worried to see the tree clearing along 405 S near NE 70th and 520. I see the old growth trees in Kirkland as a huge benefit to our region. They help define the character of our corner of the Pacific Northwest. I wish the city could do more to prevent residents from clearing large healthy old growth trees from their properties. Tree removal on private properties affects not just the home owner, but also the neighbors and the whole neighborhood. If everyone removes just one large tree each year, as time goes by we'll lose a big piece of what makes our city special and desirable.
90	I've lived in Holmes Point for 25 years, and I would like to see the SDO for tree retention maintained and enforced.
91	Keep Kirkland green and beautiful. And we also need more off-leash dog parks. Thank you.
92	Keep the Finn Hill forests forested! It's not just a place for humans.
93	Keep trying to educate the public about trees. We really do not own any of them...really!
94	Kirkland generally has ample flora, and has been easy to work with in the "old" city.
95	Kirkland has a great park system and tree maintenance program. We need to increase the enforcement of existing tree related ordinances.
96	Kirkland is a city of views. Let property owners trim trees for views. Last i heard the city and 1-1/2 arborists on staff. Question if we really need this
97	Kirkland is being taken over by trees. They are nice when they are small but they all grow up onto 50 foot monsters. Kirkland is an urban view community. There is a point when there are too many trees. We are there.
98	Kirkland is wonderful due to its public parks. Thanks for maintaining for all Eastsiders to enjoy.
99	Kirkland made it a nightmare for my wife and I to build a single family home on Rose Hill because of the trees. The threw every piece of red tape at us and finally after 4 arborist visits, 2 redesigns of our house, and $10,000, the city employee admitted to misunderstanding the regulations and gave us the green light. This was all while keeping almost 3 times the required number of tree credits for our lot. It's not even like we wanted to scrape the lot bare... we literally had to spend 8 months and $10,000 just to get them to approve the tree removal when we were keeping 3 times the required number of trees.
100	Kirkland needs to educate people not only about trees but about Kirkland's policy and laws concerning trees.
101	Kirkland's character in part stems from its parks and trees, so appreciate the efforts expended by city crews to make it happen and looking good. Thanks.
102	Let people pay for and trim city trees hiring a professional with your written permission/ special form.
103	Lots of the publicly planted trees in NRH end up dying due to lack of watering. Would prefer to see money going to care for what we have and making sure that trees are pruned to allow us to view oncoming traffic especially along the 124th corridor where smaller trees are blocking our ability to safely pull onto 124th from side streets. Ne 95th and 124th is a particular problem.

104	Love trees! Only major concerns are falling limbs/trees and obstruction of vision to see traffic especially on side streets.
105	Love trees but the City of Kirkland has gone too far in forcing the citizens to plant and protect trees that aren't even owned by the homeowner. They need to find a middle ground and solution to the trees in planter strips that are owned by the City not the homeowner.
106	More trees, better frequent public transportation, less malls and parking lots
107	My neighborhood and property have many tall older evergreens. As the trees are aging, my neighbors are cutting theirs down, which makes me feel guilty about doing so. However, as I get older, I struggle to maintain my roof and yard due to the continuous tree droppings and moss. I don't know what the solution is but I imagine many homeowners have the same dilemma. Perhaps there is a way for homeowners who cut their trees to sponsor new trees in other locations, similar to new development mitigation.
108	Need to know what to do with extra fruit. Love to donate but I can't pick it myself.
109	Never enough trees!!
110	New construction/development get away with so much with loopholes in the plan (buy replacement trees but let them die/don't plant. More inspection!
111	No
112	No
113	No
114	No
115	No offense, but employing a full time urban forester is a waste of money. You are a very nice person, but your position is non-essential.
116	Not a very good survey, I'm sorry to say. Mike Pritchard, mikep@5circles.com
117	Offer incentive to property owners who keep stands of old-growth trees together for wildlife habitat even though their views are blocked!
118	Once again, please landscape and plant trees in Kingsgate along 124th Ave from 132nd St.
119	Open-Ended Response
120	Ordinances are strict enough to discourage proper and beneficial maintenance. Expanding this is counterproductive. Use the money on basic services: police, fire protection, etc.
121	Our neighbor took down two perfectly good 100 year old fir trees this summer. Either the regulations are too lax to allow this, or they are not being enforced. Either way it is tragic.
122	Our neighborhood and the one next to us routinely cut down tall Douglas firs, partly because there has been no visible effort to share reasons not to.
123	Plant something other than Oak or trees that block the views and plug the drains. Most people don't have views and deserve to see the lake without obstruction.
124	Planting on the parking strips simply encourages dog owners to leave dog wastes on the strips. We have an issue in Kirkland/South Juanita with dog owners not picking up after their dogs; this is disgusting and not encouraging to plant trees or have greenery anywhere. The city should be more forceful on maintaining cleanliness on the street before planting trees.
125	Please do your best to conserve the forests in our area!
126	Please don't create more rules that homeowners need to follow. Let us do what we want with trees on our property. however, feel free to educate us
127	Please don't over-react about wanting to promote a healthy tree canopy so it is so difficult and expensive to replace an ailing tree. To those doing everything they can to save every tree ... I LOVE trees and am the biggest promoter of wildlife habitat around ... but the quicker I can afford to change out an unsafe tree and get a better tree in the ground the more robust the future of the tree canopy. It is so ridiculously expensive for the average person to get through your permit costs and the necessary documentation that we can't afford to then pay to have someone safely take out a tree so we can replace it for a more robust tree canopy. Make it reasonable.
128	Please help to keep more trees in Kirkland! Start a Heritage Tree program like Seattle has to celebrate and educate. Education will only help a small fraction; enforcement is the only way to protect our trees.
129	Please protect the urban forests on private and public lands with additional funding from surface water fees and other grant resources and property tax collections
130	Please stop condensed building. Please limit building height. People should see trees, not high-rises. Don’t turn Kirkland into Bellevue. Hire real city planners rather than private interest puppets.
131	Private property owners should not be restricted to cut down trees that belong in a forest. I have had seeming healthy trees fall in the wind. Thankfully, no one was hurt. The city should allow larger fir, cedar, and maples to be removed without restriction. The city should encourage the planting of safer trees. Save the big trees for the actual forest.
132	Property values in Kirkland are based on views! So, tree planning, mgmt. must take that into consideration
133	Protecting views is important for many of us and I am unaware of any city efforts to help on this issue. Protective covenants are not sufficient.
134	Repairing the sidewalks along Central should be done WITHOUT the removal of all those old, beautiful trees....please.
135	Ridiculous survey. What about obvious questions like: Over the previous 10 years of increased forest canopy coverage, my view has been improved or been diminished? Over the previous 10 years of increasing forest canopy, I feel that my house value has been positively enhanced or not. This seems like a survey to get me to support more trees in Kirkland. This isn't southern California where we have a sun problem and need to shade our houses to keep them cool. Get a clue. We have moss problems on our roofs because our houses have too much shade! Our lawns and gardens can't grow because our season is too short. I like trees where it the property

	owner wants but I don't want the city to tell me how to plant my yard or what to keep or not. Personally, given our views of the lake, I'd rather have a view than tall trees. If we are looking to put in city advice, I'd rather have the city coach people that semi dwarf trees make great sense for (sub) urban living and they rarely exceed the house height. This provides privacy and fruit if you choose. Be considerate; don't block the view of the lake for your neighbors.
136	Save the trees on Kirkland Avenue. Don't wait until you look back with regret!
137	School curriculum environmental service projects that---oh-by-the-way---engage family, neighbor, neighborhood, youth and seniors, to----oh-by-the-way---enhance resourcefulness and care of both natural and social environments. Engages, matures adolescent energy, and melds it with---oh-by-the-way---revitalized, lonely marginalized senior intelligences.
138	See #9. There needs to be recognition that people living in heavily treed areas face some different issues than those who simply have trees along their street or one in their yard. This particularly relates to the need for trimming to maintain views or /and sunlight, and potential hazards.
139	short plot permits eliminate trees contractors remove too many in the guise of their projects. need to protect the tall pollution controlling trees that are removed all along freeways and etc. and with new bldgs and construction
140	Should be ok to trim for view and should be regulation on types of trees that can be planted in view neighborhoods.
141	Single Family property owners should be allowed to trim, cut down, and generally maintain the trees and any other landscaping on their property without having to pay a fee and submit forms to the city with what they plan on doing as long as it conforms to the neighborhood bylaws (if any).
142	So many trees, not enough city crews to take care of them. Too many removals when there are others construction alternatives available. Removal should be the last choice!
143	Stop planting trees and shrubs at crosswalks and intersections before someone gets killed all for the precious tree. There needs to be laws and inspections for this.
144	Thank you for caring about the trees that make Kirkland more attractive, calming, and healthy.
145	Thank you
146	Thank you
147	Thank you for asking for citizen input.
148	Thank you for caring enough to do this survey. Since I have moved here in the mid 1980's, the area east of Lk WA has lost many of its native trees to development. Just looking at the satellite maps during the TV weather news reveals how much less green the whole eastside of Puget Sound now is. This area would normally be heavily forested with Douglass fir, alders, etc. keeping it cool, shady and moist. Now it is up to local people to try to maintain a tree balance but I don't think that many understand this. Besides trees have unique beauty. So thanks for addressing this issue.
149	Thank you for caring. I really feel that we need to protect our trees. Perhaps the tree cutting companies are the tree’s biggest enemies. They market using a lot of fear tactics.
150	Thank you for conducting this survey. As you have seen, I feel strongly that private citizens should have the right to make landscaping decisions regarding their own property without interference from government unless public safety can be proven.
151	Thank you for creating this survey, I think this is a very important topic.
152	Thank you for seeking public comment!
153	Thanks for asking
154	Thanks for asking for opinions.
155	THANKS for doing this important work!!
156	Thanks for putting this survey together!
157	The answers you are looking for are well known by those of us who follow this issue. The way that most of this is worded is obviously just ripe for the city to pull out "survey results" that support what you already intend to do.
158	The biggest problem is fear of what government will do later. If I plant a tree today, on my property, do I need a permit to remove it? We have a green common area that we (as a group) bark (mulch) and such; are we allowed to plant trees in it? Discouraged from it? There's just no clarity as to what the rules are and what will bite us later.
159	The City has planted trees in the median of 124th St, west of 100th Ave., several times, and then neglected to water those young trees. What a waste of time & $$$.
160	The city is doing a great job supporting park recovery projects
161	The City should allow citizens to make management decisions regarding the planting, maintenance, and removal of trees on their property by relaxing current tree ordinances. Providing education and arborist consultation is more effective when requested by the property owner.
162	The city should consider all uses of an area and how trees can enhance or hinder the various activities that people engage in. It's shouldn't be a one size fits all plan.
163	The City Tree Ordinance should be changed to give back to the property owner the right to remove trees they do not want. I'm okay w/ the City requiring supplemental planting if existing trees are removed. Trees are NOT more important than people or property owner rights.
164	The contract with PSE to maintain trees that are on private property that fall within the "maintenance zone" needs to be readdressed after recently having two trees on our property butchered by an "arborist" hired by Asplundh to remove branches and limbs that may potentially cause damage to the power grid. Also, on heavily wooded road, Juanita Drive, why doesn't the city look into burying the power lines to prevent outages vs. hacking the crap out of trees, further damaging and potentially leading to disease.
165	The current ordinance is an extreme overreach on a non-problem. This is the Pacific Northwest and vegetation grows very fast. Rather than driving up housing costs with unnecessary regulations, developers and owners should

	be incentivized to plant trees rather than penalized by requiring permits, inventories, and building adjustments and relocations. In our case we have planted numerous trees on our lot (many now over fifty feet tall) over our 38 years in Kirkland and are now being penalized by the current ordinance for our efforts. We should be able to manage our own forest as we see fit.
166	The cutting down of healthy trees on private property needs to be restricted. We had a beautiful old mature evergreen tree that was the on the property behind us facing the lake, Yes it blocked part of our view but it was beautiful! The owner is starting to cut his trees down to make way for a big BOX home that will be so ugly. I would much rather have a tree blocking my view than the back of a home.
167	The Kirkland City Council has overstepped its authority in annexing Finn Hill, Kingsgate, and Totem Lake. The City of Kirkland did not get the expected payoff from the State nor King County when the "Council members" voted to annex. The citizens of Kirkland did not even get a vote on this issue. Why? The Kirkland City Council methods to win approval for incorporation were (illegal but not prosecuted due to the State & County wanting this process to continue) it's all underhanded. Your open houses at Finn Hill JH and Juanita HS where one-sided diatribes which illegally promoted incorporation and did not allow the public to present their pros and cons to incorporation nor the process used. Where was the debate process? The fact that city staff mismanaged the payoff process and (documents for reimbursement) costing the city millions in unshared expenses means some people should be fired immediately! The size of the Kirkland bureaucracy has outstripped its usefulness. Solution: Freeze retirement plans, eliminate office staff or give an across-the-board 15% pay reduction, fire the dog catcher at Denny Park, consolidate Department heads, eliminate fee's for green energy (solar install permits $750.00! or more), Stay out of peoples yards unless invited. Next time paint Kirkland Police cars blue again. This Darth Vader mode has gone far enough. Gradually expand public access to Lake Washington with new boat launches on road ends. Areas that were formally unincorporated King County should be treated differently when it comes to Kirkland City code. Take half the revenue from the card rooms and set aside money for low income and senior home owners forced to complete sewage hookups that are mandatory? Without public pressure saying STOP, at a time when all financial indicators say save money you looked to tear down several popular fire stations. We are also watching the efforts made behind the scenes to eliminate the Houghton Community Council.
168	The new RR corridor is a great opportunity to plant new trees!
169	The process just to make our own neighborhoods and private properties safe from overgrown and poorly planned trees is silly. City council needs to re-address the codes and encourage planning and building practices to adhere to more strict guidelines so homeowners don't have issues of safety down the line.
170	The required question on trees between my street and sidewalk should have another option if it's going to be required. I don't have a sidewalk and don't have trees on the city right-of-way. I am glad Kirkland continues to pay attention to trees. The annexation didn't add any net trees to the world, so please keep trying to increase the general tree cover.
171	The tree ordinance is a good start but it is not stringent enough to protect our trees.
172	The tree regulations in Kirkland are far too extreme. It is ridiculous to prevent property owners from removing more than 2 trees per year on their property. Having tall trees so close to our homes in a stormy climate is a life threatening safety issue. Furthermore, when these trees become a danger it can be over $2,000 per tree to remove them since they are so close to homes. I believe the City needs to allow more trees to be removed, particularly during redevelopment projects, and allow new trees to be planted on these properties at safe distances from the homes.
173	The trees along the downtown streets and Market Street (in the median) look awful and need to be pruned and maintained. It's ironic the City has strict rules on residents and doesn't appear to take care of their own trees.
174	The trees planted in and near city rights of way cause too many problems with downed electric wires, buckling sidewalks, view blockage of traffic line of sight and deaths where cars hit the trees, whereas if the trees were not so close to the street. In most cases the car would jump the curb, in this unfortunate occurrence, and then get right back on the street with only the need for an alignment, not a car crash. The city engineering standards should not conflict with the condition of the power lines above and future sidewalk damage caused by the tree roots. The trees in the right of way cause great maintenance for leaf clean up. Government should not have control over property rights with trees on private property.
175	There are some street corners west of Market that you can't see cars coming because hedges block the view.
176	There are times when I think there is too much emphasis on saving every tree to the detriment of the community growth and changes. Trees can be replaced and not all need to be saved and protected forever. My sense is that the residential areas of Kirkland have good tree cover, whereas Totem Lake and other nearby commercial areas could use more trees.
177	There are too many too large trees adjacent to my property, they have grown so tall we get no sunlight on half of my yard in summer and none at all in winter, they reduce the value of my property, increase heating cost, continually drop needles and other dendritis, pose a hazard of falling branches when it is windy; the trees are packed too close together and are generally ugly and a constant nuisance.
178	There needs to be a balance in the tree policy. The City seems to be very strict about telling homeowners to plant more trees and restricting them from removing trees. However, the City was more than happy to remove the trees necessary to build the Transit Center. And now the City has removed 7 trees along Kirkland Avenue. The rules should be consistent for the City and for the landowner.
179	There should be serious fines for people who don't properly maintain their trees and for those trees that block right of way views (e.g. impact traffic because you can't see around the bushes/trees). With the annexation, a lot of us don't know the Kirkland ordinances for trees and whether there are any grandfather clauses from when we were County. Sending out information pamphlets (especially before winter!) would be greatly appreciated.
180	There's a lot of sidewalks in Houghton area that have low branches over the sidewalk, or the sidewalk is obscured

	by adjacent shrubs - It would be nice to have you (City of K) enforce (i.e. drop off a reminder notice on the land owners door) to trim bushes, etc. and keep the sidewalks clear. In so many areas I have to walk in the road, especially on rainy days when the branches drop lower.
181	There's a need for trees, but it should come with balance. Smaller, less invasive trees are easily managed, cost less to maintain, and look fine. Market street is prime example of how giant trees just get out of hand.
182	There's too much heavy handedness from the City when a homeowner wants to make a rational and ecologically sound decision on managing private trees. There should be oversight, but it should be HELPFUL, not punitive.
183	This area has enough trees, and we don't need more. They cost a fortune to remove when they die.
184	This cannot be one size fits all. View properties need some form of protection like a height restriction from neighbors that grow trees into their views significantly. Trees are renewable resources and can be replanted. Many street trees when they get too old, break up the sidewalks making them unsafe for many to navigate.
185	This has been an issue of mine for many years. NE 132nd St. is an example, as well as Juanita-Woodinville Rd., where the planting strips w/ trees and grasses, sometimes 3 ft. high, look terrible much of the time. They probably aren't the kind that would look good anyway, and look worse when not cared for. Neighbors habitually chose not to care for the grounds near the streets. Let someone else do it, they seem to be saying.132 costs a fortune for bi-yearly pruning.
186	This is not a very well-written survey... The questions are leading and confusing.
187	This is one of the worst cities I've lived in regarding tree ordinances. You can't even prune a tree, let alone cut one down, if you dare suggest it's to help improve your view. Even if the city planted the wrong tree in the first place, they will not allow you to remove and replace it with an appropriate one. It's decreasing property values and resulting in people moving to Bellevue and other areas that are more flexible. It's time to be more flexible and responsive to your constituents instead of being "tree Nazis"
188	Too many trees in downtown block storefronts and signage. Along Juanita Dr. trees will block beautiful views of the lake.
189	Tree laws regarding removal on private property are too confusing. We had an evergreen tree pop up that no one planted directly over where our utility and water lines run down to the street. This will eventually cause major issues to our pipes, but even though we did not plant the tree we are getting hassles (not to mention major costs) to try to remove it. Seems like an important part of encouraging trees should be encouraging maintenance, safety, and ALSO removal of trees that will likely cause damage to things like sidewalks, pipes, and others property (all 3 of which will be affected by this tree). This should not cost the citizens exorbitant amounts. Also if our neighbors are not safely maintaining their trees it affects our safety and property. This is a frequent worry in our neighborhood.
190	Tree removal rules and regulations are unclear to me, as a new city member on Finn Hill. I'd like dangerous trees in neighborhoods taken out before they cause property damage.
191	Trees add an immense amt. of quality to our surroundings and keep our community in touch with the benefits of nature. There’s enough concrete. In this stress-filled world, people need to live in surroundings that feed & nurture their spirits and give to the quality of life for us all.
192	Trees and plants that are newly planted at schools should NOT be allowed, unless the LWSD will continue to maintain water and care for. They typically plant, water for a short time...turn off irrigation systems to save money and the trees and plants die or look horrible
193	Trees are disappearing too fast in Kirkland
194	Trees are so important and with the increased density we are looking for in the city, it is important that we keep and improve our tree canopy
195	Trees are so important!
196	Trees are something we all need to appreciate and you have mentioned the most important ones. What I have most frustration with are "tree huggers" who block views and are uncooperative with neighbors. I have accommodated my neighbors in every instance when they have wanted something cut and at my own expense. I am also aware of the need to leave the stumps in the ground whenever I have had a tree cut, because the danger of runoff. I think your policy should also encourage "windowing a tree" whenever it becomes unfeasible to cut the tree down or there is resistance from a tree hugger. I don't know what your policy is in these cases. Keep in mind we joined the city of Kirkland, but we do not wish to be hidebound by too many Dr. No. answers. As an aside, I find that you are doing a good job on cleaning the street gutters on 84th Ave NE, which I had to notify the County to do before we were annexed. But I am disappointed in that "tree lawn" areas (between the sidewalk and street) are not maintained by the homeowner, particularly if their house faces north/south and they never look over their fence; they should be encouraged to see the other side facing the street.
197	Try to get the next ISA (International Society of Arborists) conference in this region at St. Edwards State Park. The Climbing Championships are exciting to watch. It was at Marymoor a few years back. Also, PlantAmnesty arborists do a volunteer project for Arbor Day. They also dedicate heritage trees in Seattle. Perhaps we can bring some of these awareness raising events to Kirkland.
198	Un-permitted tree clearing needs more aggressive enforcement and more punitive fines.
199	Urban trees keep the city from becoming one slab of asphalt.
200	Views are also a big part of Kirkland. We need to respect views.
201	We are very disappointed in lack of support from the City as it pertains to a neighbor's planted "hedge" that reaches up to 2x the house and blocks our view but more than that is ugly! We realize natural trees will block our view but they are beautiful and nice to look at...thanks for listening!
202	We can't afford wasting public money on "weeds & seeds" in this current budget shortfall. GET YOUR FINANCIAL "STUFF" TOGETHER! QUIT PENDING MONEY YOU DON'T HAVE!!
203	We don't think the current restrictions accurately reflect the varying needs of treed neighborhoods. It would be preferable to cut 6 trees every 3 years, rather than 2 trees for 3 years in a row, for example. We have over 100

	trees on our property; some are diseased, some are fragile for wind hazards, some are in the last sunny spot on the property-! Give us back some flexibility. The result is the same for you, but it's less expensive and better planning for homeowners.
204	We have an abundance of trees in our city and in our state. Kirkland citizens desire their local government to provide basic services, police protection, and infrastructure maintenance. The only people in Kirkland concerned with trees is the employees of the Kirkland planning department; most of the planners do not live in the Kirkland and should not be dictating private property tree policy to the citizens who actually live here. Every Kirkland resident I have spoken with believes the City's tree policy invades basic property rights. The City should maintain plant and fret over trees in its parks and right of ways and leave private tree ownership private.
205	We have taken the initiative to plant trees in the planting strip in front of our home, but it would be great for neighbors to be able to coordinate this activity with neighbors. A few years ago Seattle had a neighborhood street tree program.
206	We have to take responsibility for tree maintenance, that's a given. Therefore we should not overplant trees. Trees are very important, but we must be practical too. Fortunately trees can grow 3-4 feet a year in our area. Let's keep this in mind. We have many financial obligations as a City. So trees must take second or even 10 place to some of our most pressing needs. Thank you for asking. Vikki
207	We have tree ordinances? Really? Some bad landscaper put trees in my yard before I moved in, less than 10 years ago. They are dangerous, and I can't cut them down? Seriously? Frankly, I'm not even sure what the ordinance is, because if I asked, you'd know who I was, and make sure I didn't cut the tree down. We kept most of the trees, but I need to cut a few down. Making that an offense is ludicrous.
208	We live in a dark cloudy area. I live in Kirkland for the meager sunshine and outstanding views. Stop using my taxes to encourage more tall trees that block sunshine and views. Encourage considerate neighbors.
209	We live in the evergreen state and have many more important issues to discuss/fund rather than spending time talking about trees and other such naturally occurring features of our city. I live on a 7200 sq. ft. lot and the city codes required that I plant 6 trees on my lot which is excessive and intrusive. I personally would have planted 3-4 trees for an aesthetic appeal but believe that each private property owner should be allowed to decide what they want to plant on their property. This of course excludes public parking strips; the city has every right and my support to ensure a uniformed look to public spaces. I suggest a rollback of the urban forestry rules that govern private property owners.
210	We love our trees but can't afford to repair the damage they inflict. Maybe volunteer programs or funding to help homeowners manage their existing trees? Also I don't think homeowners should be able to get rid of their trees without having to replace them.
211	We n have plenty of forested areas in Kirkland to filter air. Attention should be given to areas that need trees to retain soil. I want to make decisions about trees on my property!!!
212	We need more NATIVE plants in our parks and elsewhere!
213	We need our trees!!! That's one reason I moved to the Pacific Northwest.
214	We need to keep educating Kirkland residents about the harmful impact that invasive plants like ivy and blackberries have on our urban forest and promote action to remove them.
215	We seem bent on seeing trees as timber, lumber, rather than habitat for wildlife, beauty and the natural character of this area which is why I live here. Sound proofing, protection for wildlife. Beauty in trees for its own sake and for our health and well-being.
216	We've been dealing with King County until annexation so I'm not too familiar w/Kirkland's tree maintenance program & regulations. We have a large number of significant trees on our property and surrounding us and I love it. I truly dislike current building practices where they come in a totally remove all trees from a piece of property to build a house.
217	When I see a tree trimming crew on my street I wish that I could ask them to respond to a problem with a public tree without them having to go and get a request. I have asked and no response except that they couldn't do the trim without another notice. A waste of time for them and my neighbors.
218	While I love trees, I also have heard quite a few complaints from folks who love to raise their own vegetables, but find they cannot due to too much shade from their neighbor's trees. I also know someone who is suffering property damage (cracked walkways and dying plants) due to a neighbor who has decided to allow a cottonwood tree to grow in her small back yard - the roots are causing severe problems for the next door neighbor. There need to be ordinances to help those folks whose property is being negatively impacted by trees.
219	Why are developers allowed to clear all trees, and then plant two inch trees?
220	Why not incorporate a celebration for trees with one or more of the festivals in town?
221	Wise use of money by the city is more important than a few trees....the city needs to "hug" more money and less trees
222	Would have preferred that messy, fruit-baring trees had not been allowed in our condo complex. Development.
223	Would love to see an easy to understand brochure explaining Kirkland rules and regs about tree pruning and removal. This could get mailed to each household, and to each new owner who comes to the city. Also need more info on enforcement--what is a violation, what are the consequences, if we witness a violation who to call--weekday and weekend, etc.
224	Would love trails in the Juanita Woodlands Park (maybe that is County?) so folks can enjoy the forest. And awesome that the City is looking at ways to strategize the future of its urban forest goals. Thanks Kirkland!
225	Yes - don't destroy Big Finn Hill park by building a fire station on park land.
226	You cheated - keep the 40% goal for pre-annex areas. Play up the Tree City USA connection. Work with schools to educate kids and their parents about trees. Get developers to plant bigger street trees rather than pathetic ones some have done.

CITY OF KIRKLAND
WASHINGTON