



City of
Kelowna

City of Kelowna Phase 1 Engagement Summary

Sustainable Urban Forest Strategy Update

March 2023

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SCOPE OF THE ENGAGEMENT

The City of Kelowna is updating its 2011 Sustainable Urban Forest Strategy (SUFS) to manage and grow the urban forest over the next 10 years. Kelowna's urban forest faces complex challenges related to development and climate change, such as fragmentation, drought, extreme heat, and wildfire hazards. Building on the previous goals, objectives, and targets, the SUFS will provide an update to shift recommendations and targets towards achieving the City's current strategic objectives, including Kelowna's Community Climate Action Plan and Official Community Plan update, and increasing the climate resilience of the urban forest resource.

Engagement

Two rounds of public engagement will help inform the SUFS. Phase 1 of public engagement occurred in December of 2022 and aimed to help draft the vision, principles, and goals of the SUFS. The project team sought input on a long-term vision to guide planning, growing, managing, protecting, and partnering to steward the urban forest. The second phase of engagement is planned for the spring of 2023 and will seek input on the draft strategy, including ranking priorities for implementation.

Objectives for public engagement

- To inform the public about:
 - The status of our urban forest
 - The role of our urban forest in the community, including the unique environmental, economic, and social value of Kelowna's urban forest
 - The opportunities and challenges for urban forest management, particularly due to ongoing development and climate change
 - The responsibilities of different groups of people, including City government but also private landowners and the development community for urban forest stewardship
- To consult the community to:
 - Develop a long-term vision and goals for the SUFS that capture the community's perspective on the City's urban forest
 - Understand the community's willingness to support and participate in urban forest stewardship, whether led by the City or residents themselves
 - Identify challenges and opportunities to preserve and protect, grow, and enhance our urban forest
- To obtain feedback on the draft SUFS and the prioritization of recommendations (Phase 2)
- To build community awareness, support, and advocacy for our urban forest and the updated SUFS

ENGAGEMENT ACTIVITIES

The public was invited to provide input through an online survey and mapping tool in November and December 2022, which was hosted on the project page at getinvolved.kelowna.ca. Stakeholder organizations were invited to provide additional input during an in-person workshop on October 27, 2022. Details on opportunities for Phase 1 engagement are outlined in Table 1.

Engagement

Two rounds of public engagement will help inform the SUFS. Phase 1 of public engagement occurred in December of 2022 and aimed to help draft the vision, principles, and goals of the SUFS. The project team sought input on a long-term vision to guide planning, growing, managing, protecting, and partnering to steward the urban forest. The second phase of engagement is planned for the spring of 2023 and will seek input on the draft strategy, including ranking priorities for implementation.

TABLE 1 – PHASE 1 SUMMARY OF OPPORTUNITIES FOR ENGAGEMENT

	Engagement Activity	Participants
Nov/Dec 2022	Survey	347 respondents
Nov/Dec 2022	Mapping tool: Share locations you value	48 submissions
Oct, 2022	Online stakeholder workshop	22 attendees

Communications tactics used

Kelowna residents were invited to participate in the Phase 1 public engagement process. Information on engagement opportunities was communicated via several available online platforms to reach as many people as possible.

Platforms used:

- Dedicated SUFS project page and project updates mailing lists (Get Involved)
- City of Kelowna social media accounts: Twitter, Instagram, Facebook
- Press releases for the launch of the project and public open house
- Email invitations for targeted stakeholder workshops
- Sent event/survey links to the City's e-subscribe Climate Action and Environment list and Parks List

WHO WE HEARD FROM

On Kelowna’s project page, 360 engaged participants contributed to one or more feedback tools. We heard from 347 survey respondents and 48 mapping tool participants.

Survey demographics

Of the 347 survey respondents:

- 95% reside in Kelowna
- 85% are homeowners, 12% renters
- Most respondents live in Kelowna Central, Kelowna Southwest, Kelowna North, and Kelowna East Central (Figure 1)
- 88% of respondents are 25-74 years old: 44% are 25-55 years old, 44% are 55-74 years old, and 8% are 75 or older. 2% of respondents are under the age of 25 (Figure 2).

FIGURE 1 –WHERE SURVEY RESPONDENTS RESIDE

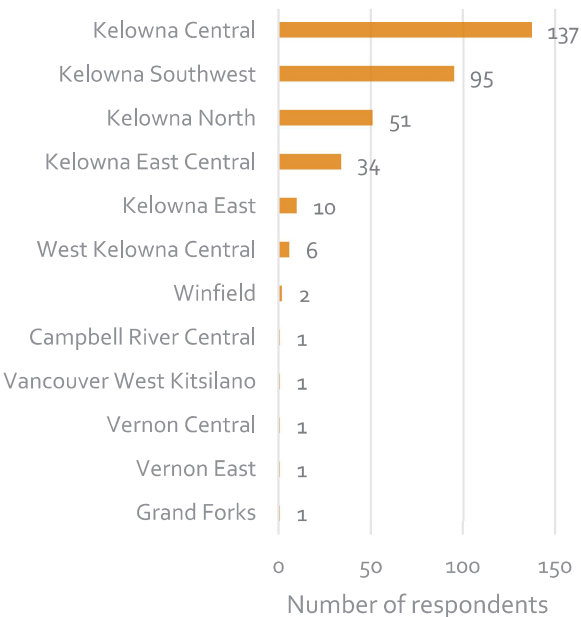
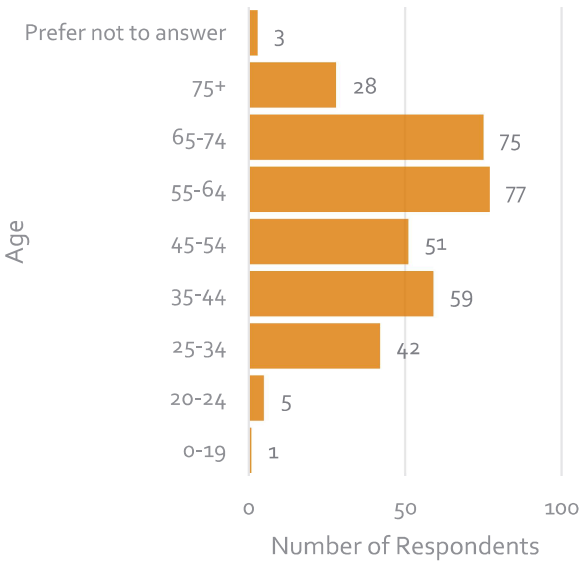


FIGURE 2 – AGE OF SURVEY RESPONDENTS.



Stakeholder workshop

- 22 stakeholders and six staff attended the online workshop. Stakeholders included members of the arboricultural, environmental and non-profit, utilities, development, and academic communities. Invitations were sent by the City via email to its targeted contact list.



WHAT WE HEARD

Results from the first phase of public engagement are summarized in this report. The detailed engagement results are available in the Appendices (Appendix A: Survey results, Appendix B: Mapping tool results and Appendix C: stakeholder workshop boards).

The report is structured around the engagement tools used:

- Online survey
- Mapping tool
- Stakeholder workshop

Online Survey

The online survey covered five key topics:

- Understanding how the urban forest is valued and vision for 2040
- Preferences for street trees (size and distribution)
- Priorities for urban forest management on City-owned land and private land
- Satisfaction with and preferred urban forest service levels
- Community stewardship of the urban forest

Understanding how the urban forest is valued and vision for 2040

Survey respondents ranked climate change resilience (shade and cooling of streets and buildings, flood protection, role in carbon cycle and storage), ecological (habitat and food for native plants and animals), and environmental services (e.g., rainwater management, air purification, wind protection) as the most important urban forest benefits to them and their community. Survey respondents ranked economic and cultural benefits as lower importance.

Respondents were asked to imagine what they would like Kelowna's urban forest to look like in 2040. Common themes included a vision for canopy expansion with large and mature trees (149 mentions), planting of street trees (81 mentions), use of local species (66 mentions), and stronger tree protection (46 mentions). Other frequent themes were creating a healthy, accessible, and diverse urban forest with a special mention of rooftop greenspaces and tree planting efforts in the downtown area.

The Urban Forest on Your Streets

Respondents were asked to identify the photo that most resembled their street and a preference for what they would like their street to resemble (Figure 3).



A. Few or no trees



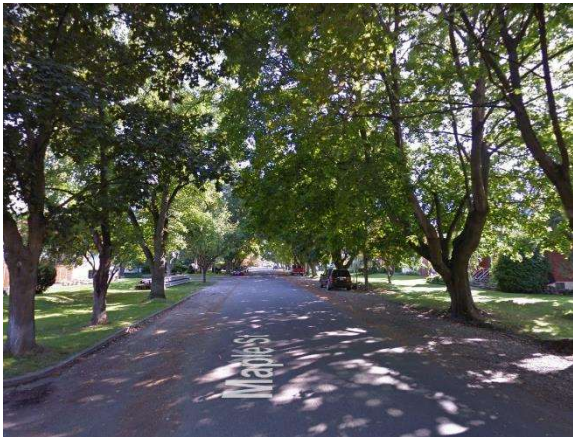
B. Regularly spaced small trees



C. Regularly spaced, medium-sized trees



D. Mixed spacing and species, medium-sized trees



E. Regularly spaced, large trees



F. Mixed spacing and species, large trees

FIGURE 3 – TYPES OF STREET TREE PLANTING PRESENTED TO SURVEY RESPONDENTS

The largest number of respondents currently live on a street resembling option A – few or no trees (23%) or option D – mixed spacing and species, medium-sized trees (22%; Figure 4). Eighty percent of respondents live on a street with no large trees present (Options A, B, C, and D). Only 4% of respondents live on streets resembling Option E – regularly spaced, large trees .

When asked which street they would prefer to live on, most respondents indicated a preference to live on a street with big trees, resembling option F – mixed spacing and species, large trees (47%), or option E – regularly spaced, large trees (25%). Twenty-six percent of respondents said they would like to live on a street with medium-sized trees (Options C or D). Only 2% of respondents would like to live on a street with small trees like Option B – regularly spaced small trees, and no respondents chose Option A – few or no trees (Figure 4).

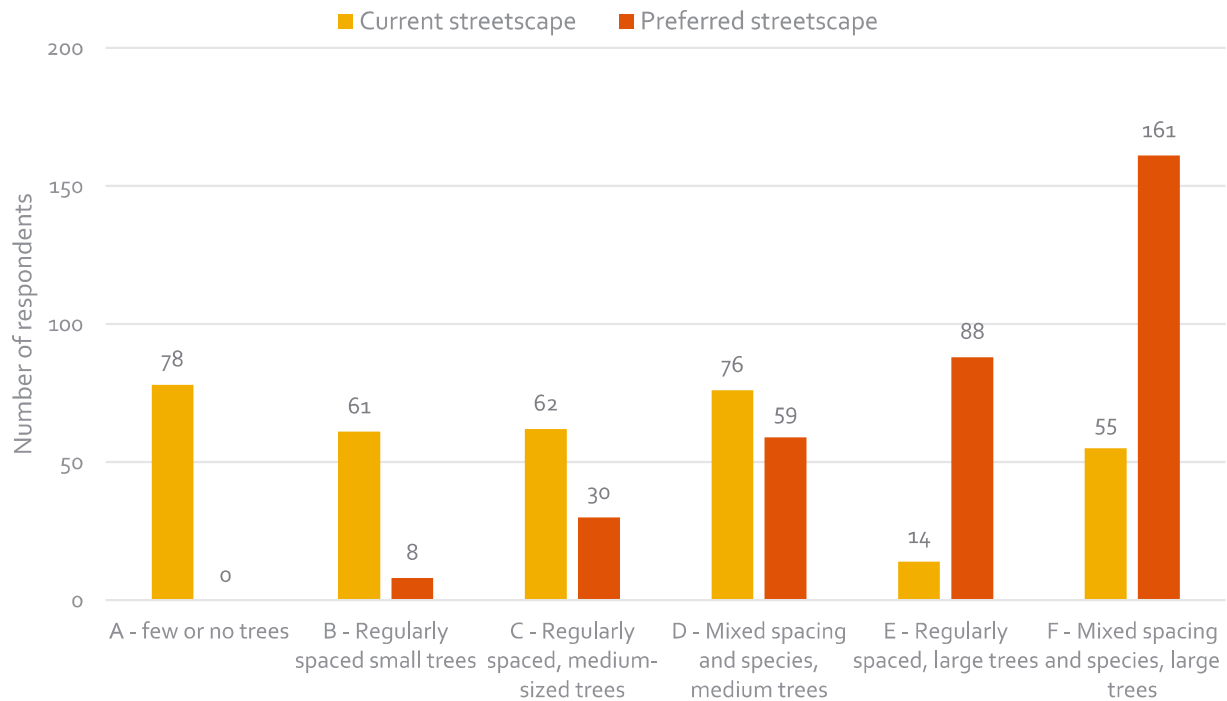


FIGURE 4 – RESPONDENTS’ CURRENT STREETScape VS PREFERRED STREETScape

Priorities for Urban Forest Management

Respondents ranked Urban Centres as the most important place for the City to plant trees (Downtown Kelowna, Pandosy, Capri-Landmark, Midtown, Central Rutland), followed closely by Core Areas (neighbourhoods next to urban centers). Respondents assigned medium priority to tree planting in Gateway (Industrial areas including and surrounding UBCO and Kelowna International Airport) and Suburban areas. Rural areas outside the permanent growth boundary were ranked as lowest in tree planting priority.

When asked where in those top priority areas trees were missing the most, respondents indicated commercial streets, parking lots, new developments, and plazas and paved open areas (55% of responses). Natural areas and parks only made up 8% of responses (Figure 5).

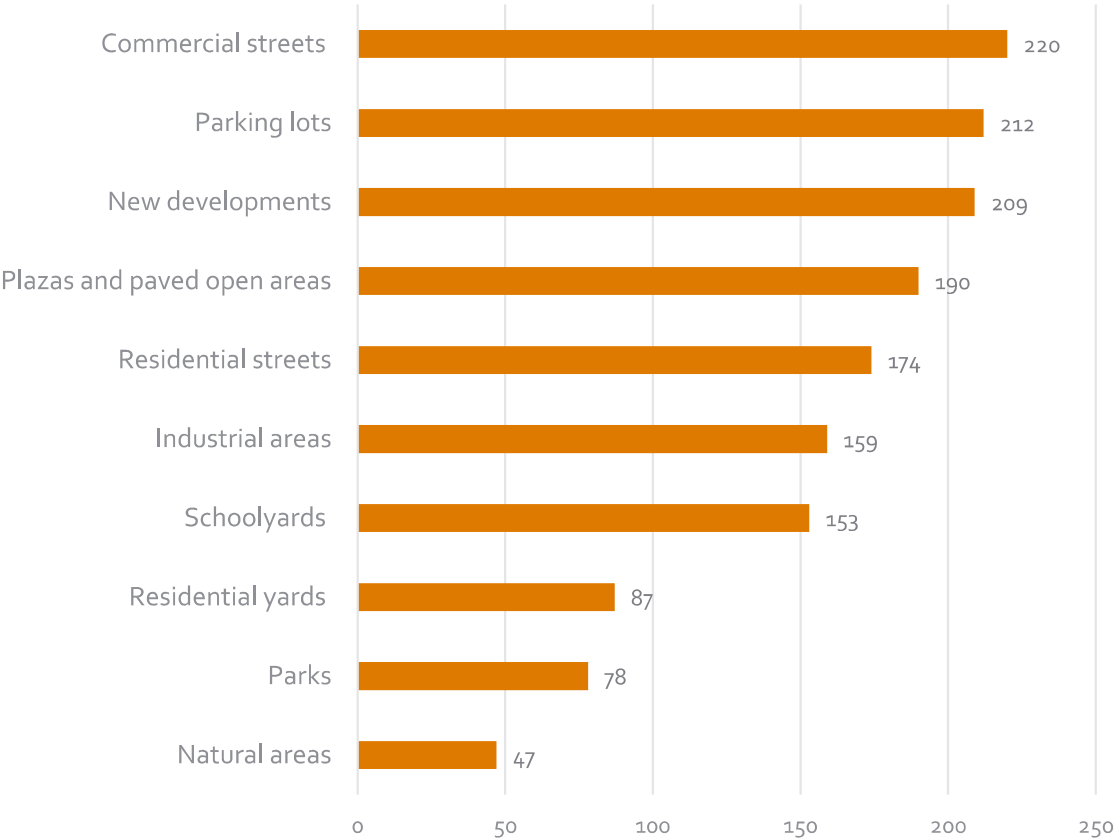


FIGURE 5 – AREAS WHERE TREES ARE MISSING IN NEIGHBOURHOODS

Priority actions on City-Owned Land

Respondents were asked to assign a low, medium, and high priority ranking to eight urban forestry actions on City-owned lands (Figure 6). Overall, most actions were ranked as either high or medium priority. The action which ranked highest in priority was the construction of new tree planting spaces on streets and paved areas where few now exist. Planting trees along streets and parks, adapting park spaces to more arid climate, improving guidelines for tree selection and engineering standards for soils were also assigned high priority in the ranking. For the most part, respondents ranked more public spending on the tree care of existing trees as medium priority. Respondents assigned lower priority ranking to increasing fees/penalties for tree removal and creating more opportunities for residents to participate in tree planting.

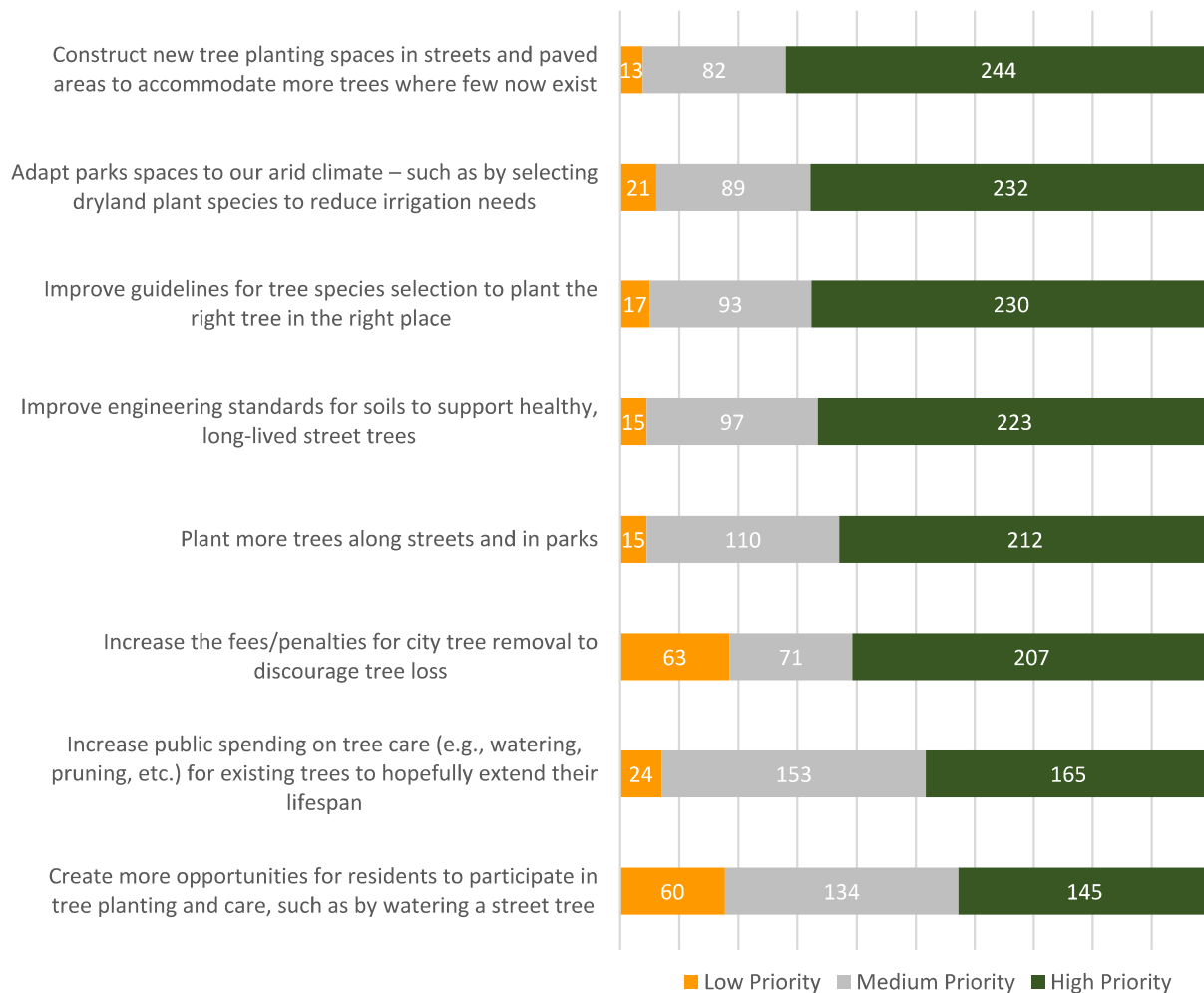


FIGURE 6 – RESPONDENT PRIORITY RANKINGS FOR EIGHT URBAN FOREST ACTIONS ON CITY-OWNED LAND

Survey respondents were able to provide additional open-ended comments about actions they'd like to see on City-owned land. Residents frequently shared the importance of public education initiatives to support general awareness about the value of the urban forest and the need for the city's urban forest management. Increasing tree planting with climate-suitable or native species is considered important to replace losses from street boulevards and public parks, as is taking a more proactive approach to the management of trees on City-owned land to meet expectations around utility conflicts, traffic hazards, and pest management.

Priority actions on Private Property

Respondents were asked to share their level of support regarding nine urban forest actions on private property (Figure 7). Overall, there was high level of support for actions proposed on private property. Increasing the required number of trees for new developments (multi-family, subdivision, commercial) was the most supported action. High levels of support were also shown towards requiring at least one tree planted per lot for new developments, improving the standards for tree planting, and formalizing tree planting as a

green infrastructure solution. Moderate to high levels of support were shown with regards to expanding programs like NeighbourWoods, tree protection measures during construction, and providing education on tree protection and water efficient landscaping. Actions which received lower levels of support were introducing a private land tree bylaw to protect a subset of trees on private land and rewarding developers that retain trees with small changes to building setbacks or a smaller building footprint with one extra storey in height.

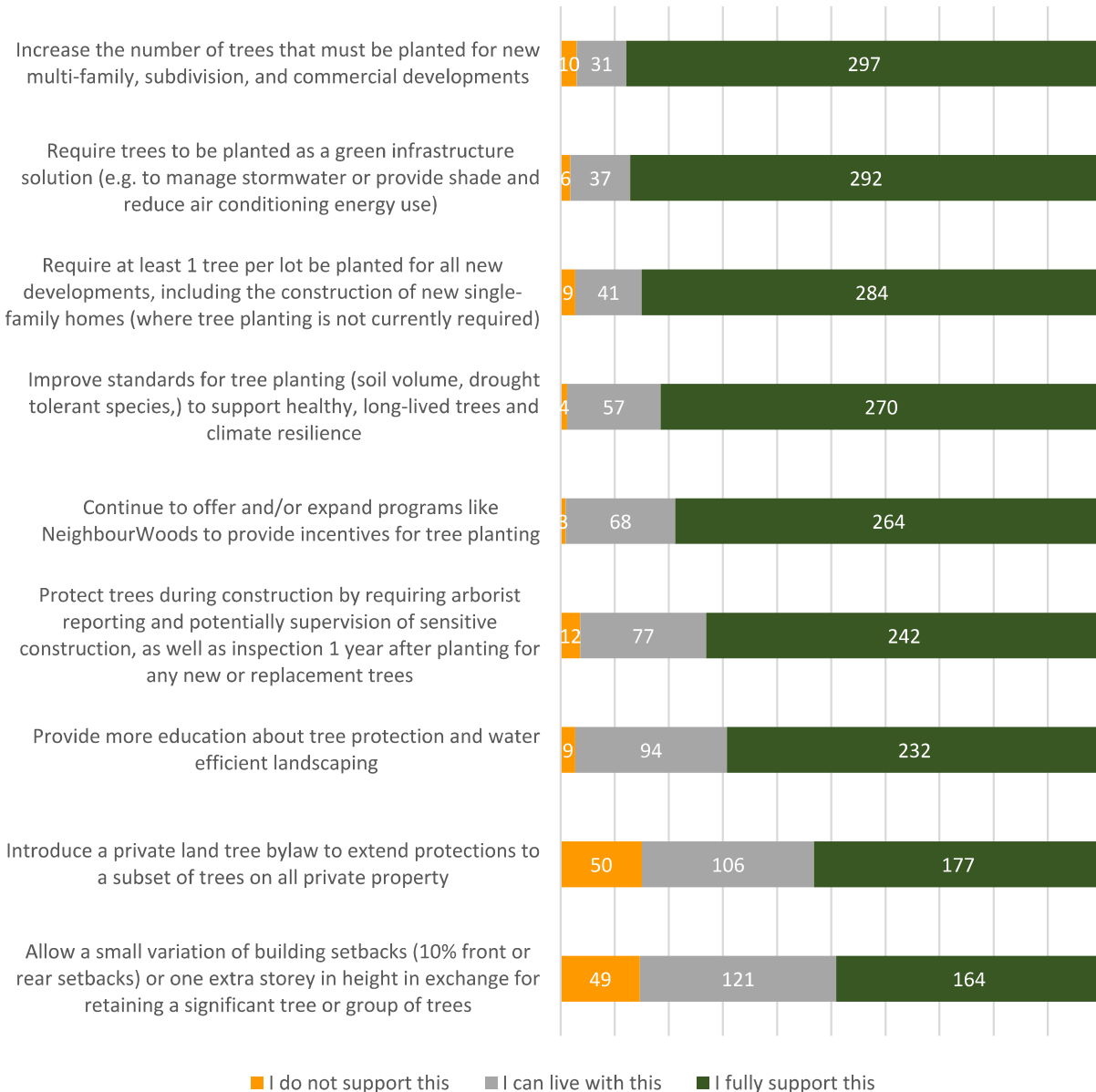


FIGURE 7 – RESPONDENT LEVELS OF SUPPORT FOR NINE URBAN FOREST ACTIONS ON PRIVATE PROPERTY

When survey respondents were asked to provide additional open-ended comments about actions on private property, the most common concern was the removal of large mature trees to accommodate development. 54 people submitted comments related to this topic. Several solutions to this concern were shared, including

placing additional tree planting and/or tree protection requirements on new construction. 33 people shared they believe education focused on private landowners is important for the urban forest. 24 people shared ideas about financial incentives for private landowners or developers to promote tree retention. Inadequate replacement of removed trees was also of concern. 4 people expressed a concern about cumbersome and excessive regulation on private land.

4.1.4 Urban Forest Service Levels

“Service levels” are a description of how Kelowna maintains a public asset, in this case city-owned trees.

Respondents were asked to rank satisfaction levels with current service levels for trees in parks and along streets. Survey respondents had mixed levels of satisfaction with the urban forest services provided by the City (Figure 8). Satisfaction levels were higher with regards to storm response/tree debris cleanup, dangerous tree removal, and tree pruning and maintenance. Respondents expressed neutral levels of satisfaction about wildfire fuel reduction and pest/disease control. Respondents were most dissatisfied with the level of public education surrounding urban forestry, with almost half of respondents expressing dissatisfaction. Respondents were also more dissatisfied with the level of tree planting and replacement as well as tree protection and preservation. These results are in line with respondents’ major concerns discussed in the previous section. The relatively high proportion of neutral responses may reflect uncertainty or lack of knowledge about the services that the City provides in urban forestry.

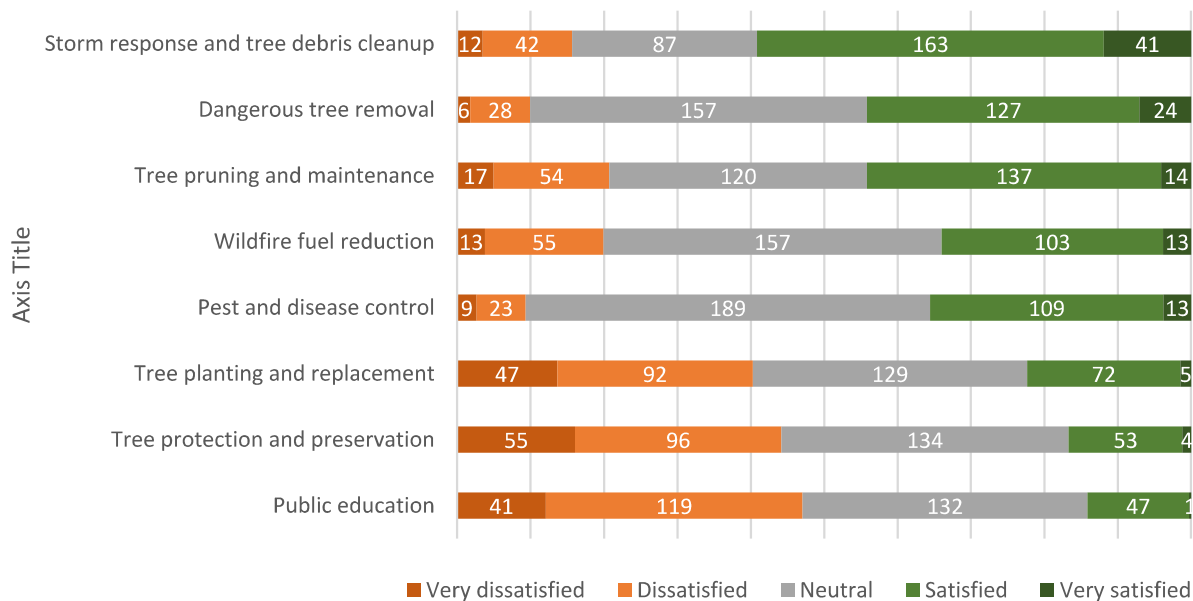


FIGURE 8 – SATISFACTION LEVELS WITH CURRENT SERVICE LEVELS FOR TREES IN PARKS AND ALONG STREETS

When asked to provide additional open-ended ideas for improving the City’s service levels, several survey respondents commented that they lacked enough knowledge of the City’s activities to assess their level of satisfaction. Some respondents called for more open communication with residents regarding urban forest services and city activities, while others complimented the public communications of the City’s parks and urban forestry crews. Ideas for specific improvements included prioritizing trees during streetscape design,

cleaning up woody debris from parks and trails more frequently, and supporting creating opportunities for residents to take care of a City or park tree.

4.1.5 Community stewardship

Community stewardship refers to activities that the community participates in to care for or contribute to urban forestry on public and private land. Respondents answered several questions about urban forest stewardship activities:

- 65% of respondents have planted at least one tree on their property in the past five years (35% have not)
- 64% of respondents have never watered a City-owned street tree or park tree
- 74% of respondents have not bought a tree through the NeighbourWoods Program in the past 5 years
- The top five barriers to planting and maintaining trees on private property were:
 - Not having enough space (33%)
 - Already having trees on property (31%)
 - Needing permission from strata (27%)
 - Lack of knowledge about trees (13%)
 - Cost of planting trees (13%)
- The top five factors that would encourage respondents to plant trees were:
 - Knowing what trees are suitable for our climate (51%)
 - Having space to plant them (37%)
 - Having someone to call to guide species selection, siting, or other questions (35%)
 - A tree planting subsidy for maintaining trees on my property (34%)
 - Knowing where to plant a tree in my yard (31%)

Mapping Tool

Online mapping tool respondents were asked to identify places by dropping a pin in the urban forest they value and in places needing improvement. A total of 146 locations were identified using the mapping tool. 84 (58%) were places of value and 62 (42%) were places needing improvements. The Central City area had the most locations submitted (32; 22%), including the most places to improve (20) and places of value (12). McKinley was the area with fewest locations submitted (1 place of value and 1 place to improve).

Places of value

Across the entire municipality, 56 percent of valued places were in a park (47 locations), with hotspots found on Knox Mountain, Mission Creek, and Scenic Canyon Regional Park. 37 locations were located in other contexts across the City, including unprotected greenspace or natural areas, streetscapes, and private yards. Valued locations are shown in Figure 9. Glenmore and South Pandosy were both common areas where places were valued, representing 40% of the total responses (34 locations). The most common reasons respondents valued locations were strong ties to a specific park, greenspace, or otherwise large tree. Other respondents indicated that they valued overall greenness or neighbourhood canopy cover rather than a specific tree. Other

reasons places were valued included seeing/supporting wildlife, opportunities for recreation, and general beauty and aesthetic value.

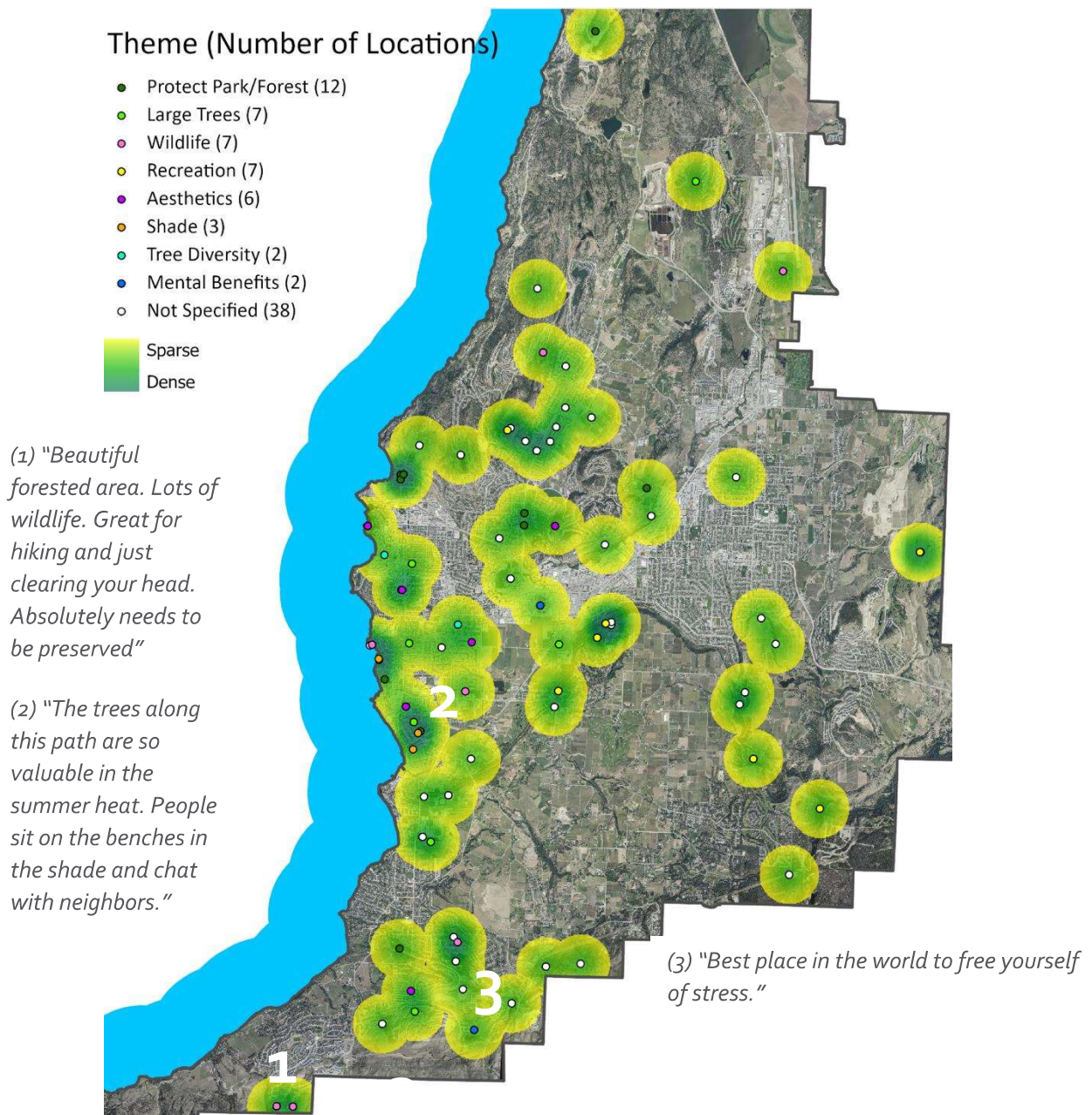


FIGURE 9 – URBAN FOREST PLACES OF VALUE IDENTIFIED IN THE ONLINE MAPPING TOOL BETWEEN NOVEMBER 12TH AND DECEMBER 11TH, 2022

Places needing improvement

Urban forest places needing improvement are summarized in Figure 10. Central City and South Pandosy were the most common areas for improvement (34 locations; 55% of responses). Other hotspots submitted for improvement were found in the Southwest Mission and the Glenmore areas. Thirty-nine percent of improvement locations were found in a park (24 locations), while 61% (38 locations) were not. Outside of parks, submitted locations were frequently residential streets, while a few were located in highly paved

commercial, industrial, and institutional areas like North End, Midtown, north Rutland, and at Okanagan College. The most common improvement expressed by respondents was adding more trees to the location. Other improvements included retaining trees, expanding trail systems and greenways, as well as more proactive debris cleanup and invasive species removal.

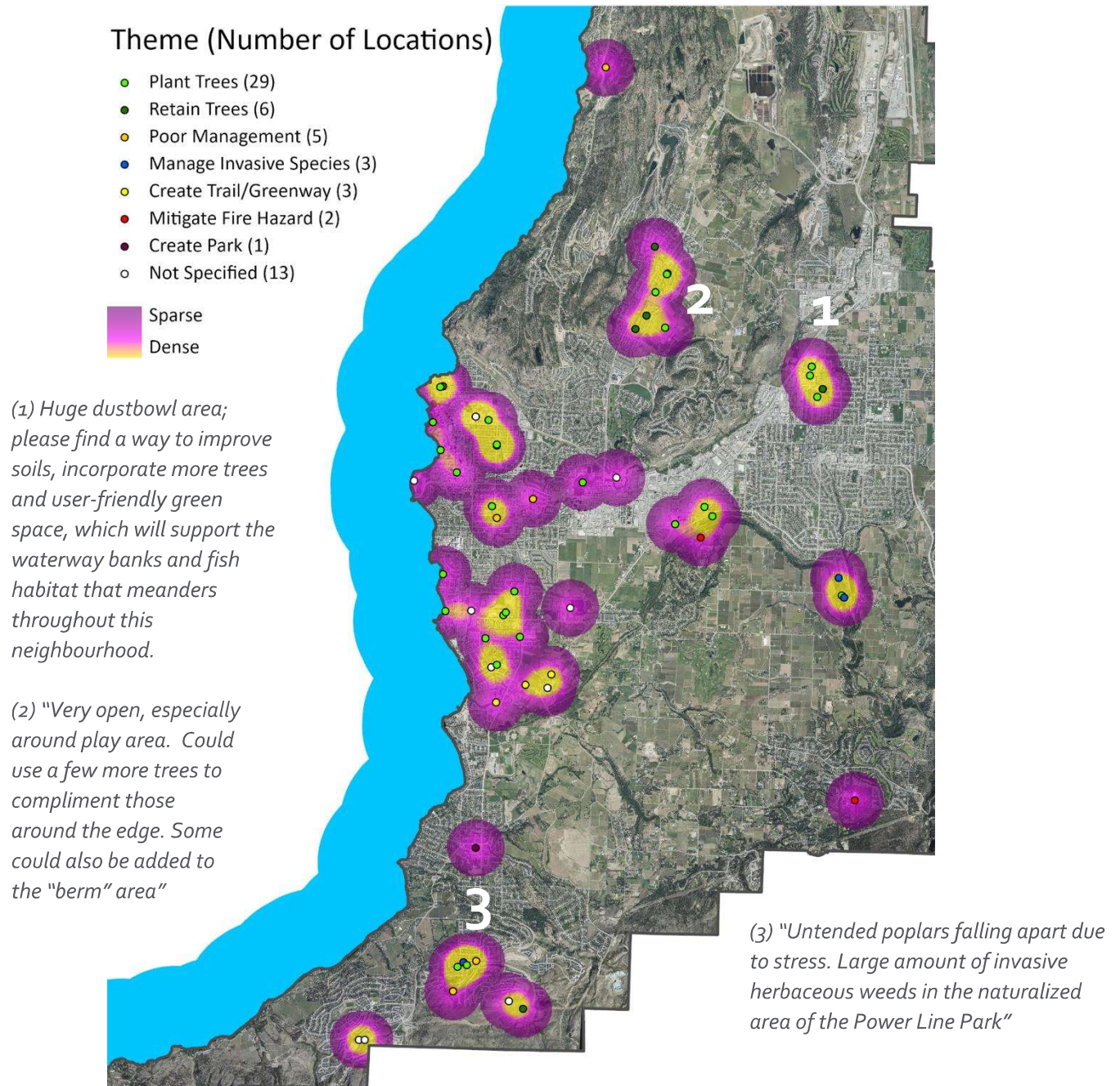


FIGURE 10 – URBAN FOREST PLACES NEEDING IMPROVEMENT IDENTIFIED IN THE ONLINE MAPPING TOOL BETWEEN NOVEMBER 12TH AND DECEMBER 11TH, 2022

Stakeholder Workshop

Twenty-two participants from nine organizations and six staff members attended the October 7th stakeholder workshop. Participants were representatives from the arboricultural, environmental/non-profit, utilities, development, and academic community. Workshop participants discussed opportunities and challenges facing Kelowna's urban forest using four urban forest themes to structure the session:

- **Planting**
- **Managing**
- **Protecting**
- **Partnering**

On the topic of tree planting, participants expressed concerns around sourcing native trees as well as suitable non-native trees given climatic conditions and risk of disease. The discussion on planting opportunities included creating a tree selection guide for residents to plant the right trees on private property as well as mandating a minimum canopy coverage for new commercial developments. The conversation progressed into finding ways to incentivize tree planting for residents and for existing commercial parkades at expense of parking spots.

Challenges facing the management of Kelowna's urban forest were centered around utility conflicts and the costs associated with tree management (watering, treating disease, pruning). Participants saw opportunities both in installing utilities underground and working with community members to better inform around the importance of mature trees.

The major concern regarding tree protection was the loss of large mature trees during development and the lack of a tree protection bylaw. Participants identified opportunities in introducing a tree bylaw. Specifically, participants thought a tree bylaw could increase accountability during development application processes, establish a 2:1 replacement ratio, and protect root zones during development. Participants also discussed reframing trees as amenities that increase property value and quality of life.

The conversations around urban forest partnerships were focused on Indigenous relations, resident stewardship, and volunteer opportunities, as well as collaboration with school districts and UBCO.

Participants raised the Declaration on the Rights of Indigenous Peoples Act as a responsibility for Kelowna to partner with First Nations on urban forest work. Participants also highlighted the need for a communication strategy to accompany any partnerships.

Mural Boards of responses collected during the stakeholder workshop are provided in **Appendix C**.

Synthesis of Feedback

The feedback received from the survey, mapping tool, and stakeholder workshops has been synthesized into key statements in the tables below. Each key statement ("What we heard") is followed by a statement on how the feedback will be considered in relation to the ongoing development of the SUFS.

SUMMARY OF FEEDBACK FOR THE URBAN FOREST PLANNING AND LONG-TERM VISION

What we heard	How it will be considered
<ul style="list-style-type: none"> The most valued benefits provided by the urban forest are climate change resilience, ecological, and environmental Respondents envisioned Kelowna's 2040 urban forest as expanding, with large and mature trees made up of a healthy mix of native and climate suitable species, with lush tree-lined streets and strong tree protection measures in place Mapping tool participants: <ul style="list-style-type: none"> Valued parks and greenspaces for their recreational benefits and the habitat they provide for wildlife, noting key urban forest locations to protect. Outside of parks and natural areas, valued residential areas with many large or older trees. Wanted more trees planted and more proactive management of natural areas and invasive species. Residential streets were a common place additional trees were desired, followed by commercial/industrial areas. 	<p>The project team will incorporate this input when drafting the SUFS vision and goals. The strategy will emphasize the benefits most valued by the community and will address the issues cited by participants as needing improvement.</p>

SUMMARY OF FEEDBACK FOR GROWING THE URBAN FOREST

What we heard	How it will be considered
<p>There is an opportunity to increase community satisfaction by doing more tree planting.</p> <p>For street tree planting:</p> <ul style="list-style-type: none"> There is a preference for streets with mixed spacing and either mixed or large tree sizes. Respondents would like to see tree planting prioritized in Kelowna's urban center, specifically on commercial streets, parking lots, and new developments. 	<p>The draft SUFS will include recommendations for tree planting in parks and streets and update the City's tree planting list with climate resilient species.</p>

KEY THEMES FROM PUBLIC ENGAGEMENT ABOUT MANAGING THE URBAN FOREST

What we heard	How it will be considered
<p>Respondents had mixed levels of satisfaction for current urban forest service levels.</p> <ul style="list-style-type: none"> • Satisfaction levels were high for storm and debris cleanup, tree pruning, and dangerous tree removal. • Respondents expressed dissatisfaction for public education, tree protection, and tree planting. • Several respondents were neutral particularly about wildfire fuel reduction and pest and disease management. <p>Mapping tool respondents would like more trees planted, stronger tree protection measures, and more proactive management of greenspaces.</p>	<p>The draft SUFS will make recommendations to clarify and improve service levels.</p>
<p>On City-owned land, most respondents supported the construction of new tree planting spaces in streets and paved areas, adapting parks to the arid climate, and improving both tree species guidelines and soil engineering standards.</p>	<p>The draft SUFS will make recommendations to improve planting site construction standards to support the health and survival of trees given site and climate requirements.</p>

KEY THEMES FROM PUBLIC ENGAGEMENT ABOUT PROTECTING THE URBAN FOREST

What we heard	How it will be considered
<p>On private property, most respondents supported increasing the required number of trees for new developments as well as improving the standards for tree planting. Respondents' biggest concern was tree loss on private property caused by development.</p>	<p>The draft SUFS will make recommendations that include policy tools and approaches to improve protection of trees on private property, with a focus on the role of development in tree removal and replanting rates.</p>
<p>On private property, most respondents supported extending protections to a subset of trees on all private property through a tree bylaw. 177 respondents "fully support this", 106 respondents "can live with this", and 50 "do not support this". Of the ideas put forward by the online survey for tree protection, a tree bylaw was the second-least popular (second-lowest number of "I fully support this" responses).</p>	<p>The draft SUFS will make recommendations that recognize and preserve the future potential of tree protections on private land.</p>
<p>More respondents were dissatisfied than satisfied by current urban forest service levels for tree protection and preservation.</p>	<p>The draft SUFS will consider strategies to improve tree protection and preservation that move the City towards meeting or exceeding current public expectations.</p>

KEY THEMES FROM PUBLIC ENGAGEMENT ABOUT STEWARDSHIP OF THE URBAN FOREST

What we heard	How it will be considered
A moderate number of respondents had planted at least one tree on their property in the past five years. Most survey respondents have not watered a city tree or bought a tree through the NeighbourWoods program.	The draft SUFS will recommend ways for the City to encourage urban forest stewardship, including education on tree planting and care.
The largest barriers to planting trees on property were space limitations, already having trees, and requiring permission from strata. The main incentives would be knowing which species are suitable for the climate, having space to plant trees, and having someone to call for help in selecting the appropriate tree species.	The draft SUFS will recommend ways to incentivize tree planting and distribute educational materials to support private tree planting and care.
Stakeholders would like the City to partner with Indigenous groups, schools, and nurseries, include more resident volunteer opportunities, and improved communication surrounding urban forestry services with residents.	The draft SUFS will recommend ways to partner with First Nations Governments and Indigenous peoples and foster community stewardship of the urban forest.

NEXT STEPS

The findings from the first phase of community engagement will inform the development of the draft SUFS, including a long-term vision and priorities for implementation. Phase 2 of public engagement is expected to occur in the spring of 2023 to gather feedback on the draft SUFS.

LIST OF APPENDICES

Appendices are provided in a separate document.

Appendix A: Survey results

Appendix B: Mapping tool results (*Tabular responses*)

Appendix C: Stakeholder workshop boards