VISION & GOALS

The Urban Forest Strategy Vision Statement is meant to capture the desired state of the urban forest. The Vision Statement will be used as an aspirational guide to help the community make decisions about the urban forest as the plan is implemented. The draft Vision Statement below has been informed by the summer 2018 consultation findings, using the voices from the community.

Review the Vision Statement and use the sticky-notes to suggest changes!

Courtenay residents envision a future urban forest that is more extensive than today, is connected and accessible, maintains mature trees and ecosystem services, is comprised of a sustainable mix of ages and locally adapted species, and is used as a design treatment to reduce the prevalence of pavement in commercial areas, create neighbourhood distinction and canopy streets on key routes.

The public survey asks what the canopy cover target should be for the City.

A minimum of XX% canopy cover target distributed throughout Courtenay will inform the refinement of policies and actions to achieve this Vision, as the urban forest changes to accommodate development, climate change and through the natural life span of trees.

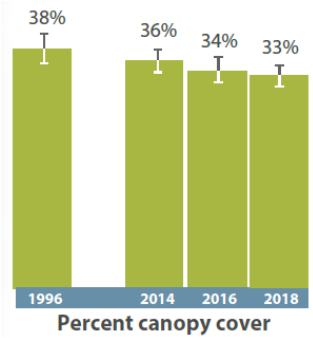
A number of actions are proposed within the plan, organized around the following 5 themes. Consult the Detailed Actions story boards for specific proposed actions.

Use the sticky-notes to tell us what you think of the Goals!

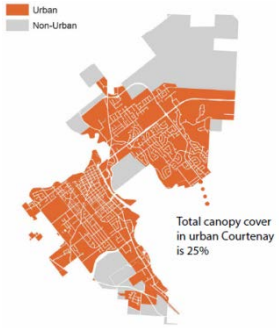
- *Plan strategically to inform and monitor land use changes on the urban forest and integrate into public asset management*
- *Manage proactively to enhance urban forest health, safety and resilience by managing alongside other infrastructure goals*
- *Protect prudently to maintain the quality and connectedness of the urban forest*
- *Grow intelligently to provide urban forest benefits when and where they are needed*
- *Partner effectively to share stewardship and promote appreciation of the urban forest*

WHAT WE'VE LEARNED ABOUT COURTENAY'S CANOPY

Courtenay's tree canopy in 2018 was approximately 33% across the entire City, and 25% within the urban areas. The canopy cover has been declining over time, with accelerating loss in the past four years.

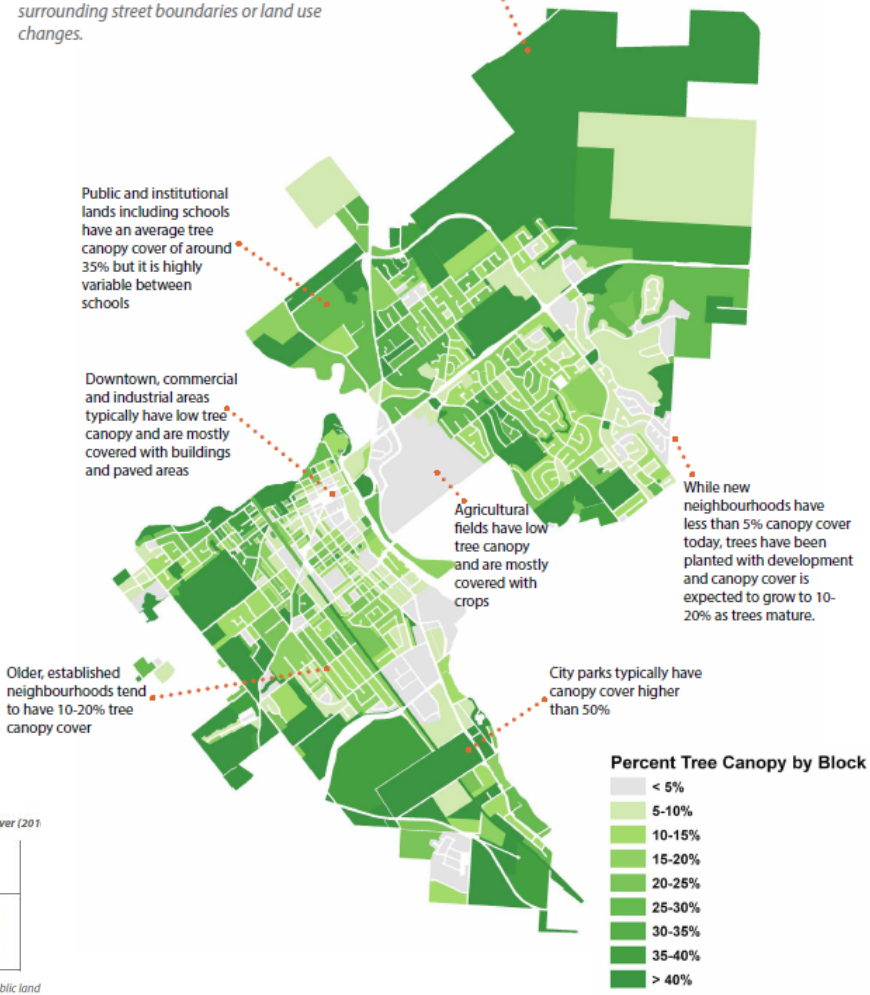


Different dates, different data. A number of the graphs are based on 2016 data because that is the year of the LiDAR data set. LiDAR is flown with a laser shooting pulses down to the surface to create a 3D model of the ground below. Data from other years is generated from the USDA's i-Tree Canopy program designed specifically to detect land use cover changes.



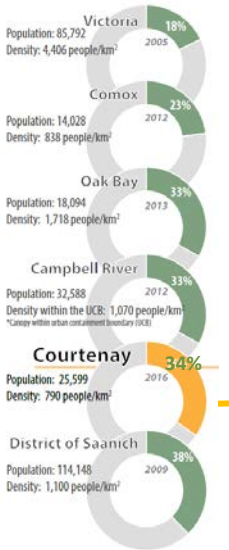
Canopy Cover by Block (2016)

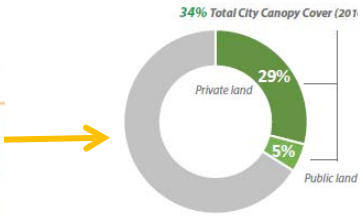
In this map, tree canopy cover is summarized by 'blocks' of the city defined either by surrounding street boundaries or land use changes.



Courtenay's urban forest cover is relatively similar to reported canopy cover for several other communities in the region. Victoria and Comox are lower, likely due to population density and land use respectively.

Based on a 2001 nation-wide study from the United States, canopy cover variation in urban areas is explained mostly by ecoregion type (i.e. forested, grassland, desert), population density and land use. Across all urban areas in forested ecoregions in the US, canopy cover averaged 34%.



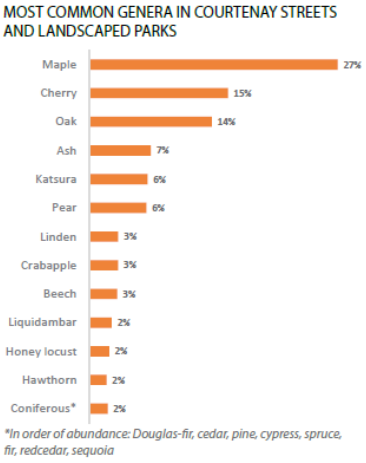


Only 5% of Courtenay's canopy is on public land

CITY TREES

City trees are those that have been planted in roads, parks or other City-owned lands. The City plants 300-350 new trees each year. About 50 are street trees installed in new developments and the remainder are planted to help restore natural areas.

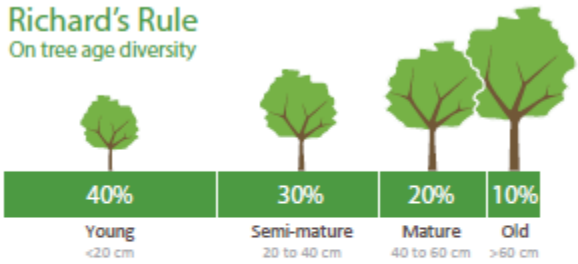
The City has a partial inventory of 3,255 of its trees planted in streets and landscaped parks, but the total number of trees on City property is estimated to be closer to 30,000!



Diversity is important

A mix of tree ages and species are important to maintaining a healthy urban forest. Diversity reduces vulnerability to pests and disease, impacts of climate change and ensures there are successive generations. This generally holds true for intensively managed City trees as well as those in natural areas.

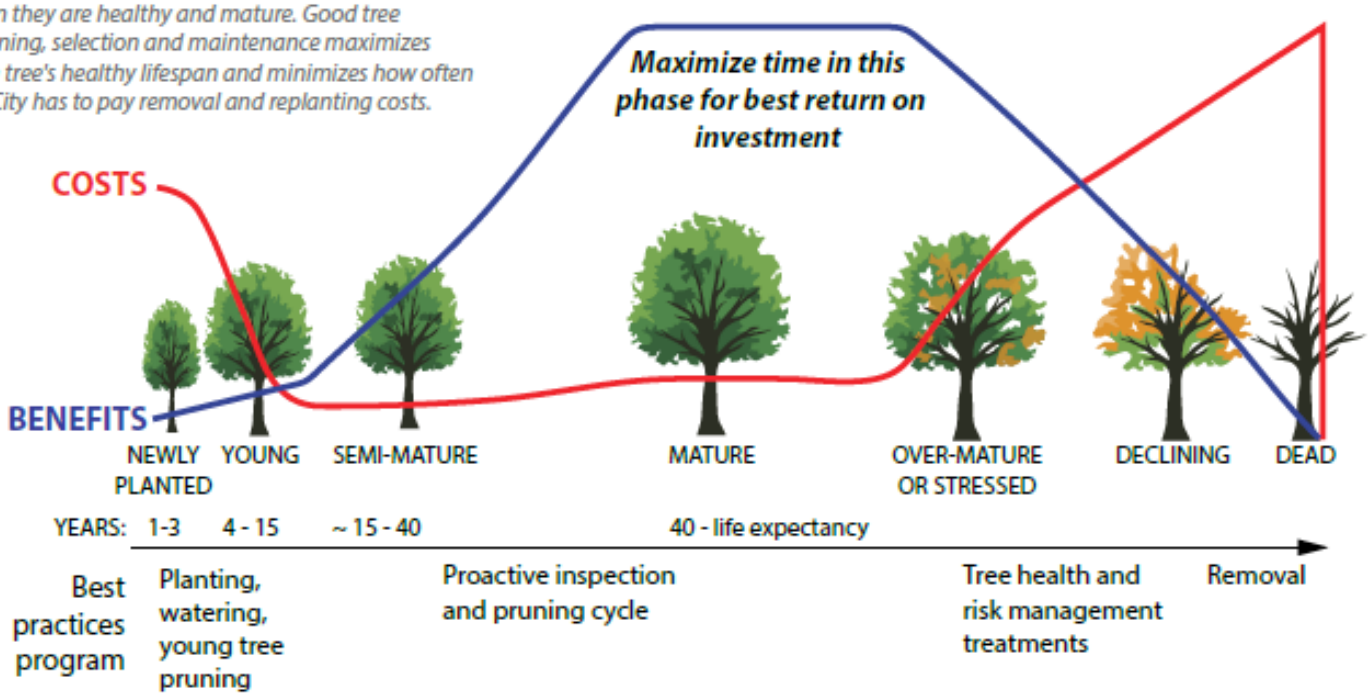
For intensively managed City trees, diversity guidelines are provided for both species and age. For example, urban forest populations should strive for a 5-15-20 rule of thumb: no more than 5% of any one species, 15% of any one genus and 20% of any one family.



This guideline for size diversity comes from research on tree populations that found street tree population stability was driven by young tree mortality and replacement. This distribution of size classes was proposed as a guideline for maintaining a stable supply of tree canopy over time.

LIFE-CYCLE COSTS

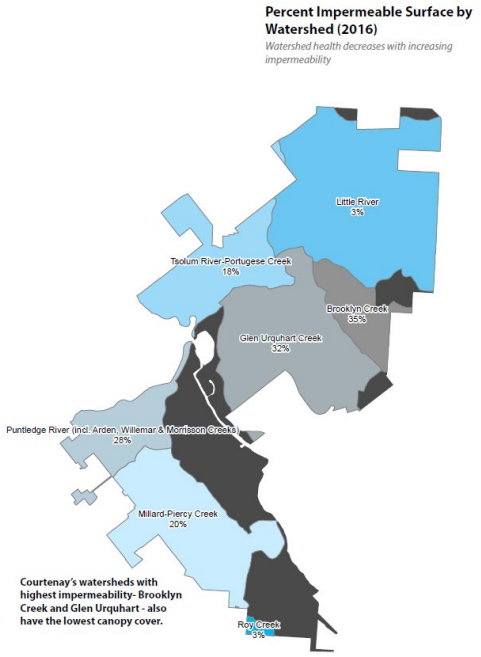
Trees cost the most at the start and end of their lives and produce the greatest benefits in the middle, when they are healthy and mature. Good tree planning, selection and maintenance maximizes each tree's healthy lifespan and minimizes how often the City has to pay removal and replanting costs.

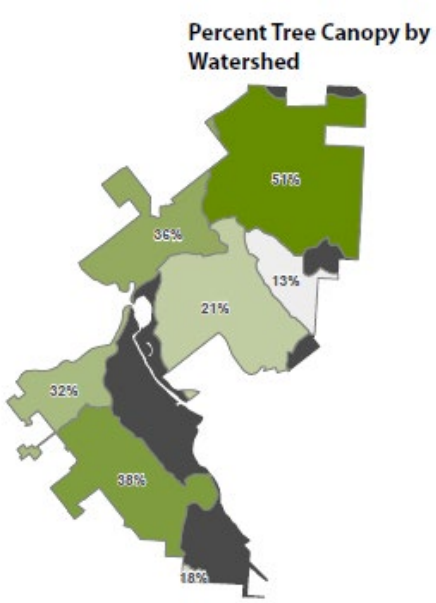


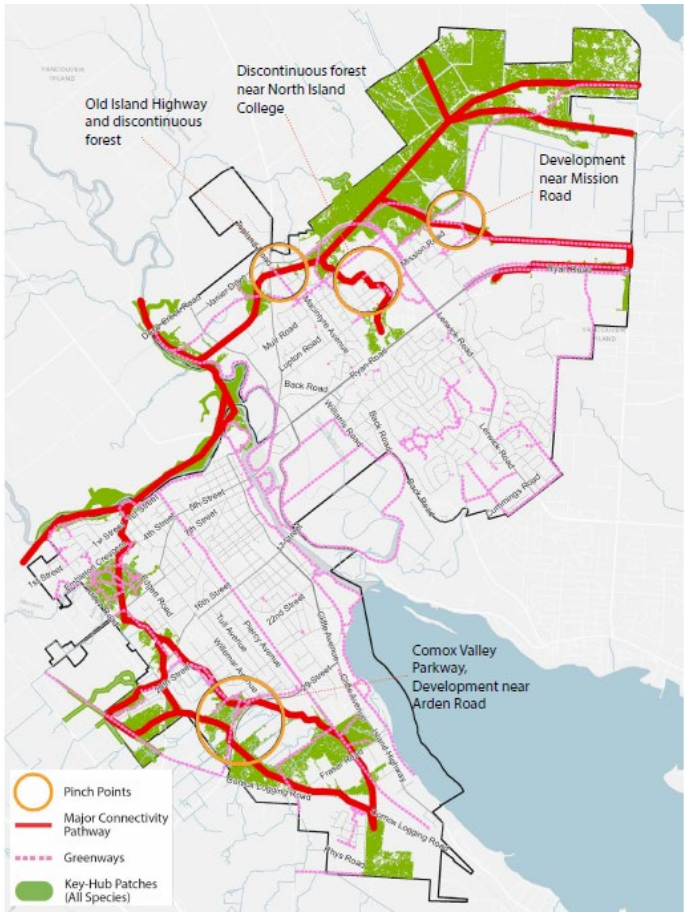
SEEING MORE THAN THE TREES

Impermeable cover and species use were examined and are discussed in the Urban Forest Strategy. Impermeable cover includes hard surfaces like roads and buildings. The proportion of impermeable surfaces in a watershed is an important indicator of urban stream health.

The higher the impermeable surfaces, the lower the water quality, the higher the temperature and the more 'flashy' and erosive the water quantity can be. The maps below show where impermeable surfaces are highest in the City, and how this corresponds to watersheds and canopy cover.







The urban forest can be thought of as a network of habitat patches through which species move. Understanding how connected this network is, and which patches play an important role in maintaining network connectivity can better inform conservation planning.

Spatial analysis was conducted using three local umbrella species to understand where the most important habitat corridors are in the City's boundaries. The map to the left shows areas that all three species likely use. This information will be used to inform land use planning in the upcoming Official Community Plan review process, starting in the fall!

- The red legged frog needs aquatic, riparian and moist mature forest
- The red squirrel needs mature coniferous forest
- The brown creeper bird needs either deciduous, coniferous or mixed forest environments

HOW ARE WE DOING?

Courtenay's urban forestry program is in the early stages of development. Developing this strategy establishes the vision, goals and management criteria for the urban forestry program.

The criteria below have been adapted for Courtenay's context from the "Sustainable Urban Forest: A Step by Step Approach" funded by the USDA Forest Service.

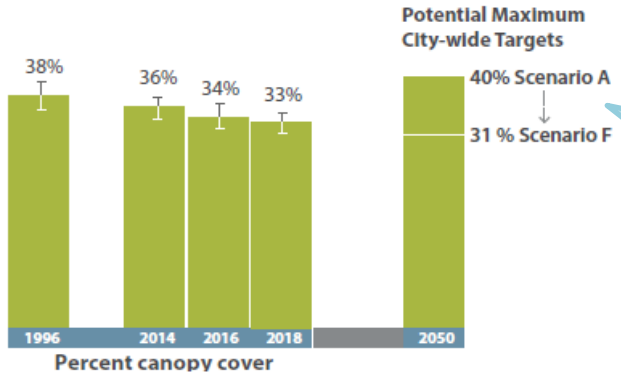
Management Criteria and Targets for Success	Low	Fair	Good	Optimal
A. PLAN STRATEGICALLY				
Appreciation of trees as a community resource	○	○	●	○
Clear and defensible urban tree canopy assessment and goals	○	○	●	○
Trees on private property	○	○	●	○
Green infrastructure asset management system integration	○	●	○	○
Interdepartmental and interagency cooperation	○	●	○	○
Urban forest funding to implement the plan	○	●	○	○
B. MANAGE PRO-ACTIVELY				
City tree inventory	○	○	●	○
Maintenance of City owned streets and park trees	○	○	●	○
City tree risk management	○	○	●	○
Storm response	○	●	○	○
Pest and disease management	○	○	●	○
Urban wood and green waste revitalization	○	●	○	○
Usage of publicly owned natural areas	○	●	○	○
C. PROTECT PRUDENTLY				
Tree protection, policy development and enforcement	○	○	●	○
Publicly-owned natural areas management planning and implementation	○	○	●	○
Privately-owned ESAs protection policy and enforcement	○	○	●	○
D. GROW INTELLIGENTLY				
Tree establishment and replacement planning	○	●	○	○
Planting design guidance, site specifications and standards	○	●	○	○
Equity in planting program delivery	●	○	○	○
Native vegetation planting	○	○	●	○
Green infrastructure for stormwater management	○	●	○	○
Building energy efficiency	●	○	○	○
E. PARTNER EFFECTIVELY				
Citizen involvement and neighbourhood action	○	●	○	○
Involvement of large private land and institutional landholders	●	○	○	○
Green industry cooperation	○	●	○	○
Utilities cooperation	●	○	○	○
Regional collaboration	●	○	○	○
Urban forest research	●	○	○	○

Has Courtenay made the grade? Where would you prioritize improvements? Use the sticky-notes to have your say!

Check out Courtenay's Urban Forest Strategy report card in more detail in Section 6 of the Plan!
www.courtenay.ca/urbanforest

LET'S SET A CANOPY TARGET!

Tree canopy is a common metric used to describe the extent of a community's urban forest. Courtenay's tree canopy is composed of natural forests and planted trees in streets, parks and on private property.



Courtenay's canopy cover in 2018 was approximately 33% across the entire City, and 25% within the urban areas. The canopy cover has been declining over time, with accelerating loss in the past four years.

There are no industry standards on canopy cover as each community will determine this for themselves based on their values. Common targets in other communities range between 30-40%.

Six canopy cover scenarios are presented in the table below for your consideration. Please review them and indicate your preference in the survey. **Reminder that the current city-wide canopy cover is 33%, the urban area canopy cover is 25% and the Tree Bylaw Tree Density Target requirement is 50 stems per hectare.**

Some explanation of the tables
The tables show differences in actions in three broad categories that could be taken to achieve the six different Canopy Target Scenarios. These action categories are: regulation (such as the tree bylaw), voluntary planting (on private land) and public planting (on City land).

Because the rate of community growth and forest change cannot be predicted at this time for large undeveloped portions of the urban forest, the Canopy Targets are shown as a range of what might be reasonably achieved between the city-wide target (maximum) and the urban area target (minimum). Minimums are presented to show that as the large undeveloped portions of the urban forest are developed, they would be required to meet the minimum city-wide targets similar to the rest of the community.

What do you think? Have your say in the survey: www.courtenay.ca/urbanforest

Scenario	City-wide Canopy Target (maximum)	Urban Area Canopy Target	Tree Bylaw Density Target (Stems per hectare)	New Trees planted on private land (voluntary)	Action category: Regulation	Action category: Voluntary Planting	Action category: Public Planting
A	40%	34%	100	17,000	Highest	High	High
B	37%	29%	75	17,000	High	High	High
C	36%	27%	75	8,500	High	Moderate	High
D	34%	24%	50	17,000	Current	High	High
E	33%	23%	50	8,500	Current	Moderate	High
F	31%	21%	50	0	Current	None	High

Scenarios explained another way...	
A	City-wide range between 34-40%. Canopy similar or higher than today due to 100 stems/ha tree density requirements in bylaw; lots of voluntary private land planting and maximizing public land planting.
B	City-wide range between 29-37%. Canopy similar or lower than today due to 75 stems/ha tree density requirements in bylaw; lots of voluntary private land planting and maximizing public land planting.
C	City-wide range between 27-36%. Canopy similar or lower than today, and lower than Scenario B, due to 75 stems/ha tree density requirements in bylaw; some voluntary private land planting and maximizing public land planting.
D	City-wide range between 24-34%. Canopy lower than today due to **status quo 50 stems/ha** tree density requirements in bylaw; lots of voluntary planting, and maximizing public land planting.
E	City-wide range between 23-33%. Similar to Scenario D with fewer private planting efforts.
F	City-wide range between 21-31%. Similar to Scenario D with no voluntary planting efforts.

DETAILED ACTIONS FROM THE DRAFT PLAN

PLAN / MANAGE / PROTECT / GROW / PARTNER

ALSO AVAILABLE ONLINE WWW.COURTENAY.CA/URBANFOREST

TAKE THE SURVEY AND TELL US WHAT YOU THINK!

Plan strategically to inform and monitor land use changes on the urban forest and integrate into public asset management

PLAN – ACTIONS

1. **On public lands, formalize urban forest asset management and protection in City corporate policies and systems**
   - 1a. Adopt a Council-approved City Tree Asset Management Policy to guide City tree protection, removal, replacement and level of service expectations and decisions.
   - 1b. Utilize the Policy to inform the creation of a City Tree Operations Manual to guide staff decisions and respond to public inquiries regarding public trees. This action item discussed in more detail in the Manage section.
2. **Set neighbourhood tree canopy and character goals in consultation with the community to refine expectations and specificity regarding protection, character and function of the urban forest**
   - 2a. Establish neighbourhood planning units across the City through the next OCP review process. Use these planning units when creating Local Area Plans.
   - 2b. Whenever conducting Local Area Plans, ensure UFS goals are discussed alongside other community planning goals, using a standardized framework. The framework would include, but not be limited to: setting a neighbourhood specific canopy cover target; identifying key streets and other transportation routes eligible for enhanced canopy and green infrastructure rainwater treatments that support trees; neighbourhood planting character goals; street naming conventions to reflect ecological or cultural heritage; identifying specific locations for tree planting or replacement; identifying significant trees or stands of trees; and UBC developed Climate Action Coolkit.
   - 2c. Set street tree character goals along key transportation routes in conjunction with neighbourhood planning, and community servicing study updates
3. **Identify and proactively manage forest fire risk**
   - 3a. Apply for UBCM funding to complete a Community Wildfire Protection Plan (CWPP) for the City to define risk and risk mitigation including fuel treatments on public land, FireSmart standards, training, education and suppression resources.
   - 3b. Work with the Comox Valley Regional District to investigate opportunities to share CWPP implementation costs and benefits (e.g., fuel treatment programs, equipment caches, training, etc.).
   - 3c. Within the next OCP review, consider implementing a Wildfire Development Permit Area for development within or adjacent to the wildland forest edge to require new construction and landscaping to meet FireSmart standards.
4. **Regularly update urban forest data and key planning and policy documents to respond to changes in land use and technology**
   - 4a. Collect aerial LiDAR imagery every 5 years to detect canopy cover changes and remeasure tree density by neighbourhood. Ensure LiDAR data is classified into different data types (e.g. bare earth, vegetation, building, etc.).
   - 4b. Research cost estimates of arborist reports and memos, tree protection installation and arborist supervision to enable City staff to quantify the cost impact of tree protection on development.
   - 4c. Review and update the UFS Implementation Plan as close to 10 years as possible using the monitoring information identified above.
   - 4d. When conducting comprehensive OCP reviews, ensure that the most currently available information regarding canopy cover, sensitive ecosystem inventories, connectivity analysis and invasive species inventories are included to inform long range land use decisions and Development Permit guidelines.
   - 4e. Provide updates to Council and the public every two years on the implementation progress of the UFS and any pertinent new information available.
5. **Actively pursue funds and respond to partnership requests to support the UFS**
   - 5a. Use the Tree Replacement Reserve Fund contributions, pursue grants, partnerships and allocate dedicated Council funding.
   - 5b. Consider developing a policy for Municipal Ticket fines and financial outcomes of enforcement negotiations and prosecutions to be dedicated to initiatives such as the Tree Replacement Reserve Fund.
   - 5c. Consider amending the application of Tree Replacement Reserve Funding to address required UFS needs, as monitored over time. Currently the program designation is for the planting of trees on public lands or on private lands in accordance with a program created to provide tree planting incentives to private land owners. For example, explore whether tree management could be an eligible use of funds.
6. **Amend the Tree Bylaw, as needed, to respond to community wide urban forest information**
   - 6a. Expected amendment cycles include following Urban Forest Strategy plan updates, in coordination with Official Community Plan updates or in response to canopy cover monitoring information.

These are Actions that the City would take to monitor the City-wide canopy and manage public trees

Manage proactively to enhance urban forest health, safety and resilience by managing alongside other infrastructure goals

MANAGE – ACTIONS

7. **Develop a City Tree Operations Manual to formalize urban forest asset management and protection in City corporate policies and systems**
   - 7a. The Operations Manual will guide staff and arboriculture contractors (where relevant) in the following topic modules, which are currently under development:
     - i. Planning and Design (pre-planting): define strategic priorities for planning the urban forest by spatial area and specific typologies. In addition, this will cover authority to plant, planting design, species selection and stock quality and diversity standards.
     - ii. Planting: include cover bulk soil management and soil volume standards, technical standards for planting trees in streets, parks rainwater facilities, and notification and engagement.
     - iii. Management and Plant Health Care: include tree protection, watering, pruning, integrated pest management, prevention and management of infrastructure conflicts and notification. Include liaison with Canadian Food Inspection Agency's Plan Pest Surveillance Unit.
     - iv. Inventory, Inspection and Emergency Response: covers the inventory and work management system, inspection policy for risk management and emergency response including personnel responsibilities, resources available and clean-up priorities.
     - v. Succession Planning and Removal Management: define strategic priorities for succession management, authority to remove, poorly performing trees, development/capital works related removals, notification and engagement, re-use tree waste.
     - vi. Monitoring and Adaptive Management: cover how key metrics at the City tree level and public urban forest level will be monitored and include recommendations for adaptive management, including resourcing, to continuously improve implementation.
   - 7b. Priority implementation items to explore for inclusion in the City Tree Operations Manual include:
     - i. A tree watering protocol or program for trees within 1-3 years of planting, and for older trees as needed.
     - ii. Continue to transition from demand risk management and tree maintenance to a preventative program. Define zones for inspection cycles, define frequency, inspection methods, assessor qualifications, responsibilities and documentation, as well as a rating system to prioritize and complete corrective action within a timeframe to meet a reasonable standard of care.
     - iii. Develop a system for evaluating and prioritizing demand maintenance and removal requests within defined level of service expectations.
   - 7c. Develop management plans for unmanaged parkland dedications in partnership with community stewardship groups.
8. **Regularly collect information to populate the city tree asset management system**
   - 8a. Inventory trees and vacant planting sites with the maintenance cycle.
   - 8b. Value, life expectancy, maintenance and replacement costs of City Tree assets.
   - 8c. Mortality rates, failure rates, pest incidence and causality in City trees.
   - 8d. Research opportunities to account for public tree carbon storage and sequestration in corporate climate action GHG reporting.
9. **Use information from the asset management system to inform resourcing requirements, including human resources, for the desired level of service**
   - 9a. Provide dedicated capital and operational budgets for urban forestry to meet the desired level of service defined in the City Tree Asset Management Policy and supported by the City Tree Operations Manual, with emphasis on the first 5 years to transition to preventative maintenance and risk management programs. The 5-year work-plan shall include staffing, equipment, budget requirements and a review of investment to inform future budgets.
   - 9b. Maintain regular staff training, participation in industry workshops and conferences, and industry standard certifications.
10. **Establish forums for interdepartmental and interagency communication to continuously improve tree management protocols and clarify tree management expectations across public and private lands**
    - 10a. Hold annual interdepartmental staff workshops focused on: upcoming and current capital projects; on-the-ground activities around City trees; and design or planning projects involving City trees to identify recurring tree conflicts, quality issues and innovative solutions. Include utilities and contract labour when appropriate.
    - 10b. Include all staff who interact with tree management in their course of work. For example, planning staff who administer the Tree Bylaw in order to build tree literacy for more helpful Bylaw administration.

DETAILED ACTIONS FROM THE DRAFT PLAN

PLAN / MANAGE / PROTECT / GROW / PARTNER

ALSO AVAILABLE ONLINE WWW.COURTENAY.CA/URBANFOREST

TAKE THE SURVEY AND TELL US WHAT YOU THINK!

Protect prudently to maintain the quality and connectedness of the urban forest

PROTECT – INDICATORS

INDICATORS	Low	Fair	Good	Optimal
1. Tree protection, policy development and enforcement			●	
a. **Key objective:** Secure the benefits derived from trees on public and private land by enforcement of municipality-wide policies and practices including tree protection.				
b. **We have achieved this when:** Municipality-wide policies and practices are integrated to protect public and priority private trees, and the policies are consistently enforced.				
c. **How we rate now:** Good. Policies and practices are in place to protect public and private trees, and are generally enforced.				
2. Publicly-owned natural areas management planning and implementation			●	
a. **Key objective:** Acquire and restore publicly-owned natural areas in pursuit of meeting municipal-wide biodiversity and connectivity goals.				
b. **We have achieved this when:** A biodiversity strategy, or equivalent, is in effect to manage, restore existing natural areas and acquire future natural areas network throughout the municipality.				
c. **How we rate now:** Approaching Good. The Parks and Recreation Plan is adopted. Parks/area specific plans will be created.				
3. Privately-owned environmentally sensitive areas protection policy and enforcement			●	
a. **Key objective:** Secure the benefits derived from environmentally sensitive areas by enforcement of municipality-wide policies in pursuit of meeting biodiversity and connectivity goals.				
b. **We have achieved this when:** Policy and enforcement are in place to protect environmentally sensitive areas on private land.				
c. **How we rate now:** Good. Policy is in place to protect privately-owned identified environmentally sensitive areas, but enforcement powers are limited.				

Indicators are provided for all goal-themes. Check out our urban forest report card in the Plan!

PROTECT – ACTIONS

11. Prioritize protection of significant trees and forest stands on both public and private land

11a. Consider expanding the definition of "Protected Tree" to include trees with a single stem exceeding 60cm DBH, and update Section 5.3 of the Tree Bylaw to include a permit requirement for these trees.

11b. Consider options, such as land acquisition or regulation, to enhance protection of Significant Stands and Corridors (see pages 44 and 46) on private property.

11c. Develop soil preservation guidelines to encourage retention or storage of native soils for use on development sites.

11d. Meet an equivalent standard for tree protection, removal and replacement on City projects to that required on private land, and incorporate Local Area Plan urban forest priorities.

11e. Where significant trees on City property cannot be retained, explore the opportunity to memorialize the removed tree by milling specialty timber for use in other City projects.

11f. Target a permanent protection solution for the Garry Oak ecosystems in the vicinity of G.P. Vanier Secondary School and Vanier park

11g. Consider density bonusing options to protect Significant Stands and Corridors in the next Zoning Bylaw review

12. Refine understanding of the linkages between changes to hydrology and forest patches through land development

12a. Explore how to maintain hydrological pathways to retained forest patches through management initiatives or bylaw changes affecting rainwater infrastructure.

12b. Require that calculations for stormwater management plans for new development utilize runoff coefficients that incorporate the historical land cover value for up to 25 years.

13. Review the Tree Bylaw to consider possible amendments that enhance interpretation and tree protection outcomes

13a. On greenfield properties where forest cluster or corridor configurations may be possible but are not proposed, require a design rationale for why such configurations are not possible.

13b. Require a tree survey by a BC Land Surveyor for any trees that are proposed to be retained in order to accurately inform the arborist's tree inventory report and tree protection requirements.

13c. Require a CAD (Computer-aided design) drawing Tree Protection and Removal Plan that accurately maps the tree survey, site plan, trees to be removed and retained, protection fencing and annotations for arborist supervision.

Any changes to the Tree Bylaw would require a separate Council adoption process

Protect prudently to maintain the quality and connectedness of the urban forest

13d. Consistently apply arborist monitoring requirements as follows:

i. Prior to tree cutting permit issuance, require arborists to submit a comfort letter outlining work near trees that needs to be supervised and ensure it is signed by the arborist and owner, and accepted by the City.

ii. Require an arborist memo be submitted to confirm tree protection fences are field constructed to the required standard. Such memos shall be submitted prior to construction drawing approval, issuance of building permit on any property that has a retained tree, and at time of or immediately following adjacent tree removal for greenfield tree removals.

iii. Regardless of the size of the property, require a final arborist memo at the conclusion of all development activities adjacent to retained trees, confirming that protection measures were properly implemented as a condition of releasing securities.

13e. Limit the number of tree security releases per project.

13f. Clarify hazard tree replacement requirements.

13g. Require TRAQ (Tree Risk Assessor Qualification) Certification for arborists submitting any tree risk assessment.

13h. Require Registered Professional Forester status for windfirm boundary assessments when cutting into a forest stand.

13i. Update Section 12.1 such that a permit may be refused if "the proposed work would adversely impact a protected tree, and alternatives to tree preservation have not been explored to the satisfaction of the Director."

13j. Update Section 10.1(c) (tree replacement within Environmentally Sensitive Areas) to require that replacement ratios follow Provincial Planting Criteria.

13k. Create a tree cutting permit fee for small-scale removal on greenfield properties.

13l. Require that tree replacement security requests occur during active growing season in order to best determine health of the tree.

13m. Allow Tree Bylaw Tree Density Target requirements to be achieved on trail connection lands designated as "highway".

14. Improve the quality of park assets inherited through development

14a. In support of Parks and Recreation master planning:

i. Locate community parks next to natural areas where synergies will benefit users.

ii. Include and protect existing trees within parks where possible.

14b. Review development design and procedural guidelines for parkland dedications to improve retention of windfirm groups of trees, maintenance efficiency, fire suppression access and amenity value.

i. Determine minimum greenway corridor widths, and develop nature trail specifications, to protect retained forest stands adequately. Ensure that corridor widths reflect that 3m trails include a minimum of a 5m zone of impact and therefore 10m corridors allow for very minimal mature tree retention, unless adjacent lands contain forest values that are protected.

ii. Require invasive species, high risk trees, windthrow risk and fuel hazard mitigation prior to acceptance of new park land.

iii. Require a tree asset management plan from the applicant's arborist upon park dedication in order to incorporate management needs into the City's Asset Management inventory and resourcing framework. The plan shall include at minimum: a description of the tree assets, estimated age and composition, identified risks, potential impacts from changes in adjacent land use (e.g., hydrology), management recommendations and timeframe.

iv. Adopt a City review and inspection procedure involving public works staff to ensure that incoming park tree assets are selected carefully and treated sensitively during all phases of development from adjacent land clearing to park dedication.

15. Consider the creation of a tree heritage registry or significant tree list within the Tree Bylaw in order to protect individual trees of community significance

15a. Use local area planning processes as the opportunity to create the heritage/ significant tree list.

15b. Allow for trees of significant scientific, cultural or landscape visual value to be included.

DETAILED ACTIONS FROM THE DRAFT PLAN

PLAN / MANAGE / PROTECT / GROW / PARTNER

ALSO AVAILABLE ONLINE WWW.COURTENAY.CA/URBANFOREST

TAKE THE SURVEY AND TELL US WHAT YOU THINK!

Grow intelligently to provide urban forest benefits when and where they are needed

GROW – ACTIONS

16. Improve the quality of new tree planting in the public and private realm

16a. Develop design guidelines and species selection criteria to guide planting on public land for City and private development projects. Guidance should cover downtown streets and other street types, parking lots, narrow yards and planting beds, aerial servicing and property lines. Ensure climate adaptability and fire resistance are factored in.

16b. Update streetscape standards and details for City infrastructure (e.g. boulevards, tree pits, soil trenches, soil cells, structural soil, etc.) to incorporate street trees with stormwater management options in targeted areas. As guidance, minimum single/shared soil volume targets recommended are: 10m3/5m3 for small trees, 25m3/15m3 for medium trees and 50m3/30m3 for large trees. Soil volume can be met in the tree pit or by providing root bridges to adjacent soil areas.

16c. Develop soil investigation protocols and remediation standards for new and failing planting locations.

16d. In the next Zoning Bylaw review, and as part of neighbourhood consultations, consider limiting the area of paved surfaces within certain zones.

17. Increase the quantity of new tree planting in the public and private realm

17a. Plant 300 trees per year on public land and work with residents to plant approximately 500 trees per year on private land [TO BE ADJUSTED TO CANOPY TARGET].

17b. Within the next OCP review explore Development Permit Areas for the establishment of objectives to promote energy and water conservation and the reduction of greenhouse gas emissions, in order to utilize tree planting and landscaping to support these goals (S.488 (1) (h)(i) & (j) of the Local Government Act). Details to explore include standards for tree canopy, permeable cover and extent, green infrastructure such as raingardens, soil volume and quality with emphasis on adequate tree canopy in parking lots, along publicly fronting streets, and property perimeters.

17c. Within the next OCP review, clarify that landscaping targets shall achieve the Tree Bylaw Tree Density Target for Development Permit Areas that may set stipulations on landscaping. For infill properties (as defined by the Tree Bylaw), that require such a Development Permit, the Tree Density Target shall be achieved through retention wherever possible.

17d. Within the next Specifications and Standards Bylaw update, include specifications to support larger canopied trees, and on both sides of the street in identified key transportation character routes. This will require increased soil volumes and spacing depending on size of tree (e.g. 6-9m for small trees, 8-12m for medium trees and 10-20m for large trees).

18. Plan and prioritize tree planting where it will most benefit community and ecological health, and support other City strategies

18a. Prioritize tree planting in the public and private realm through the Local Area Plan process and using metrics on street tree density, block tree density, canopy cover and impervious. Additional context should be provided Environmentally Sensitive Areas, Significant Stands and Corridors, transportation character routes, heritage and Integrated Rainwater Management watershed restoration locations.

18b. Prioritize street tree improvements when downtown streets are scheduled for capital improvements towards implementation of the Downtown Playbook vision.

18c. When planting in or adjacent to significant stands or corridors prioritize the use of ecologically appropriate native species.

19. Support local food security through the urban forest

19a. Establish a community orchard on public land as a food security demonstration project provided that adequate community partnership support is available.

19b. Explore opportunities for fruit and nut trees in the public realm where there is demand from the community.

Can you think of some specific places where you'd like to see new trees? If you have the space would you be willing to pledge to plant a new tree on your property?

Use the sticky-notes to share your ideas of where and what to plant!

Did you know? There are over 5,000 estimated planting opportunities on public land and nearly 40,000 on private land. To achieve a healthy canopy into the future, we'll need many new trees.

DETAILED ACTIONS FROM THE DRAFT PLAN

PLAN / MANAGE / PROTECT / GROW / PARTNER

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TAKE THE SURVEY AND TELL US WHAT YOU THINK!

Partner effectively to share stewardship and promote appreciation of the urban forest

PARTNER – ACTIONS

20. Work together with K'ómoks First Nation and community groups to steward the City's urban forest

20a. Work together with K'ómoks First Nation to identify culturally appropriate stewardship activities and opportunities for public land.

20b. Develop a volunteer strategy to include objectives and guidance for community urban forest stewardship. Volunteer activities could include, but not be limited to: tree or understory restoration planting, invasive species removal, stewardship education, citizen science projects and basic tree health monitoring, subject to training.

20c. Actively respond to requests for partnership, recognizing that the City has limited resources to implement the urban forest strategy.

21. Develop a Communications Strategy to effectively share the story of the urban forest and engage the community in managing public and private trees

21a. The Communication Strategy shall serve as a long term marketing and education tool and shall seek to identify the values of the urban forest, promote urban forest supportive behaviours, clarify regulatory expectations and celebrate the role of the stewardship sector in promoting and being an active stakeholder in the UFS.

i. Key behaviours that the Communication Strategy shall promote are assistance with watering public trees during establishment years, avoiding impact within critical root areas, and not initiating any work on public trees.

ii. Include messaging on responsible fruit tree management (to avoid vermin and bears).

iii. Identify when to use competitions, promotions and prizes to build awareness and a spirit of fun.

21b. Work together with K'ómoks First Nation to include their perspective in the urban forest story and its connection to culture and reconciliation.

21c. Maintain information on the City's website and public GIS or Story Map that:

i. Is an interactive City tree map linked to the City's tree inventory that reports individual tree data.

ii. Shares the story of Courtenay's urban forest, its heritage and trends.

iii. Explains the urban forest's critical role in maintaining healthy community, ecology and culture.

iv. Links to the ISA Consumer Information Program www.treesaregood.org as a reliable and current source of tree care information for tree owners.

v. Provides season-relevant information, updated each month, such as that from the www.treesaregood.org website, and bird nesting season reminders.

21d. Revisit the Communication Strategy to respond to changes in public messaging, emerging research and urban forest trends over time.

22. Partner with institutions such as UBC Urban Forestry to identify research and co-op student opportunities to study the urban forest and effectiveness of management outcomes

22a. Topics for exploration include but are not limited to:

i. Mapping protected species for inclusion in the City's mapping to have accurate information when responding to public inquiries.

ii. Monitoring restoration efforts for effectiveness;

iii. Use of the UBC developed Climate Action Coolkit in neighbourhood engagement endeavours.

iv. Identifying trees of cultural and historical significance and documenting local stories.

v. Production value of the urban food forest.

vi. Carbon credit accounting.

vii. Biodiversity characteristics and value of the urban forest.

viii. Habitation of the urban forest (by the homeless) including drug usage increase and management solutions.

ix. Any other item within the UFS that does not involve sensitive or confidential information.

22b. Participate in the Canadian Urban Forest Network to share information, develop best practices and stay informed of funding opportunities.

23. Partner with government, municipal and 3rd party utilities and green industry to implement the urban forest strategy

23a. Work with and educate local nurseries on non-invasive and climate-appropriate species lists as a strategic point of communication to consumers.

23b. Work with local nurseries to procure diverse and climate suitable tree stock, including exploring the possibility of municipal growing contracts to provide future public trees and/or protected species.

23c. Work together with the local non-profit Garry Oak Nursery to explore the potential to expand the number of endangered native species available, and promote the work of this group.

23d. Explore salvage options for sourcing protected species to be removed during land clearing activities when they cannot be retained or in adjacent jurisdictions

Partner effectively to share stewardship and promote appreciation of the urban forest

that do not have Tree Bylaw protection. For example, local provenance genetic stock of pacific dogwoods are difficult to germinate commercially due to climate and are not currently locally available.

23e. Continue to work with the consulting arborist and development community towards a mutual understanding of Tree Bylaw information requirements and tree protection measures.

23f. Continue to work with BC Hydro to share information about pruning City trees and expectations for pruning standards.

23g. Work with Comox Valley Regional District to ensure that Courtenay's urban forest, and urban forests within the region, are included in future Regional Growth Strategy deliberations, and identify opportunities to share costs, resources or messaging for implementation regional urban forest strategies.

23h. Encourage developers to engage the stewardship sector during the land development process.

24. Respond to creative ideas from potential partners that advance Urban Forest Strategy implementation

24a. Assisting teachers develop modules for student exploration of the urban forest.

24b. Working with a community arts program that celebrates the urban forest.

24c. Participating in events promoting the urban forest, such as annual arbor days, Earth Day, green industry, food and arts festivals.

Can you think of other ideas on how to partner or what to research about our urban forest?

Let's hear 'em!