

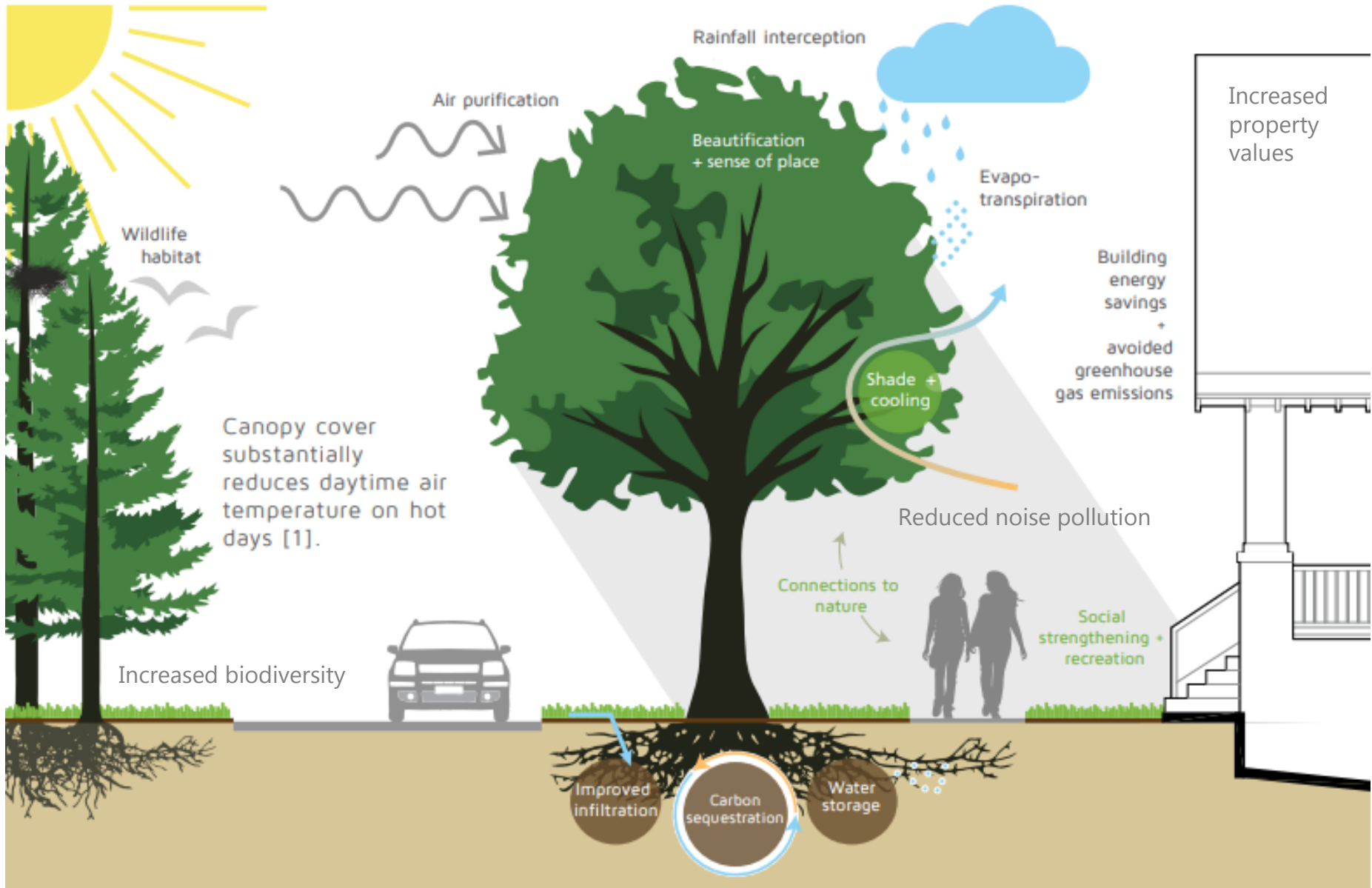
Council Workshop: Urban Tree Canopy Enhancement Strategy



Purpose

- ▶ To assess current urban tree protection policies within the City of Kelowna and, based on the gaps identified, present options to achieve the urban tree canopy goals established by the 2040 Official Community Plan (OCP).

Services Provided by Trees...



Source: Columbia Basin Trust, "Adapting Community Tree Management to Climate Change, April 2020.



Primary drivers of tree loss:

- ▶ Safety concerns
- ▶ Development pressures

Protection Strategy - Tree Bylaw

- ▶ Clear penalty for tree removal – before, during, and after development.
 - ▶ Requires intensive enforcement in often complex situations.
 - ▶ Awareness of a new Tree Bylaw in other cities led to:
 - ▶ Cutting trees prior to adoption as owners seek to avoid bylaw.
 - ▶ Owners removing trees prior to reaching minimum protection size.
 - ▶ Allowances for one tree removal per year lead to the removal of one tree per year until all the property's trees are gone.
- ▶ *Focusing solely on a Tree Bylaw may not reduce canopy loss if not approached strategically.*

Protection Strategy - Tree Bylaw

- ▶ *Does not PROHIBIT tree removal.*
- ▶ Common requirement - replace each tree removed with 2 or more new trees or pay compensation.
- ▶ Other jurisdictions identified as having strong protections allow tree cutting if:
 - ▶ Tree is deemed hazardous by a qualified professional – this can include safety hazards like falling risk and wildfire.
 - ▶ Tree is within a proposed building envelope, and it is not possible to change the building envelope.
 - ▶ Tree is impacting the access and servicing of a lot.

Current Private Property Tree Management:

2040 OCP Tree Protection Policies

- *Permanent Growth Boundary* – limit development to already disturbed lands.
- *Natural Environment Development Permit* (NEDP)
- *Performance Security* (Bond) – deposit held by City to cover cost of trees/plants if owner doesn't complete work. Money not returned until trees are well established (3+ years of monitoring).



Take Action on Climate



Protect & Restore
Our Environment



Stop New Suburban
Development

2040 Official
Community Plan

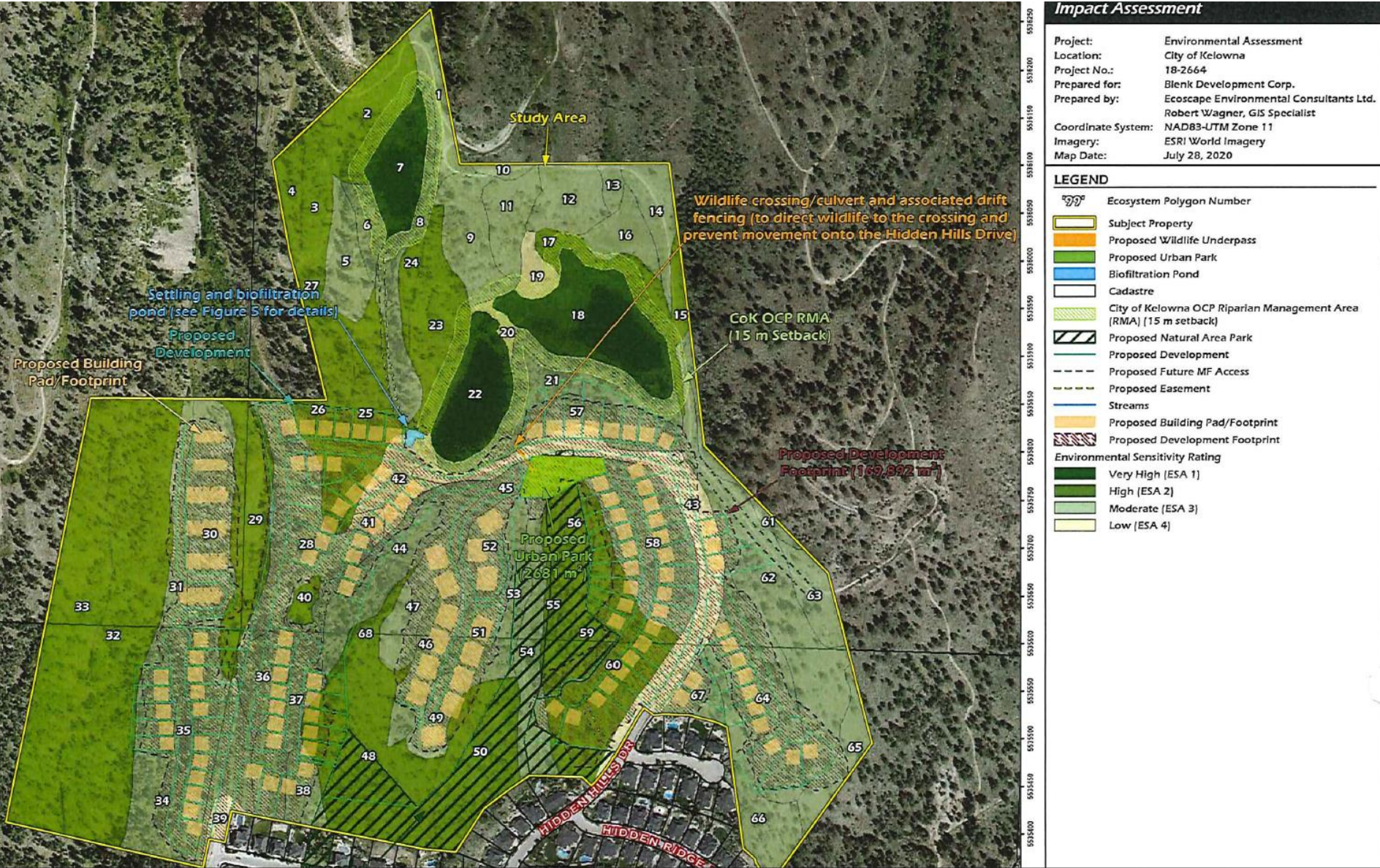
Chapter 1
The Big Picture

Current Private Property Tree Management

Tree Protection Bylaw No. 8041

- Applies to trees larger than 150 mm (trunk diameter) within:
 - *Riparian Management Areas* (10m - 30m of a waterbody)
 - *Slopes steeper than 30%*
- Enforcement triggered by complaints. Six permits issued in 2021.
- Replacement trees not required (but encouraged) if removal due to emergency falling hazard.
- Two (2) replacement trees for each one removed.





Natural Environment Development Permit Area Example

Total Subdivision Area Undisturbed: 37%

Very High Value Environmentally Sensitive Area (ESA) Undisturbed: 100%

Current Private Property Tree Management

Procedures Bylaw No. 12310

- Applies to landscaping identified in **Form & Character Reviews** (development permits on **multi-unit residential, commercial, or industrial properties**).
- Performance Security (**Bond**) covering cost to plant trees.
- Staff **inspect** when planted and **90%** of bond returned.
- Remaining 10% held for 1 year.

Subdivision Review (Bylaw No. 7900)

- Cluster buildings/roads away from trees if possible but other site constraints must be considered.

Zoning Bylaw No. 8000

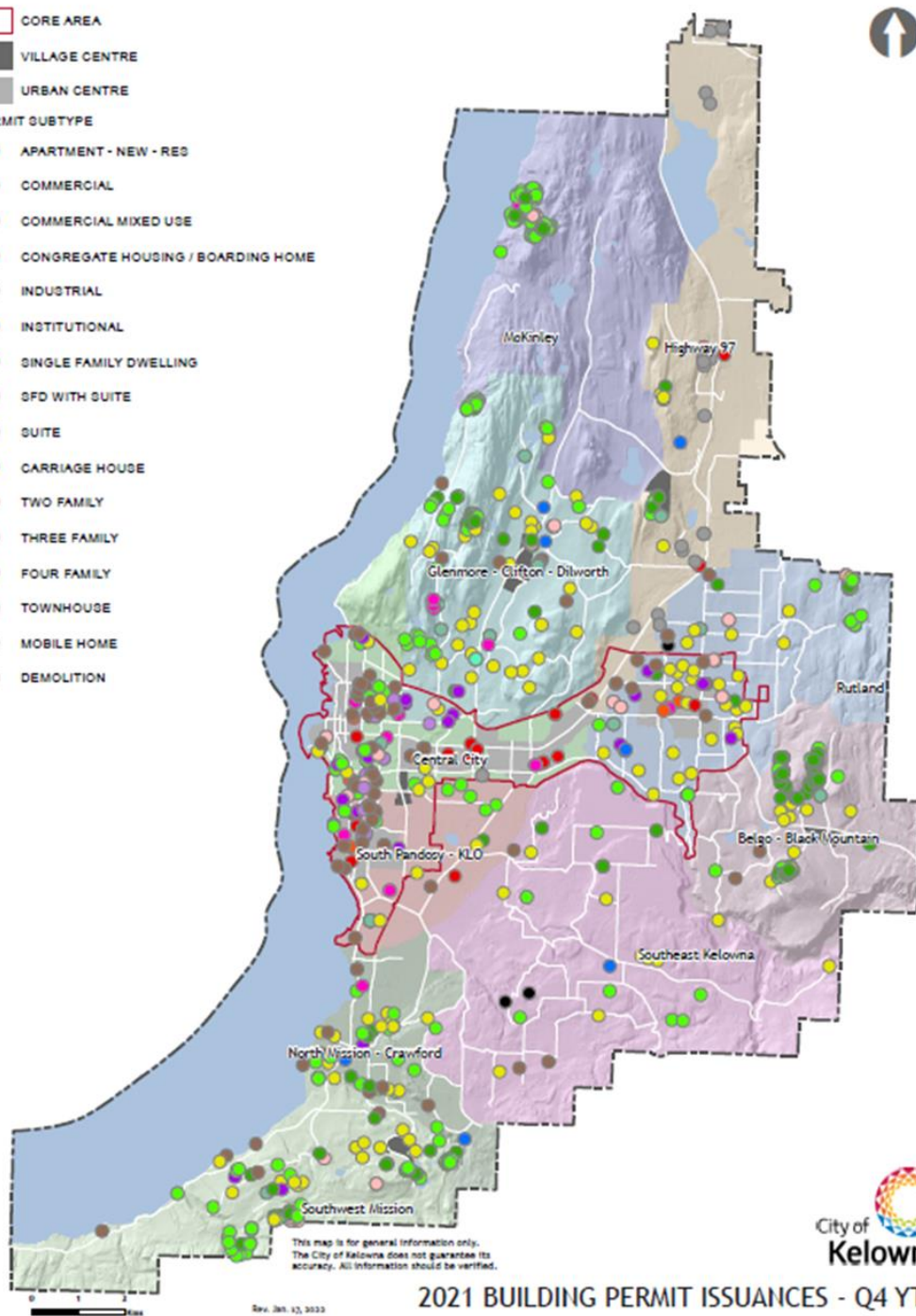
- **Landscape Buffer** (1 tree every 10-12m) when Development Permit triggered.
- Does not apply to Single Detached Dwelling (low density zones) - no Development Permit required.





Trees are still seen as a “nice to have” - not necessity.
So they disappear...

- CORE AREA
 VILLAGE CENTRE
 URBAN CENTRE
 PERMIT SUBTYPE
 APARTMENT - NEW - RES
 COMMERCIAL
 COMMERCIAL MIXED USE
 CONGREGATE HOUSING / BOARDING HOME
 INDUSTRIAL
 INSTITUTIONAL
 SINGLE FAMILY DWELLING
 SFD WITH SUITE
 SUITE
 CARRIAGE HOUSE
 TWO FAMILY
 THREE FAMILY
 FOUR FAMILY
 TOWNHOUSE
 MOBILE HOME
 DEMOLITION



Addressing Regulatory Gaps – recommended best practices:

- ▶ Pre-development Tree Inventory
- ▶ Qualified Professional designs, signs, and monitors (landscape architect, arbourist)
- ▶ Landscape Standards Bylaw
(to direct good planting and maintenance practices)
- ▶ Follow-up inspections
- ▶ Multi-year Bonding
(like Natural Environment DPs)

Implementation Strategy:

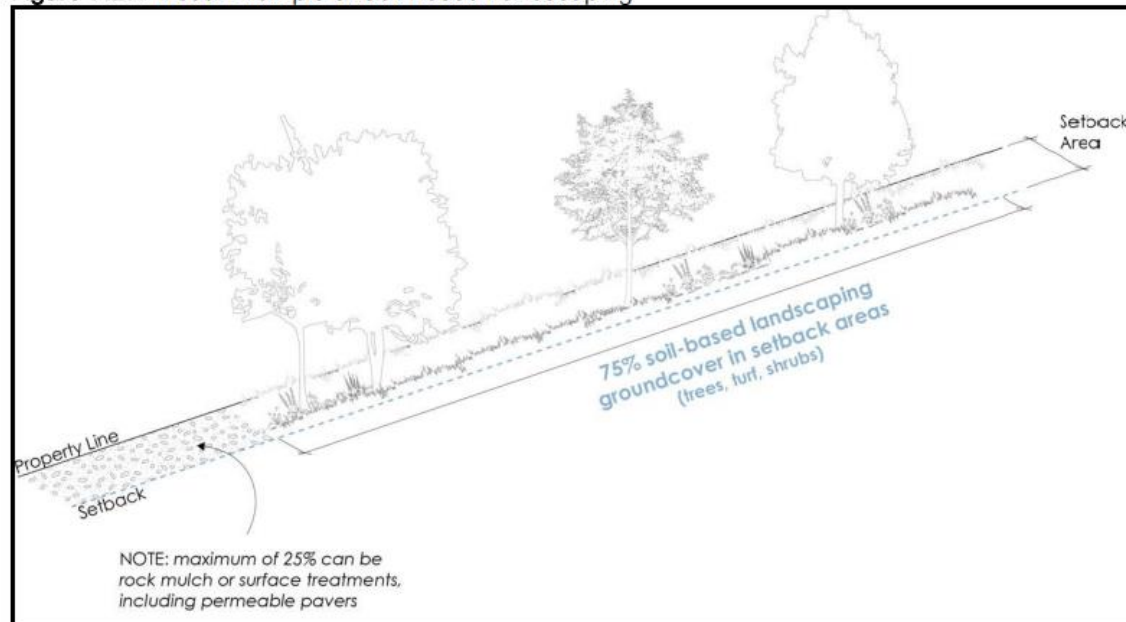
Action 1 - Support increased tree planting requirements in new *Zoning Bylaw*.

- ▶ Adding more trees to parking lots
- ▶ Increasing clarity on tree requirements in Landscape Buffers

Action 2 - Strengthen tree replacement requirements in Environmentally Sensitive Areas.

- ▶ Amend Bylaw No. 8041 to remove tree replacement exemption for emergency removals.

Figure 7.2.1 Visual Example of Soil Based Landscaping





Action 3 - Amend *Procedures Bylaw* (No. 12310):

- ▶ Pre-development tree inventory
- ▶ Construction drawings **Qualified Professional**
- ▶ **Monitor** landscaping throughout construction to discourage changes
- ▶ Staffing increase by 1 FTE to **increase frequency of inspections**
- ▶ Allowance to **hold more than 10% of bond** and inspect trees for multiple seasons

Implementation Strategy:

Action 4 - Increase tree planting requirements to support tree canopy expansion objectives of 2040 OCP.

- ▶ New Zoning Bylaw tree requirements for low density zones – **minimum 1 tree per lot.**
- ▶ Coordinate with Building Permit reviews to capture Single Detached Dwellings and other construction that doesn't require a Development Permit.
- ▶ Consider other zoning regulations (parking relaxations, height and/or setback variances) or to encourage tree retention and tree protection covenants.

▶ *Report back to Council in 2023*

Implementation Strategy:



Action 5 - Support tree longevity through a *Landscape Standards Bylaw*.

- ▶ Make room for roots – good soil
- ▶ Include **Climate Resiliency Assessment**:
 - ▶ Shading of amenity space and/or buildings
 - ▶ Irrigation standards and on-site water harvesting
 - ▶ Mulching standards
 - ▶ Permeable surface/stormwater infiltration requirements
 - ▶ Species recommendations
 - ▶ *Plant the right tree in the right place!*

Implementation Strategy:

Landscape Standards Bylaw is an opportunity to include Tree Protection Bylaw elements...

► Provincial tree replacement formula:

- 1 tree at 0 mm - 151 mm (6") DBH = 2 replacement trees (min height 1.5 m);
- 1 tree at 152 mm - 304 mm (12") DBH = 3 replacement trees (min height 1.5 m);
- 1 tree at 305 mm - 456 mm (18") DBH = 4 replacement trees (min height 2.0 m);
- 1 tree at 457 mm - 609 mm (24") DBH = 6 replacement trees (min height > 2.0 m);
- 1 tree at 610 mm and larger (36") DBH = 8 replacement trees (min height > 2.0 m).

► Compensation payments to cover cost to plant replacements.

Implementation Strategy:

Action 6 - Monitor tree canopy and assess against 2040 OCP Objectives:

- ▶ Update **Sustainable Urban Forestry Strategy** and compare against 2019 LiDAR baseline.
 - ▶ Contributions received from tree compensation, following implementation of **Landscape Standards Bylaw**, could be used to fund more tree sales through *NeighbourWoods Program*.
 - ▶ Coordinate with City of Kelowna *WaterSmart Qualified Water Efficient Landscaper* professional training.
- ▶ *Long term monitoring to assess progress*

Strategy Summary

1. Support increased tree planting requirements in new *Zoning Bylaw*
2. Amend existing *Tree Bylaw No. 8041* to increase replacement requirements in environmentally sensitive areas
3. Amend *Procedures Bylaw* to support tree inventories and multi-year monitoring with additional staff (1 FTE)
4. Increase tree planting requirements in Zoning Bylaw
5. Develop Landscape Standards Bylaw
6. Long term monitoring and evaluation

Staff Recommendation

- ▶ THAT Council directs staff to investigate the implementation requirements for the preferred six actions and report back to Council. .



Conclusion of Staff Presentation