

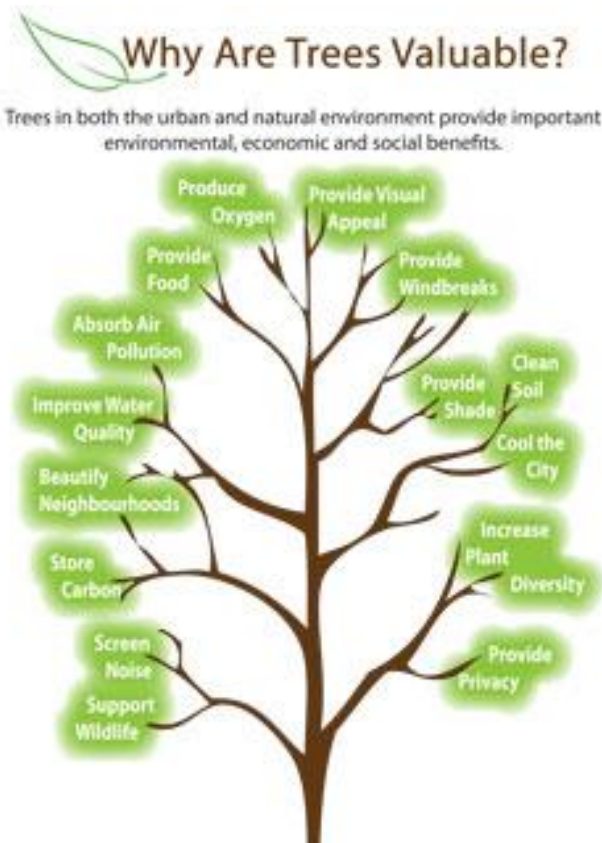
# CHALLENGES OF GROWING AN URBAN FOREST IN THE OKANAGAN VALLEY

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Parks Services Manager for the City of Kelowna

## OUTLINE

- ▶ Kelowna
- ▶ Challenges
- ▶ Strategy
- ▶ Recommendation
- ▶ Going Forward





## Kelowna

- ▶ 127,360 people
- ▶ Located in rain shadow created by coast mountains
- ▶ 9-12" precipitation
- ▶ Hot summers, "mild" winters (USDA Zone 6)

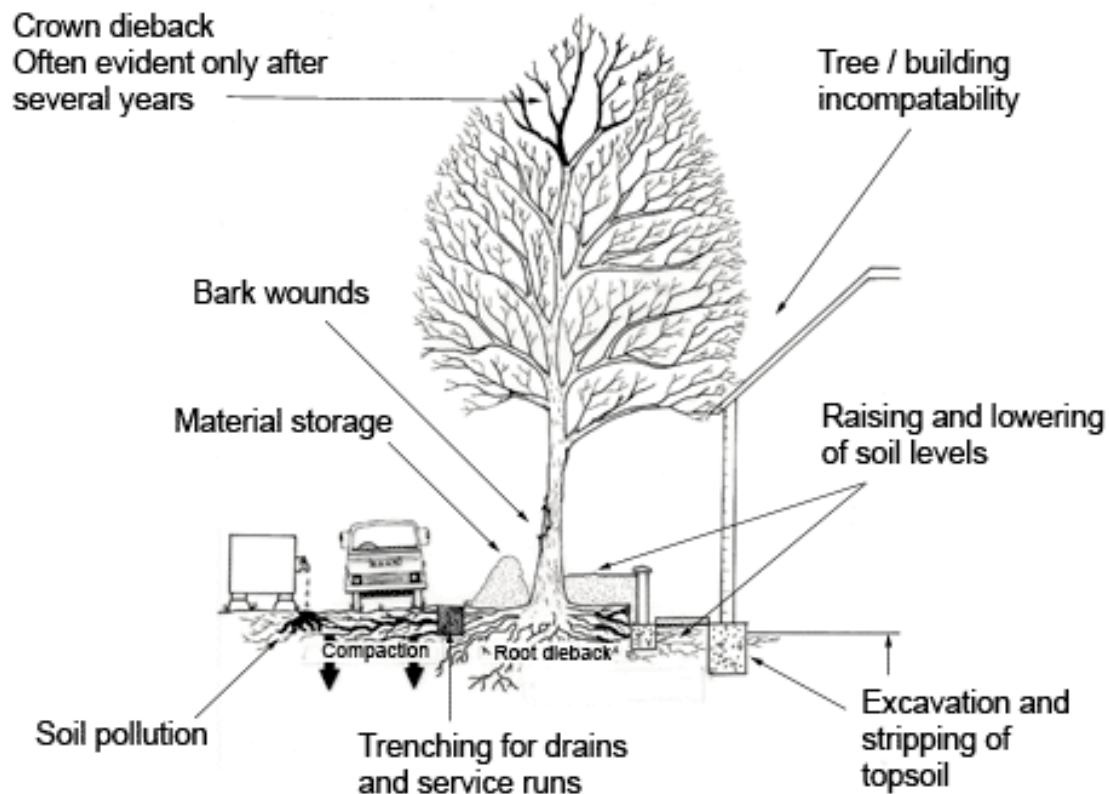
## CHALLENGES

- ▶ Construction and maintenance
- ▶ Weather and Climate
- ▶ Fuel management
- ▶ Forest Health
- ▶ Culture / public perception
- ▶ Nursery stock vs planting history



# CONSTRUCTION DAMAGE

## ► example



# CONSTRUCTION/ MAINTENANCE DAMAGE CONT.



*What came  
first the tree  
or the  
sidewalk...?*



# TREE DECLINE

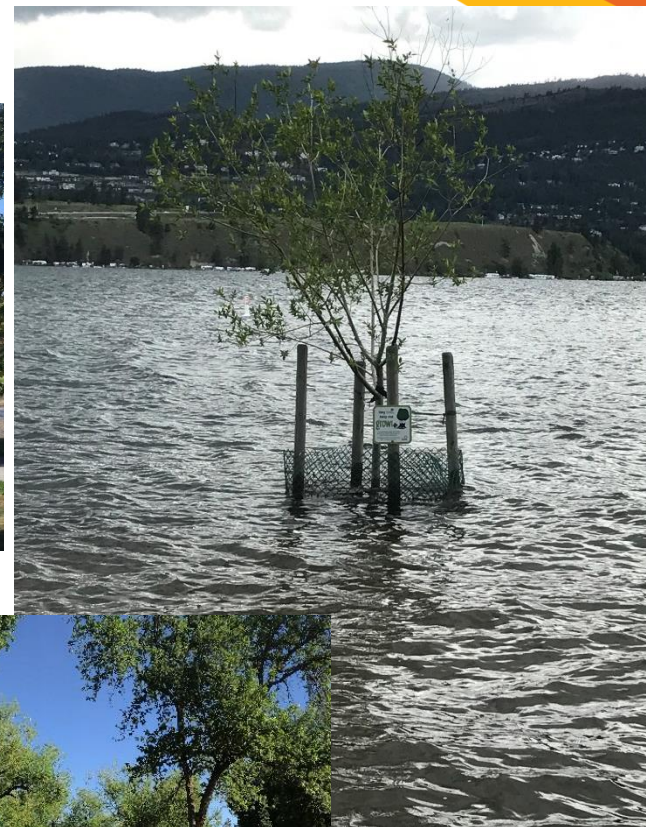
DUE TO LACK OF TREE PROTECTION DURING CONSTRUCTION



# CLIMATE AND WEATHER

- 
- ▶ Arid climate
  - ▶ Limited tree species
  - ▶ Tough growing conditions

# FLOODING DAMAGE



# FOREST HEALTH

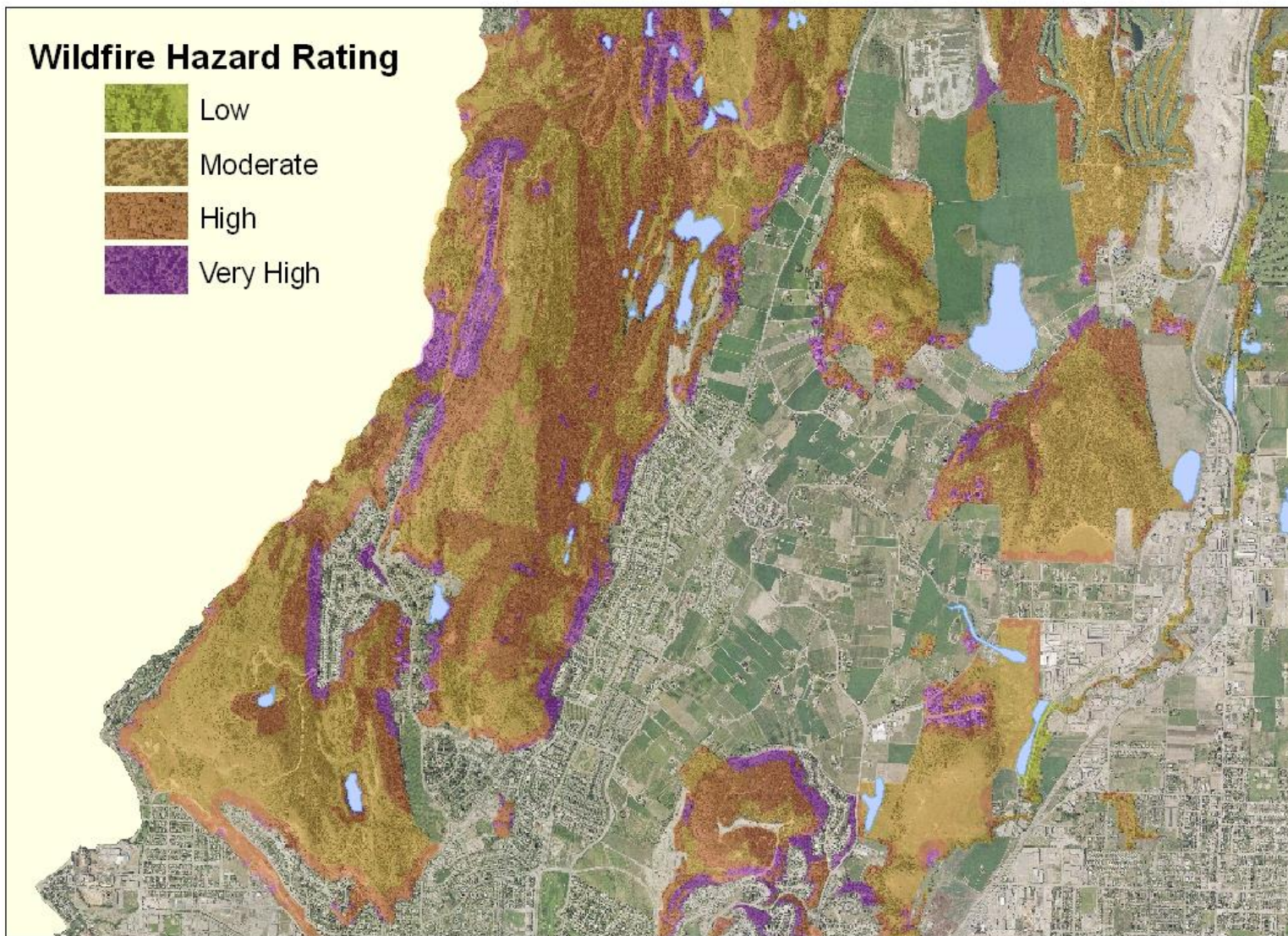
- ▶ Pine Beetle (MPB, WPB)
- ▶ Spruce Budworm
- ▶ Tussock Moth
- ▶ Hazardous trees
- ▶ Weather (wind, flood, snow etc)
- ▶ Wildfire management



# NUTRIENT DEFICIENCIES



## Wildfire Hazard Rating



# Okanagan Mountain Park Fire

45,000 residents were evacuated  
239 homes destroyed

Images courtesy of Don McPhail - Okanagan Mountain Fire

# CULTURAL PRACTICES



## RECOMMENDATIONS

- ▶ Drought tolerant trees selection and irrigation optimization
- ▶ Planting Programs
- ▶ Improve tree inventory systems
- ▶ Strengthen tree planting standards
- ▶ Tree maintenance Standards
- ▶ Tree Protection Bylaw update

# TREE PLANTING

- ▶ Community tree planting program
- ▶ NeighborWoods: provides trees at reduce cost
  - ▶ Residents buy tree for their property
- ▶ Educate and inform residents about our urban forest and proper planting techniques



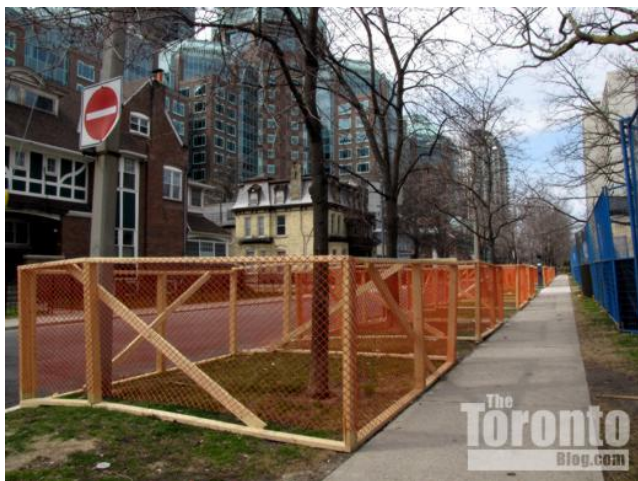
# CITY TREE PLANTING

- ▶ Bare root tree planting
  - ▶ Holding nursery
  - ▶ Transplanting



# TREE PROTECTION

- ▶ Current bylaw does not protect all trees
- ▶ Emphasis on construction zones
- ▶ Significant, rare, heritage trees
- ▶ Show by example



## GOING FORWARD

- ▶ Policy and planning changes to protect canopy
- ▶ Community engagement
  - ▶ NeighborWoods Kelowna - Urban tree advocacy group established in 2018
  - ▶ Volunteer planting projects (Girl Guides, TD etc)
  - ▶ Door hanger program (comments or concerns)
- ▶ Grant funding - supplement annual planting

A photograph of a forest floor. In the center, a dark, hollowed-out log sits on the ground. Inside the log, a small, bright green sprout with many thin needles is growing. The surrounding ground is covered with dry pine needles, twigs, and some green grass. The text "THANK YOU" is overlaid in white, bold, sans-serif font across the top of the log.

THANK YOU

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