

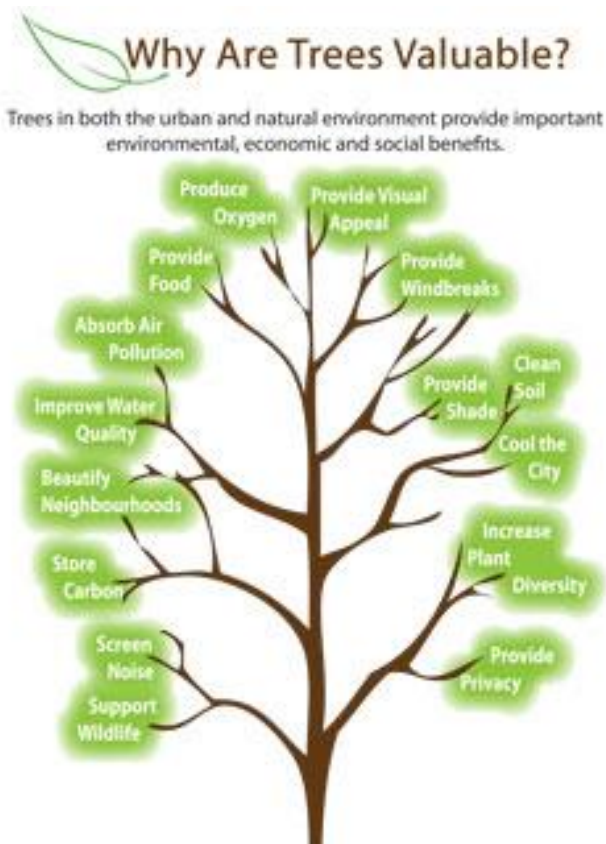
# CHALLENGES OF GROWING AN URBAN FOREST IN THE OKANAGAN VALLEY

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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)

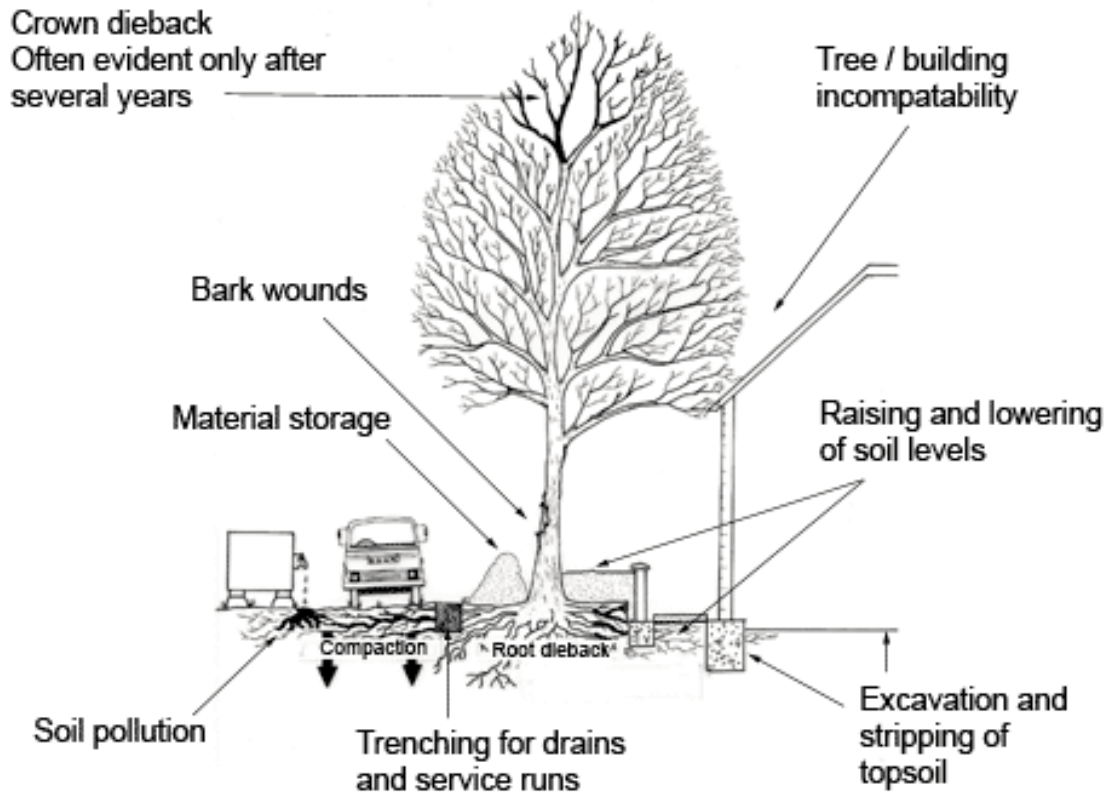
## CHALLENGES

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

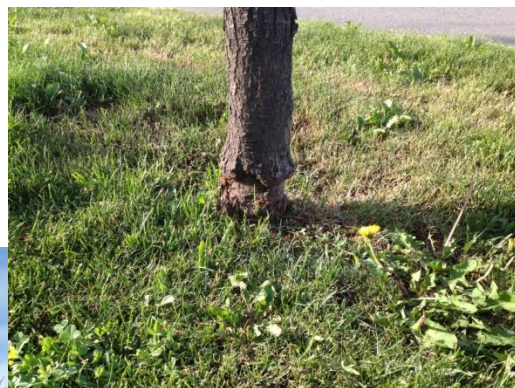


# CONSTRUCTION DAMAGE

## ▶ example



# CONSTRUCTION/ MAINTENANCE DAMAGE CONT.



# TREE DECLINE

DUE TO LACK OF TREE PROTECTION DURING CONSTRUCTION

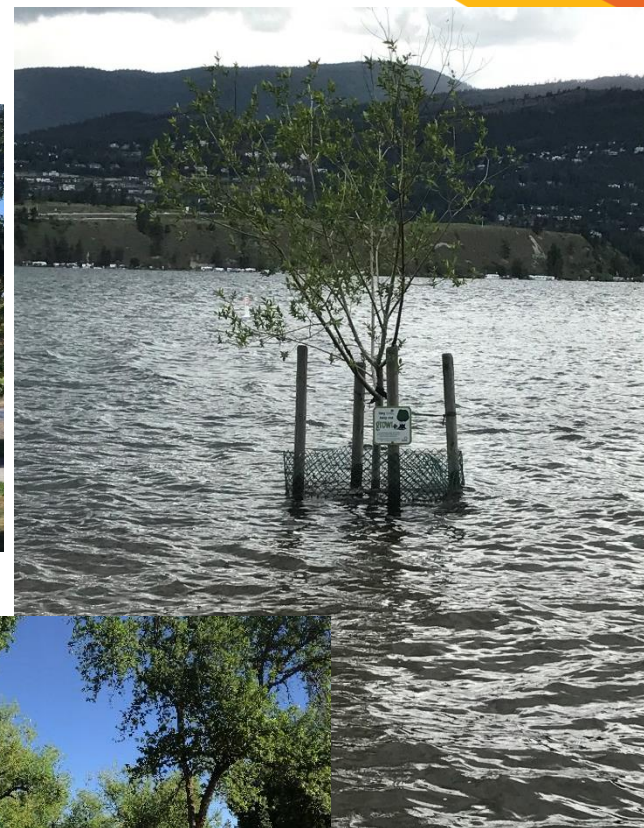


# CLIMATE AND WEATHER

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



# FLOODING DAMAGE



## FOREST HEALTH

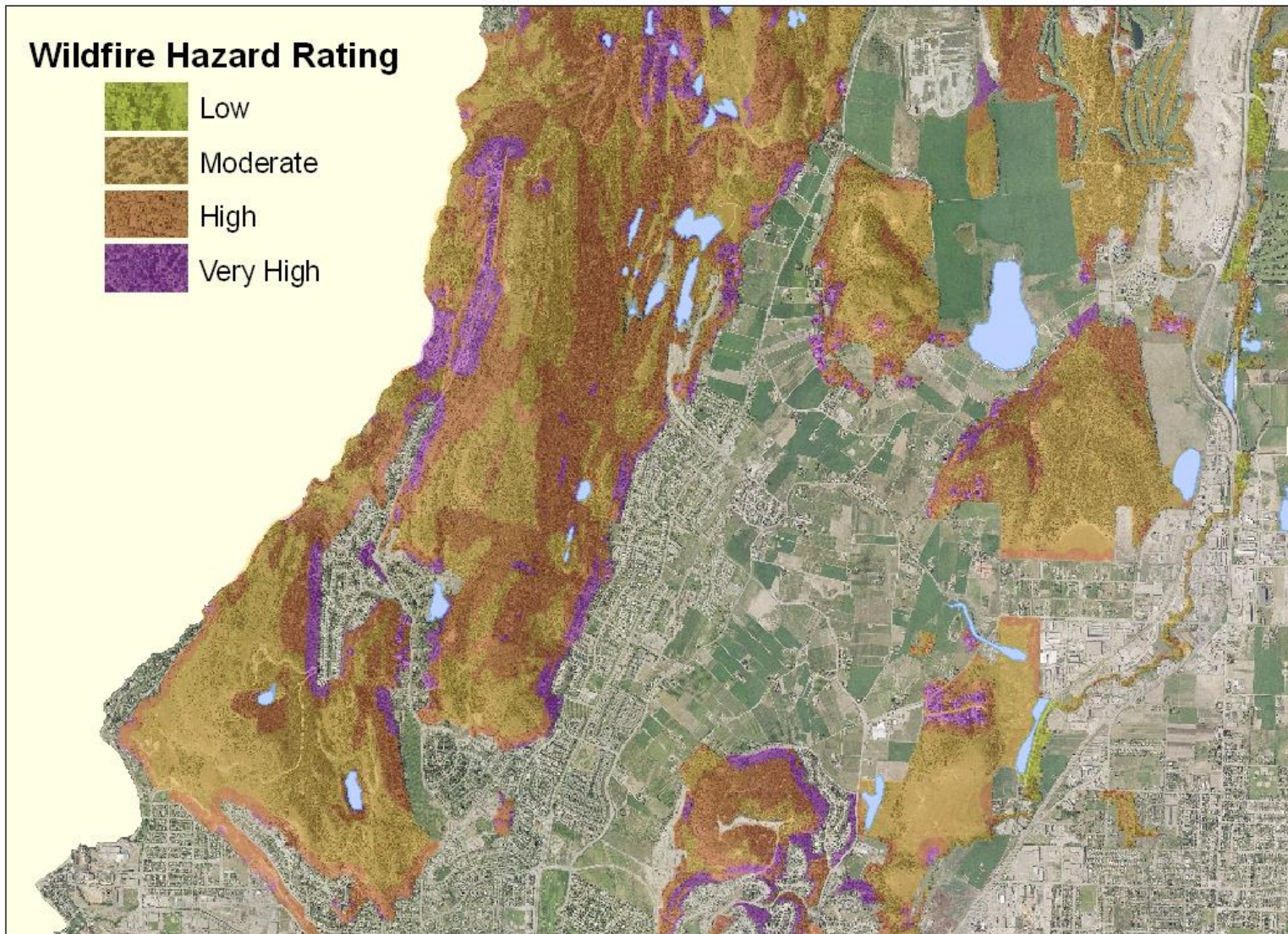
- ▶ Pine Beetle (MPB, WPB)
- ▶ Spruce Budworm
- ▶ Tussock Moth
- ▶ Hazardous trees
- ▶ Weather (wind, flood, snow etc)
- ▶ Wildfire management



# 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 tree stump with a small green sapling growing from its hollowed-out center, surrounded by grass and forest floor debris.

**THANK YOU**

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