

# Staff Report to Council

Parks, Recreation, and Culture

FILE: 12-6300-01/24

REPORT DATE:	June 12, 2024	MEETING DATE:	June 25, 2024				
TO:	Mayor and Council						
FROM:	Diane Chamberlain - Director of Parks, Recreation, and Culture						
SUBJECT: Urban Forest Health Update - Hoffman Park and Shoreline Park  CHIEF ADMINISTRATIVE OFFICER REVIEW/APPROVAL:							
RECOMMENDATION(S):							
THAT Council:							
<ul> <li>A. Receive for information the Staff Report titled 'Urban Forest Health Update - Hoffman Park and Shoreline Park' as presented at the June 25, 2024 Council meeting; OR</li> <li>B. Other.</li> </ul>							
<u>PURPOSE</u>							
Arborist reports for Hoffman Park and Shoreline Park were prepared to address the current challenges impacting the health and safety of our natural assets. This report is presented to Council to inform them of the condition of these parks and the potential community impact.							
	ort 🔲 Decision Repo	ort 🔲 Direction Rep	port				
DISCUSSION							
HOFEMAN DARK							

Hoffman Park is a 7 acre second-growth urban forest that is home to nearly 450 Douglas Fir, Western Hemlock, and Western Red Cedar trees, with additional understory plantings of a variety of smaller saplings, deciduous trees and shrubs. In the Winter of 2023, several Douglas Fir and Western Hemlock trees were observed showing signs and symptoms of *Phaeolus schweinitzii*, a type of root and butt rot that impacts the structural integrity of conifers in a forest stand. This decline warranted immediate attention and intervention. To better

understand the condition of the urban forest, the City of Pitt Meadows hired a Municipal Specialist in Arboriculture from Root and Crown Consulting to do a thorough examination.

To narrow the scope of work for the Specialist, the city's on staff Arborist walked the entire park and after a visual assessment identified 192 trees to perform a Level 1 Risk Assessment. This assessment focused on high-use areas of the park, such as the dog park, main walking trails, zones frequented by schools and daycares, and neighbouring properties.

The results from the Level 1 assessment provided a critical guide for the Specialist to carry out a detailed analysis. A level 3 Risk Assessment was completed on 77 trees. This assessment involved resistant drilling techniques to collect data from inside the stem to determine the amount of decay present.

## **Background:**

Many trees in Hoffman Park are exhibiting signs of thinning crowns, branch dieback, resinous streams, and some fruiting bodies. The primary cause of this decline is *Phaeolus schweinitzii*, a root and butt rot fungus that attacks the roots and the lower 10 feet (3 meters) of the stem. This fungus enters through wounds or damaged roots and can spread via spores carried by the wind or, less commonly, through root-to-root infection. Environmental stresses due to climate change likely increased the trees inability to defend itself against the fungus.

As the decay progresses, wood loses its structural integrity, making trees vulnerable to breakage and wind throw. Infected trees may also become more susceptible to other pests and diseases, such as the Douglas-fir beetle or *Armillaria* root rot. The presence of these decay pathogens poses significant risks to public safety and compromises the overall health and resilience of the forest stand.

#### Level 3 Risk Assessment Results:

A total of 77 trees were tested and analyzed by the Specialist using data collected from a resistograph to determine the extent of decay. Outlined below are the results from their assessment:

- 31 trees are in Good condition
- 21 trees are Low Risk and require monitoring
- 9 trees are Medium Risk and require monitoring
- 10 trees are High Risk and require removal
- 6 trees are Urgent and require immediate removal

### **Management Practices:**

Our management practices are rooted in scientific data and expert assessments. Prioritizing safety and sustainability, the city will be proceeding with the removal of 16 trees showing advanced stages of decay.

The removal is scheduled to begin July 2, 2024 and will take approximately 3 weeks to complete. Staff are awaiting a full Safety Plan from the contractor, however; due to the level of rot detected, the trees may not be safe for an Arborist to climb and a crane truck may be required. Additionally, for safety reasons a full park closure may be required which would include fence rental for the entire area at an additional cost.

# **Estimated Budget and Timeline:**

- The estimated cost to fell 16 trees from the ground is \$35,000.
- Potential additional costs crane and fence rental amount TBD.
- Approximately 3 weeks.

#### **Future Considerations:**

Once the impacted trees are removed, the surrounding ground area can not be replanted until the area is determined to be free of the disease and the soil has been remediated. During this time staff will continue to monitor trees in the surrounding area to determine if it has spread beyond what has been identified. Additionally, staff will perform addition research including but not limited to a review of surrounding communities that may be experiencing this and what mitigation measures others have considered and/or implemented.

#### **SHORELINE PARK**

Shoreline Park is a popular destination park that sees approximately 800 visitors per day and over 200,000 visits per year. Given the high usage of the trail and it's proximity to homes, the Parks Department began working closely with Professional Arborists, Metro Vancouver, and neighbouring residents to monitor these trees. In 2022, a total of 40 hazardous Cottonwood and Red Alder trees were removed.

For consistent assessments, the City of Pitt Meadows hired Diamond Head Consulting to conduct a Level 1 Tree Risk Assessment, following their assessment along Metro Vancouver's assessment of the Pitt River Greenway. This assessment focused on evaluating the likelihood of tree failure, the potential impact, and the severity of consequences in the event of a failure.

#### **Background:**

The trees growing along the south side of Shoreline Trail are predominately Black Cottonwood, mixed with some Red Alder and Bitter Cherry. All of which have naturalized and were not intentionally planted.

Black Cottonwood Trees (*Populus trichocarpa*) are medium-large deciduous trees native to Western North America. They thrive in moist, well-drained soils and are commonly found along rivers and streams. They can grow up to 100-150 feet tall with an average lifespan of 200 years. They are often sensitive to environmental stresses and are prone to self-pruning leading to unpredictable breakage. The trees assessed in the report have been exposed to high pressure winds, tidal changes, and bank erosion making them vulnerable to wind throw.

For the health and safety of park users, 20 trees were identified in the recent assessment for removal due to poor health and structural issues. These trees will be scheduled for removal, following the Hoffman Park work.

# **Estimated Timeline and Budget:**

- The estimated cost to fell 20 trees from the ground is \$30,000.
- Approximately 2 weeks.

COUNCIL STRATEGIC PLAN ALIGNMENT

☐ Principle	ed Governance	☐ Balanced Fcon	omic Prosperity	√ □ Infrastructure					
•	<ul> <li>□ Principled Governance</li> <li>□ Balanced Economic Prosperity</li> <li>□ Community Spirit &amp; Wellbeing</li> <li>□ Corporate Pride</li> <li>□ Public Safety</li> </ul>								
□ Not App	licable								
WORKPLAI	N IMPLICATIONS								
<ul> <li>□ Already accounted for in department workplan / no adjustments required</li> <li>□ Emergent issue / will require deferral of other priority(ies)</li> <li>□ Other</li> </ul>									
For safety reasons the trees identified in the Arborist report require immediate removal, therefore other tree work in the community will be postponed to future years.									
FINANCIAL	IMPLICATIONS								
□ None	□ Budget Pr	eviously Approved	☐ Refer	ral to Business Planning					

For safety reasons the trees identified in the Arborist report require immediate removal, and were not planned for in the approved 2024 budget. The remaining \$27,000 in the Urban Forestry Capital budget will be used for this work, however it will be overspent by \$38,000. It is important to note that this does not include for the potential additional costs identified for this

project, or other tree failures throughout the year.

Staff will attempt to absorb this overage within Council's approved 2024 operating budget by offsetting it against other potential unplanned surpluses. If staff are unable to accomplish this, it is proposed to be funded by the Operating Reserve and will be included as an amendment to the 2024 5-year Financial Plan Bylaw that Council will consider prior to June 30<sup>th</sup>, 2025, following the 2024 year-end.

following the 2024 year-end.							
PUBLIC PARTICIPATION							
⊠ Inform	☐ Consult	☐ Involve	☐ Collaborate	☐ Empower			
Comment(s):							
KATZIE FIRST NATION CONSIDERATIONS							
Referral ⊠ Yes □ No □ Other							
Katzie First Nation will be made aware of the tree removal, and permission for harvesting and/or removal of the fallen timber for firewood for the long house will be given.							
SIGN-OFFS							
Written by:		Reviewed by:	Reviewed by:				
Olivia Huppee,			Andy Messne	Andy Messner,			
Parks Supervisor and Arborist		Manager of P	arks				
			Diane Chamb	erlain,			
			Director of Pa	rks, Recreation and Culture			
			Mark Roberts	,			
			Chief Adminis	strative Officer			

# **ATTACHMENT(S)**:

- A. Arborist Report for Hoffman Park Root and Crown Consulting
- B. Arborist Report for Shoreline Park Diamond Head Consulting