



July 10, 2023

MEMO TO : Park Board Commissioners

FROM : Steve Jackson  
General Manager (Acting), Vancouver Board of Parks and Recreation

SUBJECT : **Stanley Park – Hemlock Looper and Wildfire Risk Mitigation – Board Briefing Memo**

---

Dear Commissioners,

The Stanley Park Forest Management Plan (2009) was in response to the 2006 windstorm that resulted in the loss of over 10,000 trees in Stanley Park. The document highlighted several areas of emphasis, including fire risk management. Subsequently, the Urban Forest Strategy (2018) was developed as a city-wide document, it also identified the need for proactive measures to address “wildfire, pest / disease outbreaks, and windstorms”. In addition, staff are currently working on the Stanley Park Emergency Response Plan with the support of consultant EMG.

#### **Hemlock Looper Outbreak Response**

Stanley Park is currently experiencing a Hemlock Looper (HL) outbreak. HL is a native insect that typically experiences a population boom every 15-years. For various reasons, including climate change, the current outbreak is in its fourth year. HL defoliates trees with a preference for western hemlock as well as Douglas fir – this defoliation typically leads to mortality. Other than natural predators, the only way to treat HL is with a biological pesticide known as *Bacillus thuringiensis* (Bt). Bt was not used to treat HL in Stanley Park because it also targets beneficial insects and was extremely controversial when historically used in Vancouver to treat Spiny Moth.

In 2021, Urban Forestry staff identified two primary risks stemming from the outbreak in Stanley Park. These risks include: increased tree mortality leading to public safety concerns; and increased wildfire risk due to fuel build-up in the park. In 2022, staff recognized the extent of tree mortality exceeded staff’s operational capacity and they initiated retaining a consultant to assist. In July 2022, staff submitted project referrals to the Musqueam, Squamish and Tsleil-Waututh outlining the issues, confirming a forthcoming RFP for consultant support and Park Board’s commitment to provide native lumber and opportunities for the Nations to inform post-mitigation planting and restoration plans. Urban Forestry issued an RFP in Fall 2022 seeking a consultant to prepare a *Hemlock Looper and Wildfire Risk Assessment and Mitigation Plan* for Stanley Park. Consequently, the expert forestry consultancy – B.A. Blackwell and Associates (Blackwell) were retained and have worked on the initiative since December 2022.

At the January 16, 2023 Board Meeting, Commissioners were briefed on [Urban Forestry Initiatives in Stanley Park](#) including Blackwell’s work to address increased tree mortality and associated wildfire risks. Blackwell recently shared their findings and recommendations with Park Board staff and they will be updating their report in the coming weeks based on staff feedback.

With this backdrop, Blackwell have advised that mitigation treatments are imperative to avoid catastrophic losses. If left untreated, risks to public safety will increase significantly due to higher likelihoods of trees failing and impacting people. In addition, the consequence of a wildfire in



Stanley Park could be devastating to the region, including potential impacts on air-quality, the ecology of the park, transportation infrastructure, businesses and tourism.

Blackwell have developed three treatment scenarios with a focus on tree removals and fuel reduction to address risks. Treatment options are mindful of values in the park such as archaeological resources, habitat preservation, invasive species management, post removal tree planting and establishment as well as visual resource management and public relations considerations. In Fall 2023, staff aspire to begin treatments in priority areas such as the Stanley Park Causeway, however mitigation and restoration efforts will come at significant cost. The overall timeline for mitigation and restoration efforts will not be known until funding is secured for target treatment areas.

### **Day-to-Day Mitigation & Response**

In an effort to manage current wildfire risks in Stanley Park, staff are meeting or exceeding Metro Vancouver's [Wildfire Preparedness and Response](#) guidance. Currently, the fire risk is 'high' and on-the-ground efforts have been amplified and staff reallocated to increase capacity in Stanley Park. Since early June 2023, a new Urban Forestry superintendent has been directing three full-time crews removing hazard trees in high use areas of Stanley Park. Ignition risk is reduced throughout the park by two full-time water crews wetting-down forest edges and horticulture staff focused on vegetation encroachments into road-ways (most notably west of Prospect Point). Finally, the Park Rangers are actively monitoring activities in the park and over-night shifts may occur if the fire risk elevates to 'extreme'. They maintain close contact with Vancouver Fire Rescue Services and provide exact coordinates of fires using the 'What3Words' app - this allows for elevating a targeted response anywhere in the park. Note that there have been 94 fires within Stanley Park in 2023 and in June alone, 23 fires, 13 more than compared to June 2022.

Regards,

A handwritten signature in black ink, appearing to be "SJ" followed by a long horizontal stroke.

Steve Jackson  
General Manager (Acting) - Vancouver Board of Parks and Recreation

JM

Copy to: PB Senior Leadership Team  
PB Communications