Purpose

The Vancouver Board of Parks and Recreation is committed to providing parks and recreation services to benefit all people, communities, and the environment. With this in mind, Vanier Park is an example of balancing these priorities, providing a home to nesting eagles, as well as a place where residents enjoy recreation. The Park Board is exploring options to integrate a child and youth bike pump track into Vanier Park, as well as environmental improvements to ensure nesting eagles can successfully raise their young and make the park their long-term home.

The proposed project will include:
- A pump track for children and youth;
- A permanent bald eagle nesting pole to minimize disturbance to the eagles; and
- Stewardship strategies for the Vanier Park forest including:
  - Invasive species removal
  - Garbage removal
  - Planting longer living native trees, shrubs, and groundcovers
  - Improved trails, signage, and environmental education

The Vanier Park Forest

The red bounding box below outlines the Vanier Park Forest study area within Vanier Park from 1949 to 2014. The earliest photo below was taken in 1949 and shows Canadian military service buildings on the current study site. Trees currently occupying the study site are less than 40 years old as the site wasn’t forested until after 1979. The forest is composed of red alder, black cottonwood, and a variety of non-native and invasive species such as Japanese knotweed, English ivy, and Himalayan blackberry.

Background

- 2010: The Park Board built a series of dirt jumps within the Vanier Park forest. These bike jumps were built in conjunction with the Vancouver Dirt Jump Coalition (VDJC) who have been stewards of the area – cleaning up garbage, maintaining the jumps, and planting trees.

- 2018: The Park Board held off expanding the proposed pump track to evaluate potential impacts to the eagle nest that was built above the site in 2017. Since then, the Park Board has worked closely with the Ministry of Forests, Lands, Natural Resource Operations (FLNRO), the Hancock Wildlife Foundation and consulting biologists Environmental Dynamics Inc. (EDI) to ensure proposed work is mindful of the Provincial Guidelines for Raptor Conservation.

- 2019: The Park Board closed the existing bike jumps for 8 weeks (March 19 - May 10) during the critical nesting period to ensure nesting bald eagles above the site had the best opportunity for success. EDI have been monitoring the eagles during this period and continue to assist the Park Board in developing future bald eagle management strategies.
CHALLENGES

Wildlife
The Vanier Park forest offers wildlife habitat for a variety of species including bald eagles. An active nest, which was built over the existing bike track in 2017, is located in a structurally weakened tree. This tree does not have long-term nesting potential and might present a hazard to park users.

Environment
The Vanier Park forest is currently degraded. The forest is composed of two short-lived tree species consisting of red alder and black cottonwood - there are little to no long-lived native species. The area is also dominated by invasive species such as English ivy, Japanese knotweed and Himalayan blackberry, which are displacing native species. There is also an ephemeral pond in the middle of the forest which requires enhancement with native water-loving plants.

Recreation
The existing dirt jumps are valued by a wide range of users. They cater to expert-level riders and exclude younger users under the age of 10. Community members and stakeholders, including the Vancouver Dirt Jump Coalition, have requested a pump track be added to the existing amenity to serve younger children.

Informal Trails
Informal trails, a lack of signage, and minimal wayfinding markers present challenges for users of the trails throughout the site. Also, the surfacing of the existing trails can be difficult to navigate and this presents mobility challenges.

Lack of Identity
The approved existing dirt jumps lack formal signage to identify the area as a Park Board sanctioned use. This may present challenges and potential misunderstandings between park users.

Illegal Dumping
Limited sight-lines and degraded landscape provide an opportune location for undesirable activity. Unfortunately this has resulted in an abundance of illegal dumping.

Vandalism
Several alders and cottonwoods within the south end of the forest have been vandalized resulting in poor health and mortality. The existing site signs have also been vandalized, stolen, and/or covered in graffiti.
What is a pump track?

A pump track is a small, dirt track designed with tight and banked corners, and small bumps forming a continuous loop. The goal is to go around the track without pedaling. Riders ‘push’ their bicycles into and around the corners and bumps to build up momentum and speed. A pump provides an opportunity for unstructured active play. Pump tracks are low risk (since there are no mandatory jumps), low maintenance (no wood structures), and enjoyable to riders of all skill levels. Pump track riding does not require an expensive specialty bike, nor is there a ‘minimum’ speed to stay on the track to still have fun.

The proposed pump track will be constructed by Joyride Bike Parks Inc. - this company is best known for its trail, pump track, and jump installations at Crankworx in Whistler, BC each summer. The pump track will be constructed using dirt - there is no paving required. An arborist report has been prepared to best locate the pump track with minimal impact to trees. Additional tree planting will take place to ensure the forest canopy is enhanced. A split-rail cedar fence will be installed to delineate the existing bike jumps and proposed pump track.
4 PROPOSED PUMP TRACK

Proposed permanent eagle nesting pole

Detailed Plan of Proposed Pump Track

Proposed permanent eagle nesting pole
The Vanier Park eagles have been nesting in the area since 1999. The original nest was in a black cottonwood tree at the Canadian Coast Guard Station at the end of Whyte Avenue – this nest still exists, but was not selected for nesting this season. A second nest was constructed in fall 2017 in a black cottonwood tree in the Vanier Park forest above the existing bike track - this nest was blown from the tree in July 2018. The damaged nest was replaced in the same cottonwood tree in September 2018 by the Park Board and the Hancock Wildlife Foundation.

This rebuilt nest is currently active, but is located in a structurally degraded multi-stemmed tree that does not provide a long-term nesting location. One of the two stems of this tree is leaning at a 45-degree angle and is structurally unstable. This half of the tree will need to be removed in the coming year, and the structural integrity of the remaining stem will need to be monitored going forward.

The Park Board is proposing the installation of a permanent nesting pole deeper in the forest. This will require removing the currently active nest after the nesting season. This is supported by the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRO) and consulting biologists at Environmental Dynamics Inc.

The permanent nesting pole located deeper in the forest will limit the eagle’s exposure to surrounding activities providing a buffer to improve their habitat.

Some examples of successful eagle nests in urbanized settings include:

- BC Ferries terminal in Tsawassen has a nest on a Telus pole
- Jericho Park (Park Board service yard)
- Strathcona Park in Vancouver
- Moodyville Park (City of North Vancouver)
- Vanier Park (Coast Guard nest that was previously active prior to 2017)
Do permanent nesting poles work?

According to FLNRO:

“This is a mitigation strategy supported by the BC Ministry of FLNRORD with previously successful adoptions by eagles of artificial nest poles.”

According to The Hancock Wildlife Foundation (HWF):

“HWF has been undertaking raptor mitigation projects for over a decade. During this time it has become one the leading organisations in Canada in developing successful mitigation options for raptors, and in particular, for Bald Eagles. To date, we have been involved with nearly 20 mitigation Bald Eagle nests throughout the Fraser Valley. Of these, all territories that had lost their original nesting tree or nest itself, have accepted our alternate nests with 100% success rate. While our four artificial pole nests have been accepted to a lesser degree, much of this was due to pairs having existing nests and did not need to relocate their nest. Our Nelson Road pole in Richmond was installed in 2010 and utilized when a new territory was created by a new pair of Bald Eagles in 2014 and has been active every year since.”
Some of the most important aspects of this diverse project are the stewardship initiatives planned for the Vanier Park forest. They include:

- Invasive species removal
- Garbage removal
- Planting longer living native trees, shrubs, and groundcovers
- Improved trails, interpretive signage, and environmental education signage

### Invasive Species Removal

The removal of invasive species will take up to two years due to the biology of these persistent species. Removal of these species will improve forest health and open up opportunities for native species to establish and flourish.

### Garbage Removal

The Park Board is committed to removing all illegally dumped garbage from the Vanier Park forest in the short-term. The removal of this refuse will help discourage ongoing dumping within the area. Additional waste bins will also be strategically located throughout the site.

### Tree, Shrub and Groundcover Planting

Removing invasive species that out-compete desirable species will create new planting areas for long-lived native species, including Douglas fir, western red cedar, grand fir, Sitka spruce, vine maple, red elderberry, salmonberry and huckleberry. Additionally, native groundcovers such as sword fern and salal will be added to the area to improve the health of the urban forest. These species will provide important forage for wildlife.

### Improved Trails and Signage

Existing trails within the Vanier Park forest can be difficult to walk on as they are informal surfaces composed of wood chips. Many of these trails will be improved through this initiative by adding granular surfacing that creates a more accessible surface. Wayfinding signage will also be added to help navigate through the forest and interpretive signage promoting environmental education will describe the ecology of the urban forest and wildlife.

### Proposed Timeline: (NOTE: the nest is inactive from August 1 - September 15)

**Short-term (August 1 - September 15, 2019):**

- Install permanent eagle nesting pole - supported by FLNRO
- Remove the existing eagle nest within the forest after the 2019 nesting season - supported by FLNRO if permanent pole is installed
- Pump track installation
- Garbage removal
- Additional waste bins
- Hazard tree mitigation

**Long Term (Fall 2019 - Spring 2021):**

- Invasive species removal
- Native tree, shrub and groundcover planting
- Path improvements adopting Crime Prevention Through Environmental Design (CPTED) principles
- Interpretive environmental education signage
- Improved policing and monitoring
Thank you for attending this open house. Please complete our survey either in person or online. The survey will be available online until June 13, 2019 and can be accessed through the project webpage at:

vancouver.ca/vanierpark

The results of this engagement will be considered in conjunction with other City of Vancouver and Park Board policies and strategies related to recreation and the environment.

Future directions for this initiative will also be mindful of input from the Province of British Columbia (FLNRO) and our professional biologist consultants (EDI).

The results and recommendations will be shared with the elected Park Board on June 24, 2019 to determine next steps. Your feedback will help inform the implementation of this initiative.

**Proposed Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2010</td>
<td>Dirt Jumps built on edge of Vanier Park forest</td>
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<tr>
<td>2017</td>
<td>Pump track expansion planning begins</td>
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<tr>
<td></td>
<td>Eagles build nest above existing bike track</td>
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<tr>
<td>2018</td>
<td>Project paused to accommodate new eagle nest and seek input from</td>
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<td></td>
<td>professionals, community-experts and the Province of B.C.</td>
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<tr>
<td>2019</td>
<td>Existing bike area fenced off for 8 weeks (Mar 19 - May 10) during</td>
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<td>critical nesting</td>
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<td></td>
<td><strong>May 30</strong> - Open House (Balancing environment and recreation)</td>
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<td></td>
<td>June 24 - Staff report back to elected Park Board to seek direction</td>
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<tr>
<td></td>
<td>August 1-September 15 - Install eagle pole, remove existing nest (while</td>
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<td>inactive), build pump track expansion, and remove garbage</td>
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<tr>
<td>2020-2021</td>
<td>Ongoing stewardship initiatives including invasive species removal, tree</td>
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<td>planting, signage installations and trail improvements</td>
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