REPORT TO COUNCIL

To: **Mayor and Councillors**

Subject: Proposed Habitat Compensation Areas

File #: 5240.01
Doc #: 199028

From: Perry Browne
Environmental Sustainability Coordinator

Date: March 10, 2025

Report dated: March 10, 2025

RECOMMENDATION:

THAT the report titled "Proposed Habitat Compensation Areas" dated March 10, 2025, be received for information.

PURPOSE:

The purpose of this report is to identify and describe a proposed bank of City-owned lands suitable be considered as habitat compensation areas that will form the basis for a future Council Policy outlining habitat restoration.

POLICY:

The Official Community Plan (OCP) identifies Environmentally Sensitive Areas (ESAs) on OCP Map 13 (Appendix A). The OCP prohibits development within “Moderate to High” sensitivity value ESAs and strongly discourages - but does not prohibit - development within “Low to Moderately Low” sensitivity value ESAs. Development applications involving Low to Moderately Low ESAs require an Environmental Development Permit approved by Council to proceed.

Should development be permitted to occur within Low to Moderately Low ESAs, the OCP requires compensation that replaces the value of the Low to Moderately Low value habitat that is being removed. The habitat compensation is to be provided at a 2:1 ratio that

typically involves planting new ground-level plant habitat and trees within an area that is double the size of the existing ESA area being removed and developed.

The majority of residential development sites within the City are relatively small (less than 2 hectares) that are not able to accommodate both the development structures and required habitat compensation land area on the same site. In these cases, additional off-site land area is required to accommodate the habitat compensation area as required by the OCP.

The Urban Forest Management Strategy was recently adopted by Council and two of the significant initiatives outlined in the Strategy are the creation of a Tree Protection Bylaw as well as and inventory of all trees on City lands. Both the tree bylaw and tree inventory projects have been initiated and are expected to be completed by the end of 2025. It is noted that within designated ESAs' the removal of any trees is regulated but otherwise there is no current protection.

COMMENTS/ANALYSIS:

Potential Sites for Habitat Bank

A desktop review, validated by specific site inspections identified a proposed habitat bank of various City-owned lands that could be considered for use for habitat compensation works on Council-approved development applications or City capital projects that are not able to accommodate the required habitat compensation on site.

It is noted that the various natural areas throughout the City identified as potential sites for inclusion in a habitat bank already have the necessary conditions to support a healthy ecosystem. However, these benefits are being lost over time due to urban development, invasive species and climate change. Since the areas already have the right soil and environmental conditions, restoring and expanding habitats in these areas is a highly effective way to improve the environment.

This approach will deliver faster, more significant ecological benefits compared to other methods, such as planting individual street trees. For example, street trees can more be expensive to plant and maintain, sequester less carbon, and don't provide the same range of benefits as a natural forest. A healthy forest can improve habitat connectivity, carbon sequestration, water quality, and support for fish, wildlife, small mammals, and pollinators, which individual trees do not replicate as well.

The potential locations for the habitat bank are included in Appendix B and are summarized thus:

1. Nicomekl Park / 208 Street

Improving and ecologically restoring the area through tree planting and habitat restoration supports several key objectives outlined in the OCP, Urban Forest Management Strategy, and the Parks, Recreation, and Cultural Master Plan, all of which emphasize the protection of natural spaces and the enhancement of tree canopy cover to provide environmental, social, and recreational benefits.

Nicomekl Park has approximately 32,000 m² of suitable area for potential conversion into a thriving riparian floodplain forest by planting a mix of native deciduous and coniferous trees. It is believed that this area holds strong potential for compensation and be the primary candidate site for meeting and even exceeding the 2:1 habitat compensation requirement of in-stream development applications as noted in subsequent sections of this report. The site has a minor constraint in that there is a gas main running through a portion of the area that will require adherence to planting standards outlined by Fortis. Staff have also identified the river banks, currently overrun with invasive blackberry as a promising candidate for restoration.

2. East Powerline Trail

Approximately 90,000 m² of area could be suitable for habitat replanting, making this the largest potential site for habitat compensation currently identified. However, planting standards set out by BC Hydro must be adhered to as this area is situated under a transmission line and is subject to BC Hydro requirements. This area would be suited to compensate any “Low” ESA.

3. Uplands Dog Park

Approximately 68,000 m² of area for tree planting and habitat compensation exists within the park. The large, landscaped fields of the park have minimal tree cover, providing adequate space for planting park trees. Additionally, a significant portion of the field lies under a BC Hydro Transmission line, which imposes height and tree species restrictions and is subject to Hydro Works.

4. Brydon Park

City staff have identified 7,800 m² of area within the park in need of additional shrub and tree planting. It has been noted that part of the park was historically a woodlot and could benefit from reforestation, with significant tree failures over the years creating opportunities for new growth and tree planting.

5. Hunter Park

City staff have identified Hunter Park as a potential location for individual tree plantings. Given its history of Douglas-firs in the park being affected by laminated root rot, any tree planting in the area would need to ensure that species considered must be resistant to the disease.

6. Nicomekl Floodplain and Trail System

The Nicomekl Floodplain and its associated trail system offer significant potential for restoration and habitat enhancement and may offer the largest potential area for offsetting habitat impacted from development. Staff have observed several areas within the floodplain experiencing invasive species encroachment, which could be replaced with native trees and shrubs. Though this is not representative of the full extent, given the vast size of the floodplain. Due to the expansive size of the floodplain within public lands, a Qualified Environmental Professional (QEP) would be necessary to assess and locate specific areas for habitat enhancement and restoration.

7. Boulevard Tree Plantings

Regarding tree compensation, staff would consider funding to plant additional boulevard and street trees throughout the City,although this is more of a challengein the denselydeveloped area north of the Nicomekl River. The northern portion of the City has been identified as having insufficient canopy cover and enhancing the tree canopy in this area would support the City's goals of preserving and expanding its urban forest, as highlighted in the UFMS.

In-Stream Development Applications

Currently there are three active development applications that involve lands with Low to Moderately Low ESAs, including a mixed-use below market rental application at 19991 49 Avenue, 19990 50 Avenue and 4951-4975 & 4991 200 Street, a residential subdivision at 20525-41 46A Avenue, and a residential subdivision at 20900-20908 Newlands Drive. There are also other potential development applications involving Low to Moderately Low ESAs that could come forward under the OCP.

In these cases, an applicant would be required to engage a Qualified Environmental Professional (QEP) that would:

1. Prepare a compensation report which would quantify the lost habitat per the ESA Guidelines;
2. Prepare a compensation plan to replace that lost habitat;

3. Work with staff to identify the most appropriate location or locations within the habitat bank, although it is expected that the compensation can be accommodated within Nicomekl Park utilizing approximately 21,500 m² of the available area.

The applicant would then enter into an agreement with the City to construct the works. This compensation agreement would be similar to development servicing agreements where securities are provided and then released once the works are completed to the satisfaction of the City and the appropriate environmental professional. There could also be instances where the City might accept cash-in-lieu of the compensation works, if it was determined that the works would be better done in conjunction with another project (i.e.: a larger combined project would be more beneficial to the environment).

Next Steps:

Following comments at the Committee of the Whole meeting a habitat compensation policy will be prepared for consideration and adoption by Council.

BUDGET IMPLICATIONS:

Where development applications seek to access the City's habitat bank all costs related to the identification of habitat loss and the preparation and construction of compensation works are to be borne by the applicant under a compensation agreement with the City.

Provincial Local Government Climate Action Planning (LGCAP) funding may also be used towards additional costs incurred by the City relating to the establishment of a habitat bank (e.g. engaging QEP's to conduct detailed environmental site assessments to evaluate the suitability for compensation, developing ecological restoration plans), and habitat compensation works, provided they align with LGCAP funding criteria.

SUMMARY:

Requiring habitat and tree compensation is essential for Langley City to meet its sustainability goals which focus on fostering a greener, healthier, and more resilient urban environment. These compensation requirements play a key role in mitigating the impacts of urban encroachment, such as habitat loss and reduced biodiversity, while supporting the City's efforts to enhance its natural areas, protect critical ecosystems, and create more greenspaces. By incorporating habitat restoration and tree planting, Langley City can ensure the long-term health of its environment, contributing to improved air and water quality, climate resilience, and overall quality of life for future generations. This approach aligns with the City's commitment to sustainability, biodiversity conservation, and creating a balanced, livable urban landscape.

ALTERNATIVES:

1. Do not consider the identified sites for habitat and tree compensation for current and future development applications. Development applications requiring habitat compensation great than that available on site would be required to identify appropriate locations for compensation.

Respectfully Submitted,

Perry Browne
Environmental Sustainability Coordinator

Concurrence:

David Pollock, P.Eng.
Director, Engineering, Parks & Environment

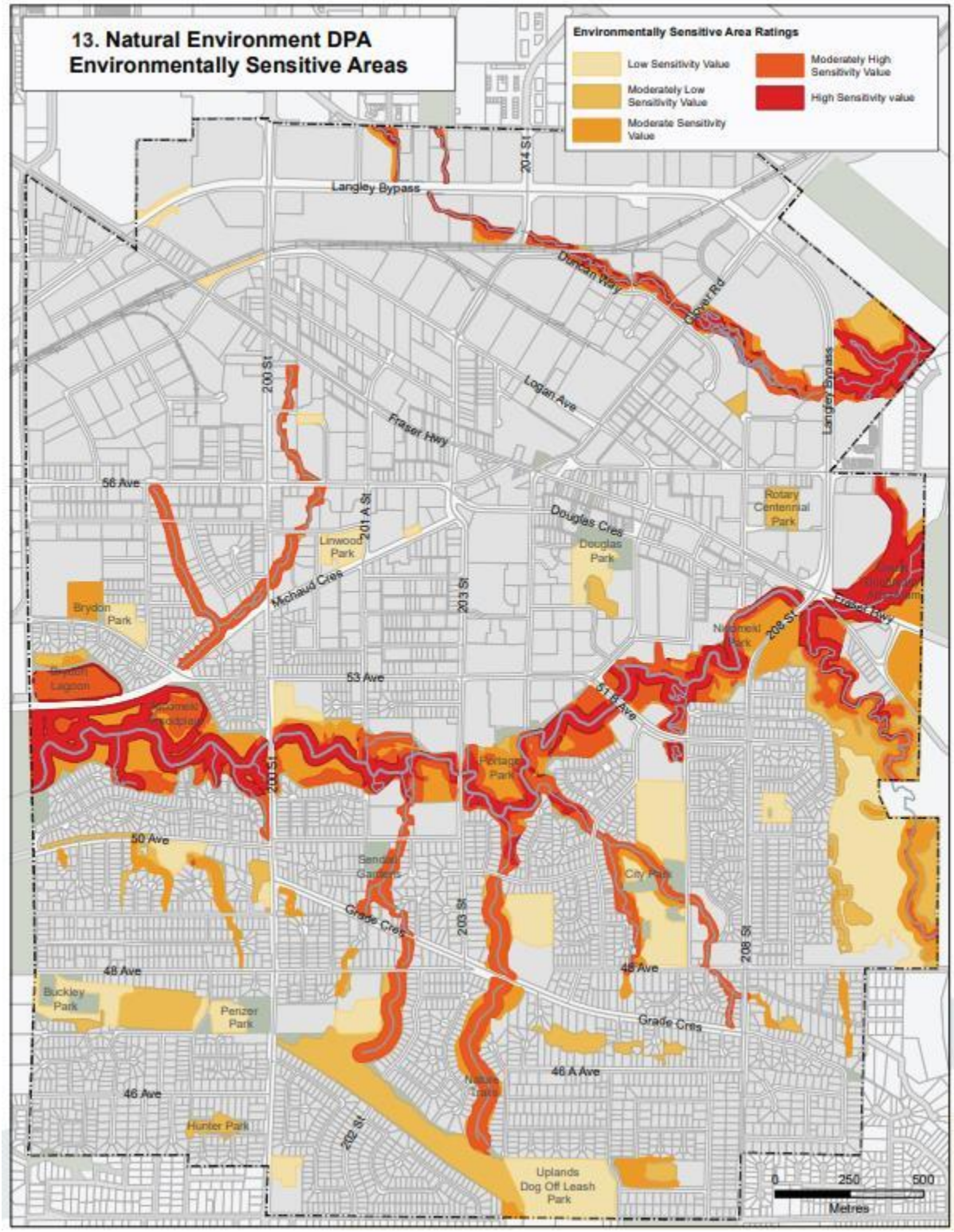
CHIEF ADMINISTRATIVE OFFICER'S COMMENTS:

I support the recommendation.

Francis Cheung, P. Eng.
Chief Administrative Officer

Attachments: Appendix A: ESA Map
Appendix B: Habitat Bank Locations

APPENDIX A
ESA Map



Langley City
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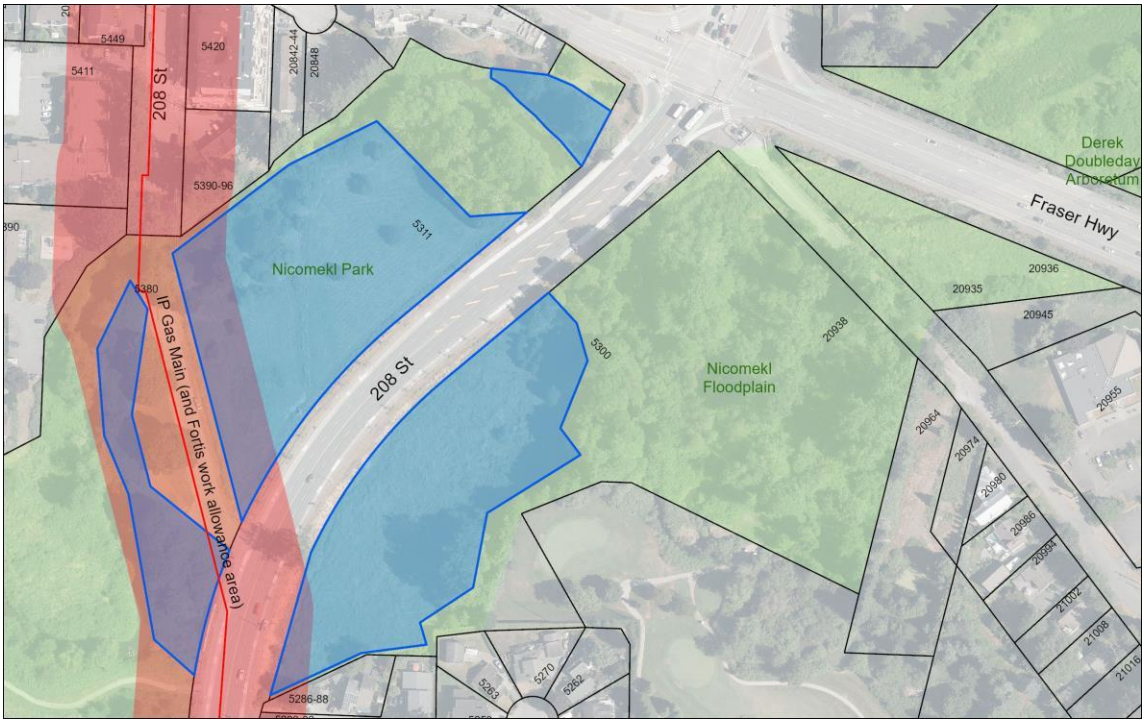
APPENDIX B
Habitat Bank Locations

1. Nicomekl Park/208 Street



NOTE: The blue shaded areas represent the habitat compensation area required for the development applications currently under consideration.

2. East Powerline Trail

3. Uplands Dog Park

4. Brydon Park

5. Hunter Park