

REPORT

Engineering Services

To: Mayor Cote and Members of Council **Date:** April 25, 2022

From: Lisa Leblanc
Director of Engineering Services **File:** 09.1740.01
(Doc# 2058282)

Item #: 2022-275

Subject: Biodiversity and Natural Area Strategy Report

RECOMMENDATION

THAT Council approve the Biodiversity and Natural Areas Strategy;

THAT staff be directed to identify and advance actions in the Biodiversity and Natural Areas Strategy that can be implemented within the existing staffing capacity and budget resources;

THAT staff be directed to bring forward as part of the annual budgeting process funding requests for specific Biodiversity and Natural Areas Strategy actions for consideration.

PURPOSE

To submit the 2022 Biodiversity & Natural Area Strategy for Council's approval.

SUMMARY

As an urbanized area, New Westminster recognizes the importance of its natural areas, urban parks and green spaces and their contribution towards biodiversity, health and well-being of residents as well as mitigating climate change impacts. Integrating natural ecosystems into the urban fabric is an important part of ensuring that the City remains resilient and sustainable as it develops.

The City is taking measures to improve biodiversity through the development of a Biodiversity and Natural Areas Strategy. The Strategy analyzes the state of natural areas in New Westminster and provides a suite of recommended actions to protect, connect, maintain, restore, enhance and prioritize biodiversity in the city.

BACKGROUND

Biodiversity is the variety of life found in an ecosystem and it is an indicator of the health and integrity of a natural system. Natural areas with a high level of biodiversity have many forms of life, habitat and resources in a thriving environment. In the urban context, achieving a high level of biodiversity means that cities exist not only to support humans, but also the ecosystem that all life depends on.

The development of a Biodiversity & Natural Areas Strategy (BNAS) is one of the actions arising from the City of New Westminster Environmental Strategy Action Plan (2018)¹. The BNAS works to enhance the integrity of natural areas for species that live there. It is consistent with and builds upon existing policies for sustainable growth and climate action at the local, provincial and federal levels.

The BNAS was prepared by Diamond Head Consulting with input from various city departments, task forces, Environmental & Climate Advisory Committee, First Nations and broader community. The recommended actions in the BNAS as well as comments from First Nations were reviewed with the Environment & Climate Advisory Committee and the Environment & Climate Task Force. BNAS includes actions, strategies, priorities and guidelines.

DISCUSSION

This Biodiversity & Natural Areas Strategy (BNAS) has three high-level goals and six principles (Table 1) to frame 29 recommended actions that protect existing natural areas and where possible enhance the level of biodiversity in the City. The BNAS ranks biodiversity within neighbourhood groups and identifies priority strategies for each group.

Table 1. Biodiversity & Natural Areas Strategy: Goals and Principles

Goals	Comments
1. Protect and enhance the city’s natural areas and shorelines to improve ecosystem health and biodiversity.	This emphasizes the need to continue to protect and take steps to enhance the few remaining and treasured environmentally sensitive natural areas in order to improve biodiversity.
2. Increase the amount and quality of habitat across the city to improve biodiversity and human well-being.	There is a need to increase the space for habitat and improve the quality of habitat in the streetscape, boulevards and urban parks. In doing so, it is recognized that natural spaces are important for wildlife but are also important for human health and well-being.

¹ City of New Westminster Environmental Strategy Action Plan (Action 13.1)

<p>3. Create resiliency by advancing nature-based climate solutions.</p>	<p>There is a need to create resiliency of natural spaces and take action to reduce the City’s vulnerability to climate change impacts. Essentially, this goal is a call to seek innovative solutions and take action in order to help us achieve our vision and goals.</p>
<p>Principles</p>	
<ol style="list-style-type: none"> 1. Protect: <i>Protect natural areas and shorelines that include sensitive habitat and provide the greatest diversity of habitat;</i> 2. Connect: <i>Improve the connections between natural areas both within the city and the region;</i> 3. Acquire: <i>Strategically acquire and restore land to add to the city’s natural areas and green spaces;</i> 4. Enhance: <i>Increase the quality and function of protected areas to increase their capacity to support species;</i> 5. Educate: <i>Expand the understanding of our connectivity to and the importance of wildlife and natural areas for our health and well-being;</i> 6. Monitor: <i>Track action taken in the implementation of the Strategy and evaluate the impact on species diversity and their distribution in the city.</i> 	

This Strategy analyses the state of biodiversity and provides a suite of recommended actions and guidelines for natural area assets. A consolidation of the recommended actions is provided in Table 2. The implementation of these actions will help the City to achieve a higher level of biodiversity over time.

Table 2. Summary of Recommended Actions within Strategy

<p>Recommended actions to protect existing natural habitat areas:</p>	
<p>1.</p>	<p><i>Amend the existing Brunette River development permit area (DPA) to include supplemental development permit guidelines specific to the Braid and Canfor reaches.</i></p>
<p>2.</p>	<p><i>Strengthen development permit guidelines to improve biodiversity conservation in urban areas.</i></p>
<p>3.</p>	<p><i>Continue to work with the Port of Vancouver to designate foreshore properties as “Conservation” zones along the Fraser River (as part of the Port’s Land Use Plan) to protect and enhance habitat.</i></p>
<p>4.</p>	<p><i>Review and update the City’s Watercourse and Riparian Areas Protection policies and explore alternative programs (e.g., Salmon-Safe) to increase protection measures for the Fraser and Brunette rivers and ditches in Queensborough.</i></p>
<p>5.</p>	<p><i>Adopt a policy of no-net loss of natural habitat area on City-owned lands.</i></p>

6.	<i>Complete a study to identify suitable wildlife refuge areas within larger natural area parks and along the Fraser and Brunette river foreshore areas.</i>
7.	<i>Develop a City-wide invasive species inventory and mitigation strategy</i>
8.	<i>Include the designation of wildlife habitat/refuge areas within the next update to the Parks and Recreation Comprehensive Masterplan.</i>
Recommended actions to connect natural areas together:	
9.	<i>Support the implementation of the Green Infrastructure Network (GIN) and prioritize enhancements for biodiversity and acquisition of new green space for habitat within this network identified.</i>
10.	<i>Restore and protect the potential habitat hub and corridor areas identified in the Green Infrastructure Network (GIN).</i>
11.	<i>As the Crosstown greenway is developed, natural habitat elements should be incorporated into the design and adjacent residences engaged to protect these features.</i>
Recommended actions to acquire new natural habitat areas:	
12.	<i>Include natural areas as a key criterion in future park acquisition plans. Adopt a goal of protecting 10% of the City’s land base as protected natural areas.</i>
13.	<i>Carry out a feasibility study to explore different city mechanisms such as Development Cost Charges, Community Amenity Contributions and taxes for the acquisition and restoration of priority lands</i>
14.	<i>Explore funding and partnership opportunities with non-profit organizations, Federal and Provincial governments to acquire, enhance, protect and manage high value natural areas and to protect species at risk.</i>
15.	<i>Identify land parcels as part of a City-wide acquisition strategy that are most suitable for acquisition and/or habitat compensation projects.</i>
Recommended actions to enhance biodiversity by land use type	
16.	<i>Enhance natural area parks to create more structurally diverse, high value forests with water features to encourage use by species that require refuge from people.</i>
17.	<i>Enhance public spaces to create habitat areas integrated with passive recreation for species that coexist with people.</i>
18.	<i>Integrate habitat features along City greenways and lanes to support birds, small mammals and insects.</i>
19.	<i>Encourage all residential landowners including those managed by strata corporations to enhance open spaces (e.g., yard, balcony), to provide habitat for species tolerant of people and to make changes around the home that will reduce impacts to wildlife.</i>
20.	<i>Review development application process, guidelines and tools to ensure biodiversity is a key criterion for inclusion into high density development projects. Explore developing new policy or permitting requirements (or incentives) to increase green space areas and include more ecological plant alternatives</i>
Recommended actions related to key enhancement strategies:	
21.	<i>Install additional pollinator gardens in open spaces, vacant and underutilized areas of land within City parks and the public realm.</i>
22.	<i>Explore opportunities to enhance habitat within the City’s cemetery including pollinator gardens, water features and potentially hedgerows.</i>
23.	<i>Install raingardens when upgrading infrastructure in the City</i>
24.	<i>Install habitat adjacent to designated open channels and sloughs in Queensborough</i>

25.	<i>Partner with external organizations to enhance habitat on unused land (e.g., Rights-of-Way).</i>
Recommended actions to educate, support engagement and seek partnerships/incentives	
24.	<i>Continue to host the biodiversity webpage as a place to inform residents on new initiatives, events and other information pertaining to biodiversity.</i>
25.	<i>Regularly connect with the City’s Environment & Climate Action Committee on biodiversity initiatives and issues</i>
26.	<i>Promote programs and education platforms that encourage residents to enhance habitat on their properties, such as iNaturalist Canada.</i>
27.	<i>Continue to support hands-on stewardship activities and achieve more wide-spread promotion in the community.</i>
28.	<i>Continue subsidy programs to encourage the planting of trees on private lots.</i>
29.	<i>Seek incentive and partnership opportunities with external organizations and advocate for biodiversity improvements</i>

NEXT STEPS

Subject to Council’s approval of the BNAS, staff will engage with the Environment and Climate Action Advisory Committee and Task Force to prioritize the actions for implementation. Actions that require additional resources, including staffing, will be brought forward to Council in the future as part of the Budget and Financial Plan process. Progress on the BNAS actions will be monitored and incorporated with the regular reporting of the City’s Environment Strategy Action Plan.

FINANCIAL IMPLICATIONS

The BNAS is an ambitious plan with 29 actions identified. Some actions will be prioritized, delivered through existing work plans, and become part of ongoing stewardship practices. Others will be implemented incrementally over the next 10 years and beyond, as resources become available. The success of the BNAS rests on the capacity and resources of the City and others to implement, and will require the allocation of new capital and operating budget, and contributions from third parties, to fully realize. The cost of delivering the overall multi-year BNAS is likely to be significant.

OPTIONS

The following options are presented for Council’s consideration:

1. Approve the Biodiversity and Natural Areas Strategy;
2. Direct staff to identify and advance actions in the Biodiversity and Natural Areas Strategy that can be implemented within the existing staffing capacity and budget resources;

3. Direct staff to bring forward as part of the annual budgeting process funding requests for specific Biodiversity and Natural Areas Strategy actions for consideration;
4. Provide staff with alternative direction.

Options #1, 2 and 3 are recommended.

INTERDEPARTMENTAL LIAISON

The BNAS was prepared in consultation with other departments including Parks & Recreation and Climate Action Planning Development.

CONCLUSION

The development of a Biodiversity and Natural Areas Strategy is one of the key actions of the City's Environment Strategy Action Plan (2018). Through best practices review and internal and external stakeholders engagement, a set of goals, strategies and actions have been prepared. This report provides Council with the final version of the Biodiversity and Natural Areas Strategy for approval.

ATTACHMENTS

Attachment 1 - Biodiversity and Natural Areas Strategy (April 2022)

APPROVALS

This report was prepared by:
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This report was reviewed by:
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This report was approved by:
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