

CITY OF BURNABY

ENVIRONMENT AND WASTE MANAGEMENT COMMITTEE

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

SUBJECT: GREEN LINKS PROJECT

RECOMMENDATION

1. THAT Council approve and support, in principle, the Burnaby demonstration project of the Green Links Project as proposed by the Institute of Urban Ecology and outlined in this report.
2. THAT a copy of this report be sent to the Institute of Urban Ecology, Douglas College, P.O. Box 2503, New Westminster, B.C. V3L 5B2.

REPORT

At its meeting of 1996 January 09 the Environment and Waste Management Committee received a delegation from the Institute of Urban Ecology and Douglas College who outlined the "Green Links Project", a project which is to address the fragmentation of urban wildlife habitat that has occurred in the Lower Mainland. The Institute of Urban Ecology is presently implementing this project to join Environmentally Sensitive Areas (ESA's) and other significant green space fragments in the Greater Vancouver region. A more detailed description of the project is outlined in Appendix A attached to this report. The Institute of Urban Ecology is seeking permission and support in principle from the Environment and Waste Management Committee and Burnaby Council to undertake a demonstration project in Burnaby.

The intent of the proposed Burnaby project is to further strengthen the connection between Robert Burnaby Park and Stoney Creek Park and to establish a connection through residential and commercial districts between Robert Burnaby Park/Deer Lake and Burnaby's South slope ravines. The goal is to establish a continuous natural habitat from Burrard Inlet through Burnaby Mountain, Stoney Creek, Brunette River, Burnaby lake, Deer Lake, Robert Burnaby park, the south slope ravines and the Fraser River. In the process the Institute of Urban Ecology will take a lead role in bridging these areas through residential streets by planting native vegetation, encouraging backyard habitat programs, cleaning up refuse, establishing butterfly gardens and any other appropriate naturalization techniques.

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They would also assist existing initiatives within the ESA's and the fragments themselves, such as the work of the Burnaby Mountain Conservation Society on Burnaby Mountain, the Sapperton Rod and Gun Club on the Brunette River, BCIT on Still Creek and Deer Lake and Burnaby Lake, the Vancouver Angling and Game Association in Byrne Creek and the elementary schools close to Stoney Creek, Robert Burnaby Creek and Byrne Creek.

The route will include following either the Trans Mountain Pipe Line fuel line or a B.C. Hydro right-of-way corridor as part of the Green Link. The Institute have therefore approached B.C. Hydro and B.C. Gas to support the Green Links Project and are about to make presentations to them for financial or in-kind resources.

The Environment and Waste Management Committee adopted a resolution to approve and support, in principle, the Burnaby demonstration project of the Green Links Project as proposed by the Institute of Urban Ecology and requested that Burnaby Council endorse this action by the Committee.

Respectfully submitted,

Councillor D.P. Drummond
Chair

Councillor D. Johnston
Member

Councillor D.A. Lawson
Member

The Green Links Project

Introduction

The Institute of Urban Ecology is presently completing a study on the potential of developing 'green links' between ecologically significant areas in the Lower Mainland (*Green Links - Making Connections with Nature in the City*). With this study nearing completion, the Institute is now looking to act on specific findings of its research; in particular, the need to address the fragmentation of urban wildlife habitat that has occurred in the Lower Mainland as Greater Vancouver has developed.

The Institute would like to extend an invitation for the Burke Mountain Naturalists to become involved as a partner with the Institute in implementing a 'Green Links' Demonstration Project. The aim of this Demonstration Project would be to establish a prototype program for preserving and enhancing urban wildlife habitats within the Lower Mainland through the development of green links within urban areas.

An Overview of Ecosystems in the Urban Environment

Urban areas contain numerous fragments of natural environments. Many of these are remnants of the original ecosystems that were present before the city developed. They can be as large as Burnaby Mountain and Stanley Park, or as small as some local ravines. Many have been identified by Lower Mainland municipalities as Environmentally Sensitive Areas, and some have been protected in municipal, regional and provincial parks. Other fragments are disturbed environments such as corner woodlots, school grounds or recreational playing fields.

The term 'ecosystem' refers to the interactive process that occurs between various species of flora and fauna within a biotic community; a process that is critical to that community's ability to survive over the long term. The necessity of this interaction can be seen in such fundamental biological processes as food webs, breeding patterns and symbiotic relationships between various breeds of plant and animal. In this context, then, one of the greatest threats faced by urban habitats is the fragmentation that occurs to them as a city develops; a process that isolates remaining habitat fragments, prevents their interaction with other habitats and thereby undermines their long-term survival.

Research has shown that the value and viability of urban ecosystem fragments can be greatly increased by creating links between them. 'Green links' can allow for the greater use, movement, dispersal and interaction of plants and animals between the more significant areas of natural habitat. The stronger the connection, the greater the ecological value to the habitat. The links may involve utility corridors through the city, railway lines, street trees, hedge rows, private landscapes, nest boxes or potted plants. Even the smallest examples of nature in the city can play a vital role in enhancing the value and survival of surrounding ecosystems.

The Green Links Project

The Institute of Urban Ecology is now concluding a study of urban green spaces in the Lower Mainland (*Green Links - Making Connections with Nature in the City*). This study analyses existing wildlife habitat and green spaces in the Lower Mainland with an eye to improving their capacity to function as working ecosystems. This will be accomplished by developing 'green links' between urban wildlife habitats within the Lower Mainland, thereby allowing for greater ecological interaction between fragmented urban green spaces.

One of the salient findings of the Green Links study was an extensive network of undeveloped lands in Greater Vancouver and their latent potential to function as both a green link between fragmented urban habitats, as well as quality green spaces in their own right. Based on the findings of this study, the Institute is now proceeding with a community action phase to the Green Links project. A vital element of this phase will be to develop potential and existing corridors of greenery to form the basis of a green links network between the Lower Mainland's major urban habitats.

A Green Links Demonstration Project would involve conducting a number of enhancement activities in and around undeveloped lands in Greater Vancouver. Among the activities envisioned are:

1. Planting appropriate vegetation in relevant areas to increase bio-diversity, with an eye to creating viable ecosystem corridors (i.e. green links);
2. Instituting stream enhancement and stewardship projects in relevant areas;
3. Conducting clean-ups and enhancements of green space "commons";
4. Establishing walking paths and interpretive sites to promote public enjoyment, understanding and stewardship of local green spaces and urban habitats.

A second element to the Green Links project will be a public awareness and education component to promote community involvement in the preservation and enhancement of its local green spaces. This will involve: making public presentations to interested organizations on urban wildlife habits and ecologies; disseminating information on caring for urban wildlife habitats and green spaces; staging a symposium on urban environmental issues; and offering community workshops on creating backyard habitats, based upon the Naturescape series "The Stewardship Series - Caring For Wildlife Habitat at Home."

How Will the Institute of Urban Ecology Carry Out the Green Links Project?

The Institute is well experienced with conducting ecological remediation and enhancement projects on urban green spaces. Much of this experience derives from the success of its Urban Ravines Clean-up and Enhancement Projects. These projects were conducted by the Institute with the extensive donation of volunteer time from community groups and individuals, along with donations of equipment, plant stock and financial resources from a wide variety of environmentally concerned organizations.