

ENVIRONMENT COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: BEECHER CREEK WATERSHED RAINWATER RETROFIT PROJECT

RECOMMENDATION:

1. THAT Council approve a joint project between the City and the University of British Columbia to improve rainwater management in the Beecher Creek watershed and funding in the amount of \$25,000 from Gaming Fund for the City's share of the project.

REPORT

The Environment Committee, at its meeting held on 2009 October 13, received and adopted the *attached* report seeking Council's approval to participate in a joint rainwater management project with the University of British Columbia (UBC) in the Beecher Creek watershed.

This project offers significant environmental value to the City. Important environmental, engineering and public educational benefits will develop through this initiative. The City will have an opportunity to work synergistically with local community groups (i.e. the Beecher Creek Streamkeepers) and educational institutions (i.e. UBC) on projects of mutual benefit.

Respectfully submitted,

Councillor D. Johnston
Chair

Councillor S. Dhaliwal
Vice Chair

Councillor A. Kang
Member

Copied to:	City Manager
	Director Finance
	Director Engineering

TO: CHAIR AND MEMBERS
ENVIRONMENT COMMITTEE

DATE: 2009 October 07

FROM: DIRECTOR ENGINEERING

SUBJECT: BEECHER CREEK WATERSHED RAINWATER RETROFIT PROJECT

PURPOSE: To obtain approval from the Committee and Council to participate in a joint rainwater management project with the University of British Columbia (UBC) in the Beecher Creek watershed.

RECOMMENDATION:

1. **THAT** the Committee recommend to Council that a joint project between the City and the University of British Columbia to improve rainwater management in the Beecher Creek watershed be approved and the \$25,000 required for the City's share of the project be funded from Gaming Fund.

REPORT

1.0 INTRODUCTION

The Beecher Creek watershed is part of the larger Still Creek watershed system and is located east of the Brentwood Town Centre in north Burnaby (see *Figure 1*). The City, in cooperation with UBC and the local streamkeepers group, have undertaken numerous environmental and rainwater management works in this system. These works have included flow & precipitation monitoring, development of a watershed run-off computer model and habitat enhancement works. Beecher Creek is home to a small population of resident cutthroat trout as well as some re-introduced Coho salmon. The Council adopted Still Creek Watershed Management Plan also identified stormwater quality improvements for the Beecher Creek watershed to preserve its environmental health.

As a component of the Still Creek watershed management strategy, the City and UBC has identified an opportunity to undertake a joint project within the Beecher Creek watershed to improve rainwater runoff quality.

2.0 RAINWATER RETROFIT PROJECT

The proposed joint project would include retrofitting of up to 100 single family homes in the subject area with two rainwater barrels for each home. Each of these barrels will store up to 340 L of rainwater captured from the roof leaders of each home before releasing the flow back into the storm sewer system. This storage of rainwater helps to reduce the peak flow of runoff that enters the drainage system. This in turn reduces negative impacts to the downstream creek system particularly through reduction of erosive forces. The installation of the rain barrels will require the co-operation and acceptance of each property owner.

Key components of the work program would include:

- Prepare project information package and communication materials
- Selection of project site and resident consultation
- Installation of rain barrels and flow monitoring devices
- Data collection from 2009 December to 2011 July
- Data analysis and final report

UBC will provide the personnel required for resident canvassing, data collection, analysis and report preparation and the City will supply the required number of rain barrels and supply and install the flow monitors.

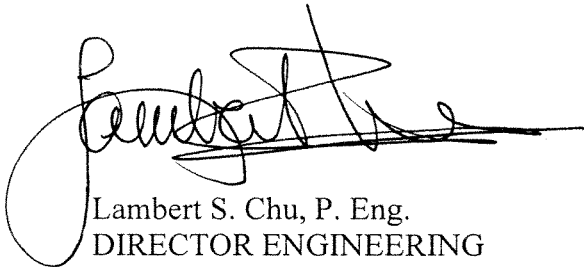
3.0 PROJECT FUNDING

The estimated City share of the project cost is \$25,000.00 which includes the purchase of up to 200 rain barrels and the supply and installation of the flow monitors in the City storm sewer pipes and in Beecher Creek. The proposed joint study will provide valuable information on the effectiveness of rain barrels on flow reduction and water quality improvements and will allow the City to refine its current stormwater management standards for future application. It is recommended that the \$25,000 required be funded from Gaming Fund.

To: Chair and Members, Environment Committee
From: Director Engineering
Re: Beecher Creek Watershed Rainwater Retrofit Project
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4.0 CONCLUSION

The Beecher Creek Watershed Rainwater Retrofit project, to be undertaken jointly with UBC, offers significant environmental value to the City. Important environmental, engineering and public educational benefits will develop through this initiative. This project presents the City with an opportunity to work synergistically with local community groups such as the Beecher Creek streamkeepers and educational institutions such as UBC on projects of mutual benefit. Therefore, it is recommended that staff be authorized to initiate the joint project with UBC as outlined in this report and the City share of the project cost be funded from Gaming Fund.



Lambert S. Chu, P. Eng.
DIRECTOR ENGINEERING

JR/DD:br

Copied to: City Manager
Director Finance

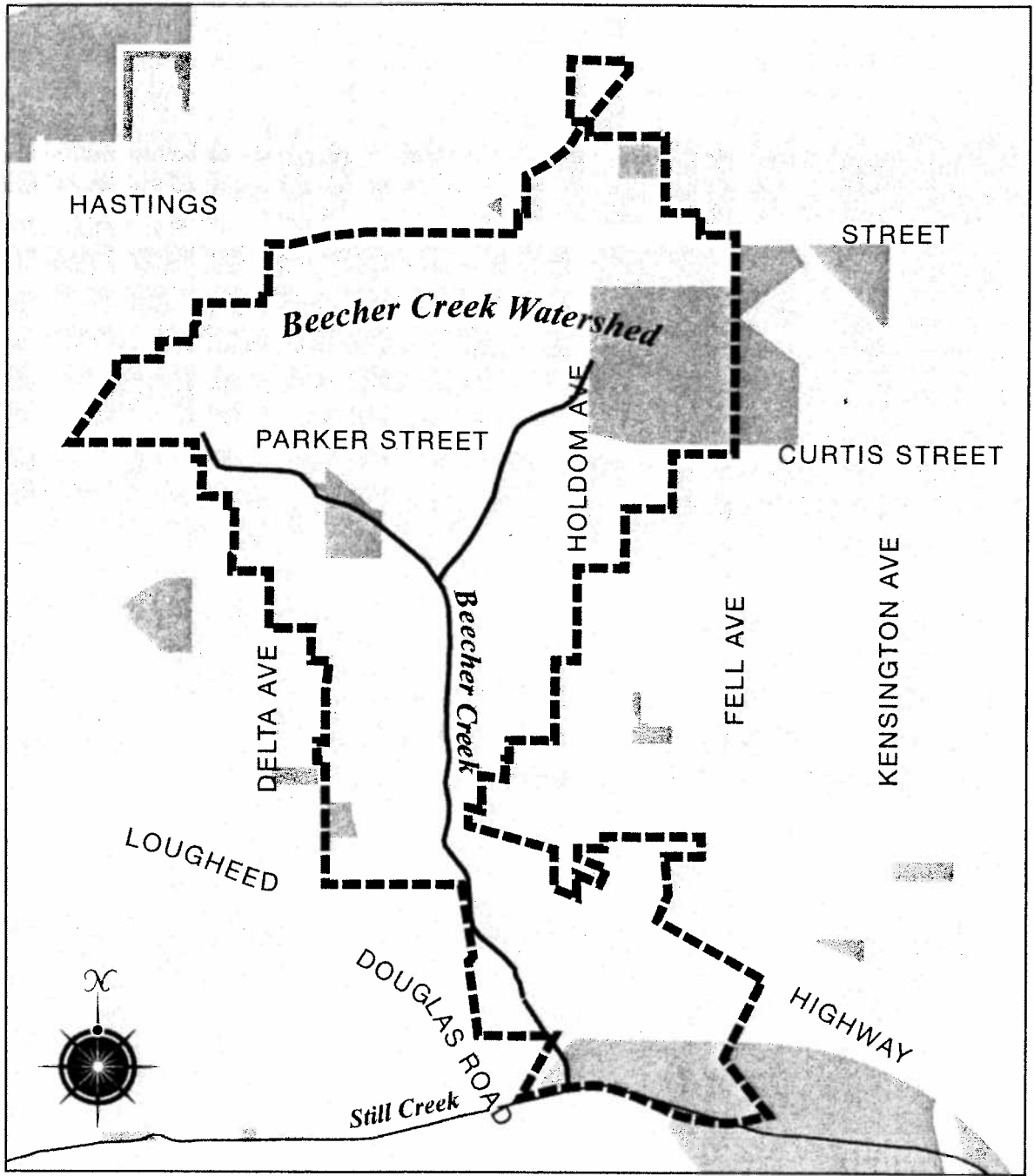


Figure 1: Beecher Creek Watershed

--- watershed boundary