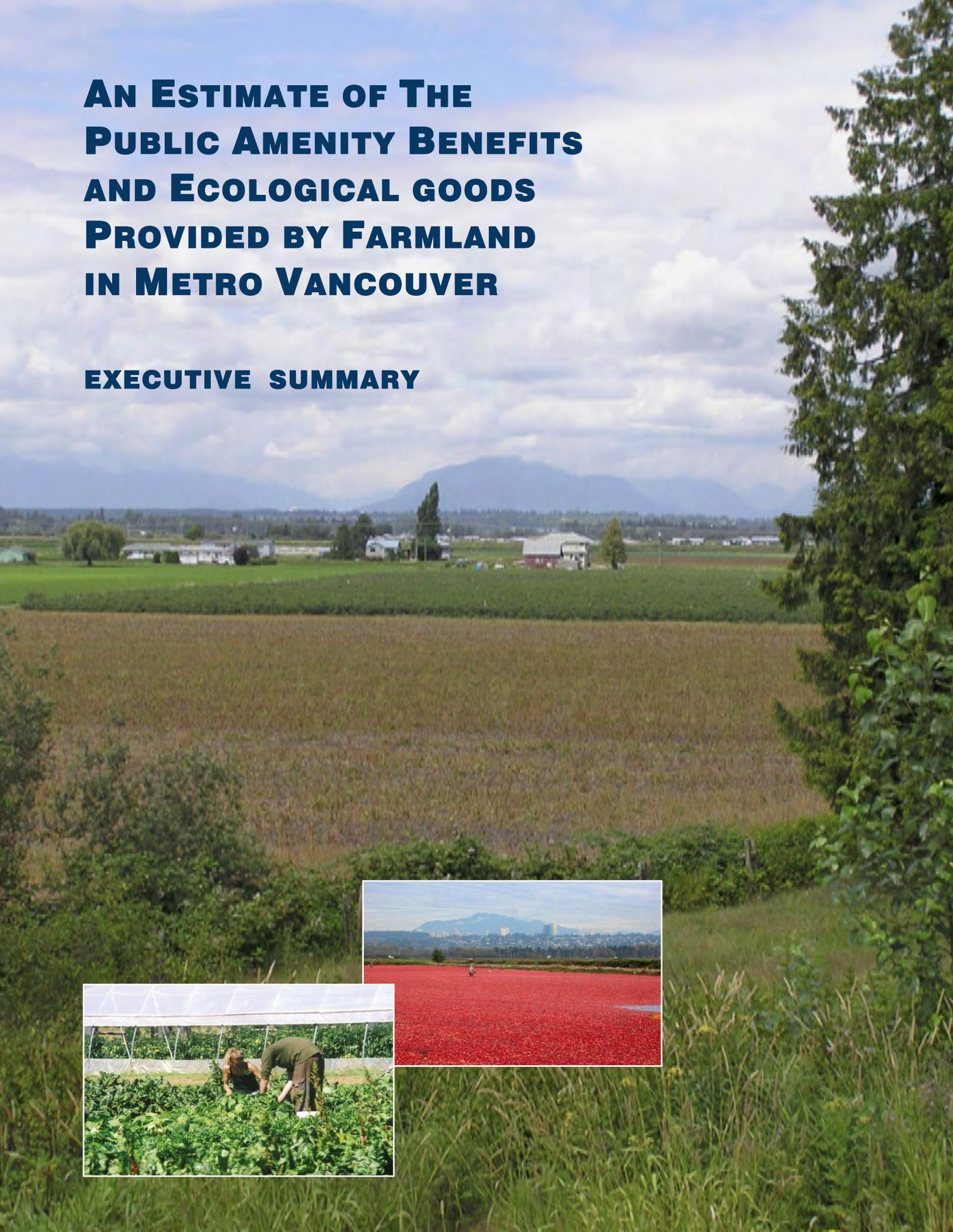


# **AN ESTIMATE OF THE PUBLIC AMENITY BENEFITS AND ECOLOGICAL GOODS PROVIDED BY FARMLAND IN METRO VANCOUVER**

## **EXECUTIVE SUMMARY**



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## **EXECUTIVE SUMMARY**

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## **PROJECT TEAM**

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## A COOPERATIVE PROJECT SUPPORTED BY

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Simon Fraser University



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## EXECUTIVE SUMMARY

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Natural capital consists of the natural resources, environmental and ecosystem resources and land where we live. When you look at the North Shore mountains on a clear crisp spring day or walk the sea wall in Stanley Park or cruise up Indian Arm you know that in Metro Vancouver we are blessed with abundant natural capital. Farmland is part of that natural capital. Many people who drive through the countryside, or purchase food from local farms place a value on having farmland that surpasses the market value of the farm products the land produces. Some also feel there is cultural heritage or endowment value in their local farmland.

While society places a value on natural capital and farmland, this public value is not traded in the market place so it is not included in the market price (private value) of the land. As a result it is currently excluded from the resource allocation and decision making process.

What is the full value of an acre of Stanley Park? The 2006 wind storm that destroyed many trees in Stanley Park gave us a glimpse of how much the public may value our natural capital. Within a short period of time, \$10 million dollars in private donations was raised to restore the park. The market value of the trees knocked down was \$1 million.

Can we quantify the public value of farmland in Metro Vancouver? This study combined the information gathered from a mail-out survey with the economic theory of valuing natural capital, to estimate the public amenity value and ecological goods provided by farmland in Metro Vancouver.

The methodology used to estimate the collective public value of farmland in Metro Vancouver involved first estimating the value the average household places on farmland and then multiplying the household value by the number of households in Metro Vancouver.

Responses to the mail-out survey indicated the average household in Metro Vancouver was willing to pay \$73 per year to preserve 400ha (1000ac) of farmland. This is similar to saying the average household valued preserving 400ha (1000ac) of farmland as much or more than a dinner out for two, once a year. The result falls in the lower end of a range of values estimated by similar studies conducted in North America over the past 20 years.

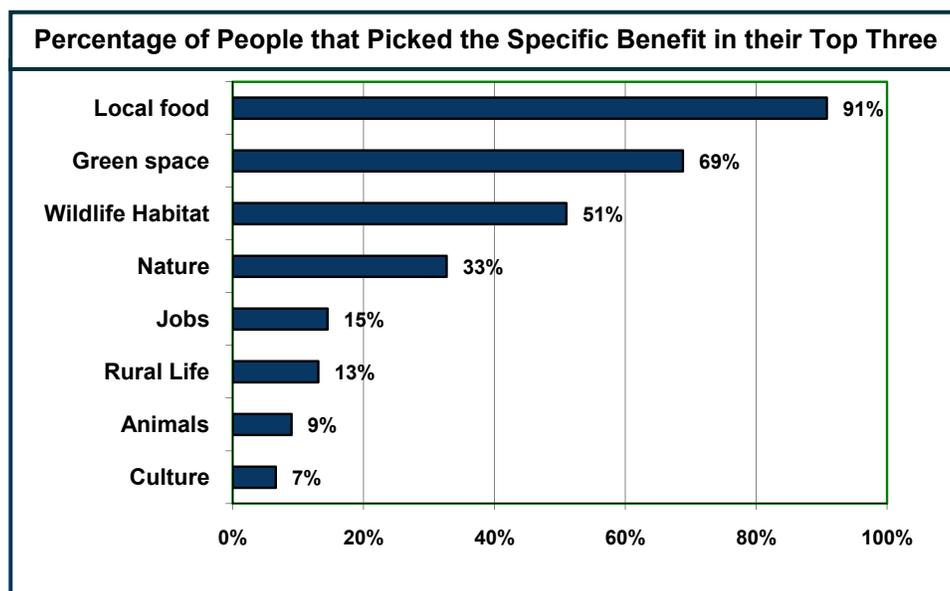
The results of the estimate of the public amenity benefits of farmland in Metro Vancouver are:

<b>Public Amenity Value of Farmland in Metro Vancouver</b>	
Public Value each year	\$ 58,000/acre
Public Value in perpetuity (similar to Market Value)	\$ 1,160,000/acre

The market value of farm products produced from farmland in Metro Vancouver in 2006 was \$5,750/acre. The estimated public value of \$58,000 is ten times the market value of goods and services provided – similar to the Stanley Park restoration example. The building blocks of the estimate are that 95% of households in Metro Vancouver want to preserve farmland and they are willing, on average, to trade \$73 per year in other values to achieve that. The following graphic may help put this in perspective.



Why do people value farmland and how do they rank those values? When asked to identify the three most important benefits of farmland, households responded as follows:



Over 90% of households felt having local food production was one of the top three benefits of having farmland in Metro Vancouver. Greenspace, wildlife habitat and nature followed as major benefits. The perspective was confirmed by focus group sessions following the survey. The collective perspective coming from the focus groups was that for farmland, food production was the priority but, while at the same time, greenspace and habitat values should be maximized.

What does this mean? In the absence of a quantitative estimate of the public value of farmland and urban development land, land use planners and decision makers often default to private values established in the market place. This report suggests that the public values of farmland in Metro Vancouver may be much higher than the private values currently used in land use policy discussions.

To embrace the idea that the public value of an acre of farmland in Metro Vancouver is

\$1.16 million

one only has to accept that, on average, households in Metro Vancouver value preserving 400 ha (1000 ac) as much or more than a nice dinner out for two, once a year.

Protection of habitat to support migratory birds in Delta has been recognized as an important public value. The Delta Farmland and Wildlife Trust administers a program that pays farmers up to \$300/acre to temporarily set-aside farmland for wildlife habitat. Responses to the mail-out survey indicated the public value of set-asides for wildlife habitat is \$3,200/acre.

It is interesting to note that in the three public valuations of natural capital, one a direct response from the public and the other two estimates from a mail-out survey, the public value exceeded the private market value by a factor of 10.

Type of Natural Capital	Private/Market Value	Public Value
Stanley Park Windfall	\$1 million	\$10.1 million
Farmland	\$5,700	\$58,000
Wildlife Habitat set-asides	\$300	\$3,200

While the absolute numerical value estimates can be debated, it is clear that in highly urbanized areas like Metro Vancouver, the **public** value of the remaining natural capital is much greater than the **private/market** value currently used to value it.

It is hoped the information provided by this study will help land use planners and decision makers in their decision making process. It is also hoped that this report will stimulate discussion and research on the public value of urban developed land. In the end, more information will lead us to more informed land use planning decisions that include the public value as well as the private value.