

# Memorandum

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<b>To</b>	Alastair Smaill, <a href="mailto:Alastair.Smaill@gw.govt.nz">Alastair.Smaill@gw.govt.nz</a> Karen Inglis, <a href="mailto:Karen.Inglis@4sight.co.nz">Karen.Inglis@4sight.co.nz</a>		
<b>From</b>	David Norman, Chief Economist GHD <a href="mailto:David.Norman@ghd.com">David.Norman@ghd.com</a>	<b>Project No.</b>	12622514
<b>Project Name</b>	AOG Consultancy Panel – GWRC – Financial Contributions Estimation		
<b>Subject</b>	Defining EHUs and estimating FCs for stand-alone roading projects		

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## Introduction

Greater Wellington Regional Council has requested further information on two points:

- A definition of an Equivalent Household Unit (EHU)
- A financial contribution (FC) estimate for stand-alone roading projects not linked to greenfield development.

This brief memorandum deals with these two points.

## Definition of an EHU

An EHU is an Equivalent Household Unit. An EHU is the basis for assessing the residual environmental impact (measured for copper and zinc contaminants in this instance) of the development of an average-sized residential unit for the purposes of calculating FCs. Each average-sized new residential unit is deemed to create one unit of impact (one EHU).

Because non-residential developments also impact contaminant levels, but can vary dramatically in size, every 100m<sup>2</sup> of roofing or roading/hardstand area is deemed to create one unit of impact, rather than using the EHU unit of measure used for residential development.

FCs are calculated based on the number of EHUs expected to be delivered in greenfield areas in the two whitua. Non-residential FCs are calculated based on the amount of roofing and roading/hardstand expected in non-residential development areas.

## **FC estimate for stand-alone roading projects**

Unlike roading that is developed to access new residential or non-residential development, where the impact of that roading is included in estimates of the FCs for the residential or non-residential development, the contaminant impacts of, for example, new highway lanes, need to be estimated differently.

Morphum Environmental estimate that 85% of contaminant run-off from these roads would be dealt with on-site. This is the same assumption as used for residential and non-residential development in the earlier work. Using the relationship between zinc and copper contaminant run-off and the required size of wetlands from the initial work, the estimated FC is **\$360 per 100m<sup>2</sup>** of roading / hardstand when that roading is not in direct support of new greenfield development.