Officer responsible Waste Manager	Author Eric Park – Solid Waste Engineer Mike Stockwell – Waste Manager
Corporate Plan Output: Solid Waste	

The purpose of this report is to outline key learning points from the Natural Step Workshop in Portland, Oregon, attended by Eric Park on 13-18 April 1999. This report has been submitted to the Environment Committee also.

#### THE NATURAL STEP FRAMEWORK

In the 1980s, Swedish medical doctor and cancer researcher Karl-Henrik Robert became concerned about the rapidly increasing incidence of cancer in children which he found was connected to environmental factors not lifestyle. Also puzzling was the fact that parents whose children had been diagnosed with cancer would do absolutely anything to save their children yet the society made up of those parents collectively found it difficult to take any concerted action on the root cause, systematic degradation of the environment by unsustainable practices. After much research he was able to establish broad consensus in the scientific community on four fundamental 'system conditions' which must be satisfied for life on Earth to be sustainable in the long term, see Table 1. Dr Robert founded The Natural Step to promulgate these conditions together with a framework for working towards sustainability.

## FOUR SYSTEM CONDITIONS FOR SUSTAINABILITY

# Table 1

In order for a society to be sustainable, natures functions and diversity must		Paraphrased by Nike, USA
1.	not be subject to increasing concentrations of substances extracted from the earth's crust;	What's in the crust stays in the crust
2.	not be subject to increasing concentrations of substances produced by society;	If society makes it society looks after it (eg heavy metals, toxic substances)
3.	not be impoverished by over-harvesting or other forms of ecosystem manipulation;	Biodiversity stays that way
4.	resources must be used fairly and efficiently in order to meet basic human needs world wide.	All human needs are met fairly and equitably.

The four conditions, firmly rooted in science, are elegant in their simplicity and therefore understandable by all people. They apply equally to people at all levels of society, including individual households, companies, whole cities and nations. As such the four **Natural Step** conditions can be used as a 'compass' by people at every level in society working towards a common goal. See Attachment (b) for some examples of its success overseas.

### THE NATURAL STEP IN SOLID WASTE

- (a) A Business Plan for Solid Waste is due to be reported to the City Services Committee in June 1999, following a seminar on 18 March 1999. This business plan will outline specific initiatives to implement the Christchurch City Council, November 1998, *Waste Management Plan for Solid and Hazardous Waste 1998*. The Business Plan for Solid Waste will incorporate the principles of The Natural Step framework, as outlined in draft form in Attachment A. The business plan will be progressively implemented via objectives in successive annual plans for the Unit.
- (b) A joint seminar for City Services and Environmental Committees is planned for 15 July 1999 at which The Natural Step framework will be discussed in more detail, together with examples of its successful implementation overseas.

### **SUMMARY**

Christchurch has already made significant advances to improve the sustainability of its solid waste management, including adoption of a zero waste target, establishment of the Recovered Materials Foundation and the Kerbside Recycling programme. The City is poised to make even more progress and adoption of the Natural Step framework will be used to assist this.

**Note:** This report is going to May City Services and Environment Committees.

**Recommendation:** 1. That the information be received.

2. That a combined Seminar for City Services and Environment Committees be held on 15 July to discuss application of The Natural Step framework.

Chairman's

**Recommendation:** That the above recommendation be adopted.