



# Developing the Residential Red Zone into Green Space: The Mahinga Kai Exemplar Project



Prepared for the Avon-tikaro Network

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## Executive Summary

The Avon t karo network laid objectives to gauge the community interest in

## Introduction

The area of land that borders the Avon/ Ōtākaro River in Eastern Christchurch has been left battered and barren after the Christchurch earthquake sequence of 2010-11. The land has been purchased by the Crown as it is deemed 'unfit' to live on and its future is currently undecided (CERA, 2014).

Canterbury Waterways Research Centre. This will bring a collaborative focus on the creation of a culturally sustainable resource (Carr et al., 2012). Due to the many interests of the collaboration, it has been proposed that there will be eleven significant sites dispersed around Lake Kate Sheppard which relate to *mahinga kai*. *Mahinga kai* is a very important concept, it relates to sustainable food gathering practices and their customary harvests. Christchurch was an important stop for food gathering for tangata whenut3-2(p)5( w s)9(t)-4(s.(l)10(an)4(d)

Results from data collection are discussed and examined to draw conclusions regarding our research question: How will the Mahinga Kai Exemplar Project be a valuable resource for the potential use of red zoned land along the Avon-Otakaro River?

## Literature Review

The concept of restoring wetland environments to their natural state is becoming a higher priority to local councils and governments worldwide, according to research by Breuste (2013), as the need for conservation becomes more apparent. The opportunity to conserve and restore Christchurch's wetlands system into a recreational area, as highlighted by McInnes (2011), has arisen due to the establishment of the Residential Red Zone along the Avon-Otakaro River. A study by Zedler & Leach (1998) discusses how conservation and restoration call for community engagement in order to be successful. Communities can be formed around common ideas, in the Mahinga Kai Exemplar Project; a sense of community has already been created around the notion of outdoor classrooms. Research completed by

area as a whole. This is g e

as transforming parts of the Residential Red Zone into green space, using *mahinga kai* as a means for education, and people's contribution to community gardens. The survey was also conducted online through Qualtrics, and advertised through social media in order to increase the number of responses.

Several schools were also approached. The schools chosen were Freeville Primary School, Waitakiri River Campus, and Waitakiri Wetland Campus. The procedure involved a group discussions and questions with groups of 15-40 children aged 5-10 years, and discussions lasted approximately 15 minutes. The discussion involved topics related to the key themes of this research.



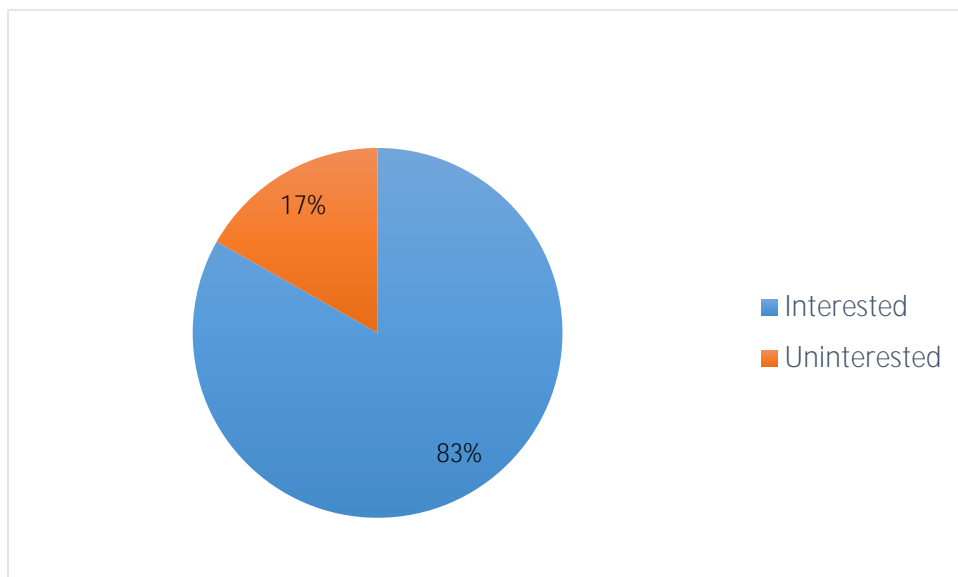
considerations were abundant in the quantitative approach, where the surveys were constructed so they did not cause any offensive, or

## Green space in the red zone

Our results showed that a majority of responses (97% children, 99% adults) were in favour

improving self-esteem and general mental and physical health, as well as moderating the effects of ADHD, autism and other childhood illnesses (Beatley, 2011). Increased residential green space could also serve to nurture the drive for preservation of native flora and fauna, a topic that is of increasing significance to Christchurch and New Zealand in general. Studies have shown that exposing children to nature from a young age will help to create future generations of adults who viscerally and passionately care about nature, are interested and dedicated to its protection or restoration (Beatley, 2011). Injecting more nature into our urban environment seems to be the perfect way to restore our connection with nature and boost our will to preserve it.

## Outdoor Classrooms



Of the surveyed individuals 88% of children and 74% of adults were in support of more outdoor learning being run in the school curriculum. It is encouraging to see the majority of adults being in favour of these developments, as support from the parents and other adults of the community would be vital to the success of these outdoor classrooms.

Studies on outdoor classrooms in the United States have cited the factors of community support (volunteer labour, expertise, and donations), direct student involvement, teacher training, and administrative support as being the most critical aspects of successful long term outdoor classrooms (Kail, 2006). The possibilities for these classrooms are plentiful, given the dynamic environment of the Avon t karo River and Lake Kate Sheppard, some

examples could be recording and describing native birds, learning to identify local native plant species, or examining the biodiversity of the tidal and freshwater systems.

In addition to the three key topics outlined the exemplar project calling for classrooms

## Mahinga Kai

Our research revealed that 31% of adults and 28% of children (figure 1) had at least heard of the term before. A separate question in the group discussions revealed that 74% of children had actively participated in *Harakeke* weaving at school, so they had been learning about *mahinga kai* practices without knowing it.

These findings of relatively low awareness highlight the need for an increased drive surrounding the education of *mahinga kai* doctrine as a tool that can help to nurture a respect and care for nature. The contemporary significance of *mahinga kai* is less for the sake of survival and practical applications as it was in the past. Today the value of *mahinga kai* lies more in its education possibilities in a cultural, historical, biological or geographical setting. When combined with other important Maori values such as *Taonga* (sacred possessions) and *Kaitiakitanga* (guardianship obligation), the full potential of *mahinga kai* as an education and management tool can be realised (Townsend et al., 2004) and then applied in the lake Kate Sheppard area.

Discussions with teachers from Freeville and Waitakiri primary schools showed support for increased teaching of *mahinga kai* values, and also plans for an intensification of this area of the curriculum coming in 2015. Utilizing the proposed (i)10(n)55( )-3n m coo62(r)9(ic8 )JTJET6l(sed)-e63evill





organisation of the preferred and most appropriate method within schools was taken carefully due to our in



applications to enhance this.

Sharing knowledge and creating a sense of community through the collaboration of primary, secondary and tertiary levels has also emerged as the next step in promoting further green space along the Avon- t karo River (Dillon et al., 2005). One primary school that we surveyed was in support of tertiary students engaging and teaching a particular discipline of interest with primary schools. These steps for the future will enhance Lake Kate Sheppard as a current resource, and further enhance and promote knowledge amongst the Christchurch community to develop creative and interactive uses along red zoned land by the Avon- t karo River (Brown & Wattchow, 2011; Dillon et al., 2005).

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