HOW CAN DIFFERENT LA

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Abstract

Numerous effective flood mitigation land uses have been qualitatively evaluated on their success both internationally and in New Zealand. These land uses have been proven to provide co-benefits socially, economically and environmentally which brings ample socio-ecological wealth to areas which otherwise would be too vulnerable to urbanise. In the Residential Red Zone following the Canterbury Earthquake Se] TJET nBT/F1n2.024 gO,44 8

Wilson (2012) stated that to live with a hazard within an urban environment, the area and its people must achieve a strong state of resilience and enhanced adaptive capacity. Urban resilience has been defined as 'the capacity of any given system within a city to survive, adapt, and grow regardless of the stresses and shocks experienced' (Rockefeller Foundation, 2020). Wilson (2012) discusses the idea of the three capitals within

3 Methodology

A mixed methodology approach was utilised to gather both primary and secondary data on how communities can increase their resilience to hazards whilst living with water, in relevance to the OARC.

3.1 Literature Review

A literature review regarding global use of blue green infrastructure was undertaken. This method of secondary data analysis provided a suitable approach to analyse significant amounts of qualitative data gathered from peer reviewed literature (Creswell, 2014). The purpose of this was to gain an understanding of how different blue green infrastructures implemented in similar environments globally act to mitigate hazards and increase

Regenerate Christchurch. This data will then be prioritised in relation to what would increase community resilience following COVID-19 and how Christchurch can better live with water.

Figure 6- Richmond

regeneration objectives, and how the project links with and strengthens neighbouring communities (C. Williams, personal communication, May 12, 2020). Community gardens would support the recovery of Christchurch following COVID-

decided to be fifth priority within the OARC plan. They are not ranked higher as ecosanctuaries provide the same benefits and the time and cost to implement wetlands would not result in any immediate benefits to Christchurch living with water or increasing resilience post COVID-19.

4.6 Housing

After the CES, there was an opportunity to rebuild more sustainable housing while accommodating the risk of future climate change to help those displaced from their homes (Bennett et al., 2014, p. 196). The CES removed a large portion of low-income housing which was previously available, particularly within the OARC which has seen a housing shortage for those of a lower socio-economic demographic (Bennett et al., 2014). The OARC plan assessed the possibility of implementing adaptable housing within the RRZ, which would hold multiple benefits, as the price of housing would likely be lower than average following COVID-19 (Corlet, 2020), allowing those who previously lived in the area the opportunity to return, while also creating multiple jobs. Due to the predicted sea level rise of up to 1m by 2115 (Tonkin & Taylor, 2013), the use of floating infrastructure is something that is being assessed and introduced globally. Successful examples of floating houses have been demonstrated in other cities in the world with a high risk of flooding. An example of this has been seen in the Netherlands, where the Ijburg district will accommodate 18,000 residential dwellings by building on the water. Several areas adopt

floating houses do not provide the wider ecological benefits that the other land uses provide thus they have been ranked sixth priority.

5 Limitations and Further research

Throughout this report, the group faced some limitations, with the obvious one being adapting to the ever-changing situation surrounding COVID-19. This provided challenges such as not being able to have group meetings in person, whilst also prohibiting the collection of any field data meaning that reliance on prior surveys

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