

90814R



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD  
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

## Level 2 Education for Sustainability 2022

### 90814 Demonstrate understanding of aspects of sustainability in different contexts

Credits: Four

## RESOURCE BOOKLET

Refer to this booklet to answer the questions for Education for Sustainability 90814.

Check that this booklet has pages 2–9 in the correct order and that none of these pages is blank.

**YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.**

**RESOURCE A: Water – a New Zealand public health issue**

Safe drinking water is most often termed ‘potable water’. The word ‘potable’ comes from the ground channels) that transported potable water from the mountains to the cities.

**Global situation**

Globally, some 771 million people lack access to safe water, and up to 1.7 billion people do not

safe water and good sanitation.

**New Zealand situation**

Fresh, potable water is a taonga (treasure), and it is the responsibility of all New Zealanders

attributed to the outbreak.

### Three Waters Reform programme

New Zealanders have been concerned about the state of drinking water for many years, with a

[Redacted]



Public health warning – unsafe water

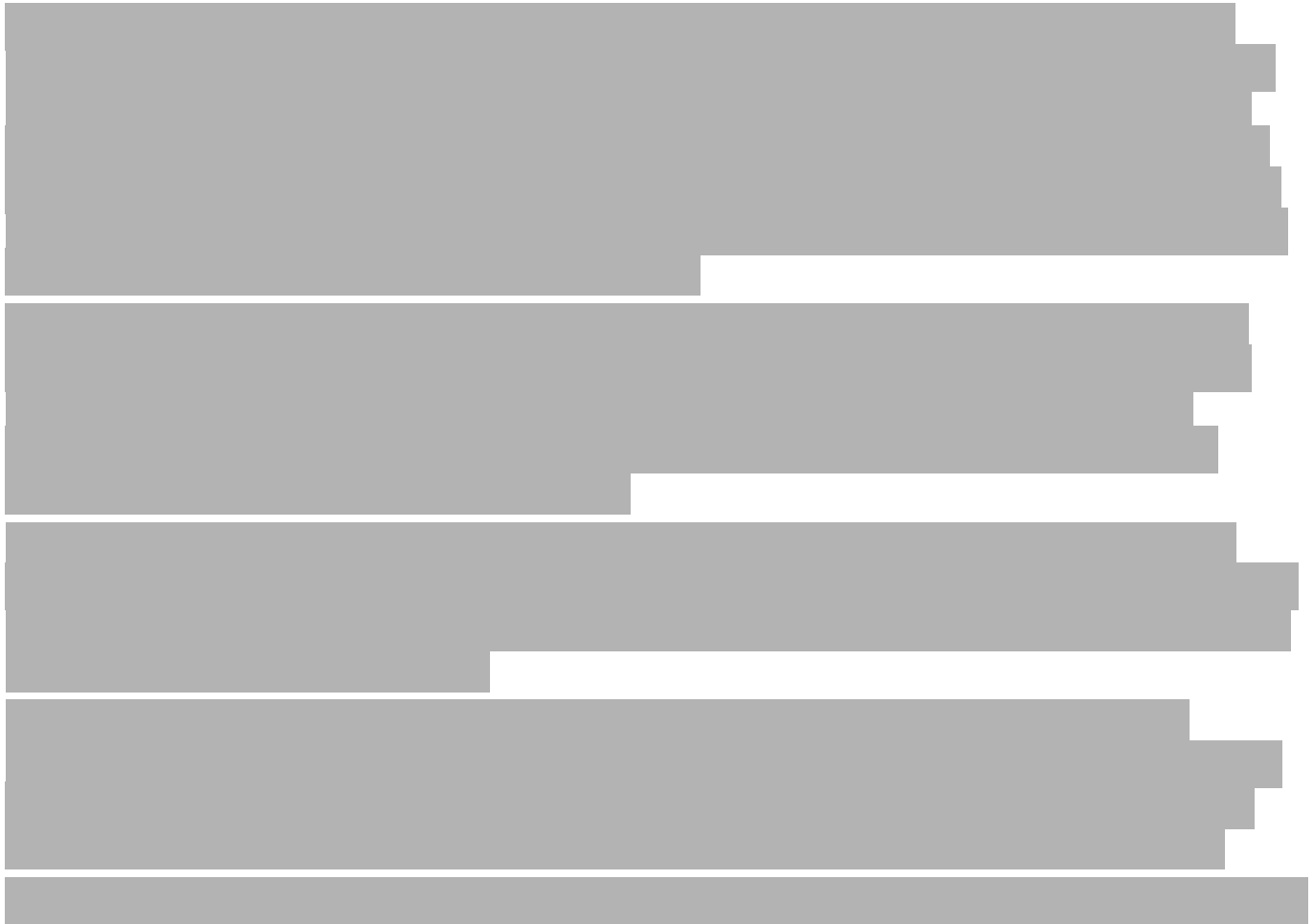
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storm water systems – is scheduled to be completed by July 2024.

**Acknowledgements**

Material from the following sources has been adapted for use in this resource:

<https://water.org/our-impact/water-crisis/health-crisis/> (Retrieved 24/3/22)

<https://www.health.govt.nz/our-work/environmental-health/drinking-water> (Retrieved 30/3/22)

<https://www.beehive.govt.nz/release/government-protect-vital-public-water-services-future-generations>  
(Retrieved 20/3/22)

<https://www.dia.govt.nz/three-waters-reform-programme-iwi-maori-interests> (Retrieved 16/3/22)

<https://www.stuff.co.nz/environment/109701626/water-pollution-the-number-one-concern-for-new-zealanders-in-new-poll>  
(Retrieved 13/3/22)

<https://www.dia.govt.nz/Government-Inquiry-into-Havelock-North-Drinking-Water-Report---Part-1---Overview>  
(Retrieved 13/3/22)

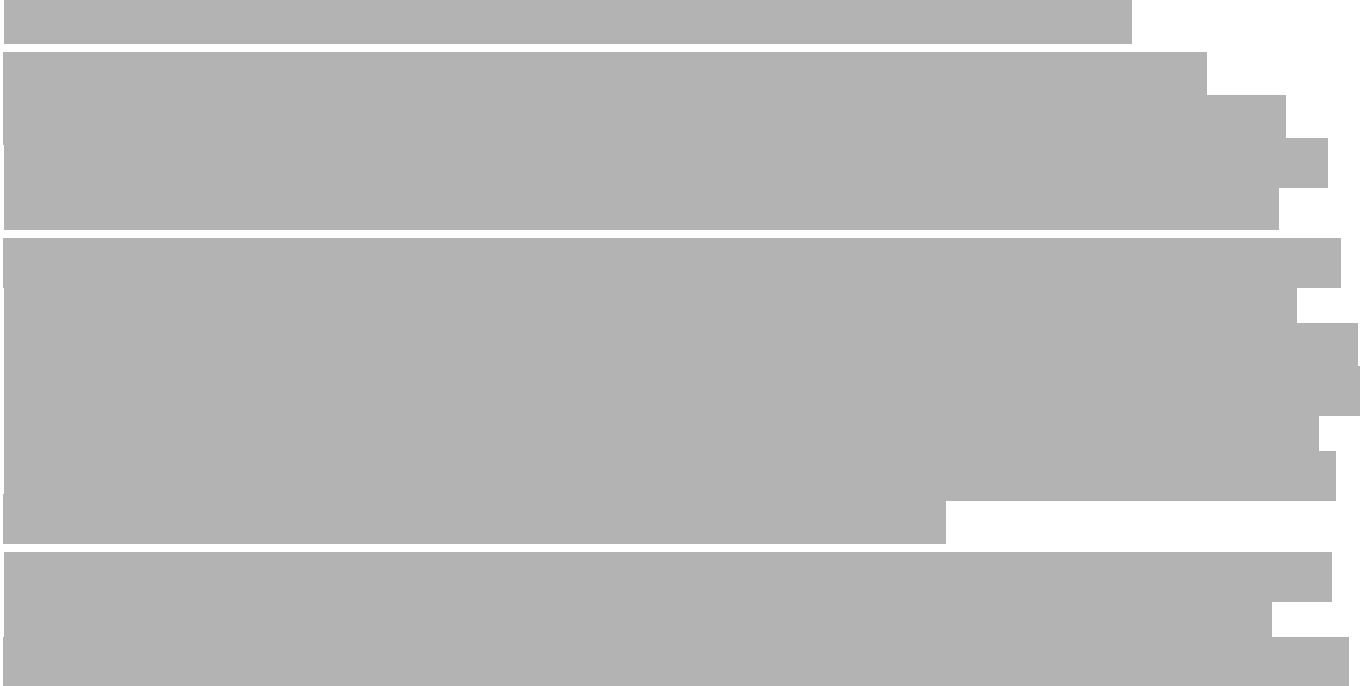
<https://www.stuff.co.nz/national/politics/128489597/government-accepts-three-waters-recommendations-councils-to-have-shareholding-aspects-of-cogovernance-to-remain> (Retrieved 29/04/22)

<https://www.otago.ac.nz/news/news/otago839477.html> (Retrieved 20/04/22)

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The examination continues on the following page.**

**RESOURCE B: Zoning and climate change**

Zoning as a planning term originated as a means for both increasing residents' access to



where retreats take place. Cost is also a factor.

**Matatā case study**

A recent example can be found in Matatā. Following the 2005 debris flow after a band of



think it would get this far. If this is going to be a test case, this is not how to do it.”



Debris flow at Matatā, 2005

## City zoning

At a time when many leaders around the world contemplate climate action, cities are stepping

infrastructure to continue unchallenged.

## Upzoning in Florida

With a renewed appreciation for the fact that the best use for any parcel of land is dependent

aspect of sustainability and opportunities to make more equitable cities for all residents.

### Acknowledgements

Material from the following sources has been adapted for use in this resource:

<https://theconversation.com/when-climate-change-and-other-emergencies-threaten-where-we-live-how-will-we-manage-our-retreat-156035> (Retrieved 29/3/22)

Why Zoning is Key to Combatting Climate Change - Azure Magazine | Azure Magazine (Retrieved 28/3/22)

<https://www.stuff.co.nz/national/300180689/matat-managed-retreat-opponents-settle-reluctantly-and-under-duress> (Retrieved 28/3/22)

<https://resiliencechallenge.nz/wp-content/uploads/2018/07/Hanna-C.-White-I.-Glavovic-B.-2017-Managed-retreat-in-New-Zealand-revealing-the-terminology-approaches-and-direction-of-local-planning-instruments.pdf> (Retrieved 28/3/22)

<https://www.lawsociety.org.nz/news/lawtalk/lawtalk-issue-945/the-proposed-managed-retreat-and-climate-change-act-and-local-authorities/> (Retrieved 28/3/22)

<https://www.c40.org/> (Retrieved 26/3/22)

## RESOURCE C: Flood disaster risk and food security

Food security exists when all people, at all times, have physical, social, and economic access to

[Redacted text]



The four pillars of food security

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

impacts of extreme hazards, in particular to reduce erosion.

### **Local case study: Canterbury floods – May/June 2021**

On 28 May 2021, MetService issued a red alert for the Canterbury region forecasting 200–300

[REDACTED]

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May. While insurance covered repairs to their home, the rest was mostly up to them to sort out.

#### **Acknowledgements**

Material from the following sources has been adapted for use in this resource:

<https://www.oecd-ilibrary.org/sites/68b7e381-en/index.html?itemId=/content/component/68b7e381-en> (Retrieved 6/4/22)

<https://digilab.libs.uga.edu/exhibits/files/original/b66d11d2ba56481404a2f60fd2b56609.jpg> (Retrieved 22/8/22)

<https://thespinoff.co.nz/society/21-02-2022/the-rising-price-of-groceries-and-the-human-cost-of-food-insecurity> (Retrieved 24/3/22)

<https://www.rnz.co.nz/news/national/452703/flood-costs-farming-couple-1m-as-recovery-grinds-on> (Retrieved 25/3/22)





