

Waste and Recycling Pack

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About this Pack

This waste and recycling resource pack was originally written for teachers, educators and students in the Hurunui District, to provide information to support schools and pre-schools convey to students the importance of reducing, re-using and recycling waste. **This is the generic national edition – in PDF.** Through the One Planet website (oneplanet.org.nz), managed by Timaru District Council, it is made available direct to subscribing councils across NZ to edit in *MS Word* format, for local use.

Activities are suggested throughout the pack, with a comprehensive resource section, which references helpful webpages, individuals and organisations.

How councils support schools and pre-schools

Schools and pre-schools play an essential role in increasing environmental awareness. Children are the principal waste producers of the future, so by working with educational establishments using this waste and recycling resource pack, more sustainable living habits at school and home can be developed and enhanced.

Acknowledging the daily time constraints that schools face, some Councils fund an environmental educator who may provide the following:

- Interactive workshops and classroom teaching sessions for teachers and pupils on waste reduction, re-use and recycling, composting and worm farms.
- Help and support to establish in-house re-use and recycling systems, to achieve a school wide approach.
- Curriculum support and resources for teachers.
- Advice and workshops on conducting waste audits, introducing litter-free lunches, building compost bins, making paper bricks or starting a wormery.
- Provide guided tours of the Council's transfer station, recovery facility or nearest landfill site to learn what happens to waste and recycling.

Make contact with your District Council to ask if they do this and mention this publication – they may wish to publish a local edition? (If so, their staff should contact Rhys Taylor on 03 6938726)

This Resource Pack should itself be environmentally friendly

This resource pack is designed to be double side printed and placed in a metal ring-binder, ideally itself a re-used one. If the resource pack was held together by plastic binding, instead of openable metal rings, later updating or additions would not be possible, as to change one page would require the entire pack to be reprinted!

When changes are made nationally, the replacement pages will be made available to Councils to download at the One Planet website. You can also add your own material to the same folder on projects or research you have undertaken.

When pages are changed, the unwanted printed paper is recyclable!

Consider how waste and recycling fits into the Curriculum

Waste and recycling can be combined with other subjects in a number of imaginative ways. Some suggestions follow:

History

- How did our grandparents manage their waste and what did they recycle?
- What happened to waste 'during the war years' in New Zealand and England e.g. mending clothes and saving waste food?
- What does the waste which archaeologists find, from the ancient Greeks, Romans, Egyptians and from Maori living here before European contact, tell us?

Geography

- Where is the landfill serving this District and why was that particular location chosen? Are there former 'public' landfills, now closed, in the District? What is their current use?

- Locate the transfer stations and larger public recycling bins in your neighbourhood, then plot them on a map, relating this to your school or venue.

Maths

- What is the road distance to drive a rubbish truck to and from the landfill, starting at each of this District's transfer stations? (perhaps use Google Maps.) Find out how many truck trips are taken each month? Work out the distance this equates to in a year, if measuring one line from school to a well-known NZ or global location or landmark? How much truck fuel is required for each trip – so how many litres or barrels of oil were used to make the fuel used in year?
- What volume of waste for landfill leaves the school or your venue each month? If this was gathered in one classroom area over a full year, how deep would it be? How is the waste composed – proportions (%) of each type of waste?

Science

- Research the chemicals contained in leachate from decaying landfill; what possible uses do these have and how are they made safe?
- Investigate how landfill waste decay products (in a process without oxygen), can be collected and used to generate electricity.

<https://www.youtube.com/watch?v=w1RKMMpRRHY> (USA video 4.5 minutes)

To book a tour of a transfer station or the landfill, or arrange for Council staff to visit you, make contact with your District or Unitary Council office.

The next section is named W&R-Parts1&2.