



Ideas for sustainable
futures

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Gore District Council

Rethinking Waste: Recommendations

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ENERGY, CARBON &
WASTE IN BUSINESS



BIODIVERSITY &
CONSERVATION



FOOD, FARMS &
FRESHWATER



CARBON FORESTS
& BIOENERGY



PEOPLE &
COMMUNITY

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1 Background

Gore District Council (GDC) wants to rethink waste. The waste hierarchy is a good tool to use to rethink waste (see below from Ministry for Environment Transforming Waste Consultation document):

The Waste Hierarchy



Using this tool, Ahikā Consulting conducted community consultation to identifying opportunities for rate payers to rethink, reduce, reuse, repurpose, recycle and compost materials they no longer want. During the consultation, a wide range of actions were discussed. The following are a selection of recommendations from this work:

1. Update the GDC website to educate rate payers on the waste hierarchy. Include information on repairing, repurposing and recycling.
2. Employ well-resourced, FTE waste minimization officer as a member of GDC staff, with a mandate to help rate payers reduce, repair, repurpose and recycle what they don't want.
3. Build a well-resourced and well-staffed Resource Recovery Park.
4. Investigate restarting kerbside recycling - what and how.
5. Investigate a food waste kerbside collection - what and how.

This report considers these five actions in further detail.

2 Recommendation 1: Update the GDC website

From the community engagement process (and some follow-up phone calls) a lot was revealed about what is happening in Gore, such as free garden waste drop off at the transfer station, cardboard recycling with Pakeke Lions and what can be dropped off to Invercargill's Recycle South (previously SDE, Southland DisAbility Enterprise). All this information is helpful to proactive members of the community who want to do the right thing. The GDC website

needs to direct people to the right places. Ahikā has verified the following opportunities for the GDC comms team to include on their website:

- Free green waste / gardening waste drop-off at the GDC transfer station
- Repair:
 - Shoe repairs: Bennetts Shoe Service (169 Tay St, Invercargill)
 - Clothing repairs and alterations: Forty-Nine Notches (49a Main Street, Mataura, Gore)
 - General fix-it types (Blokes Sheds, Mataura)
- Repurpose:
 - Op shops:
 - The Salvation Army (21 Irwell St, Gore)
 - Hospice Shop (11 Ordsal St, Gore)
- Recycling:
 - Gore Liquorland (25 Traftord Street, Gore) has a container return scheme (\$5 per crate plus the 12 bottles)
 - Super Liquor (225 Main Street, Gore) has 'swap a crate' with \$6.00 saving
 - Pakeke Lions Gore (117 Hokonui Drive, Gore) take cardboard, paper, books, and magazines
 - Mitre 10 Gore (15 Irwell Street, Gore) collect used plant pots and light bulbs
 - Recycle South (28 Etrick Street, Invercargill) collect:
 - Newsprint
 - Mixed glossy paper
 - Cardboard
 - Steel tins
 - Aluminium cans
 - Clear and coloured plastic drink bottles (No. 1 type plastic)
 - Milk containers (No. 2 type plastic)
 - Janitorial plastic bottles (No. 2 type plastic)
 - A variety of metals
 - Polystyrene.
 - Recycle South also deals with e-waste, including:
 - Decoder boxes (set top boxes)
 - Laptops
 - Gaming consoles
 - Computer towers
 - Hard drives
 - Headphones
 - Cell phones
 - Radios
 - Stereos
 - Speakers
 - Wire
 - Insulated wire
 - Household appliances (eg. toaster, jug, coffee machine, microwave).

3 Recommendation 2: Employ a waste minimization officer

Key points for this role are:

- Full time equivalent staff member within Gore District Council.
- Well supported staff to come up with ideas for change.
- Well-resourced staff to implement those changes.

The role of the waste minimization officer is about waste reduction and waste education and therefore needs resourcing (given a significant budget) to be able to run workshops, bring experts in and establish work programmes. This person's role is also to have a finger on the pulse in terms of what is going on within the town and districts of Gore and into Southland and get that information out into the community through GDC's comms team.

The role will also be about making connections to find the right avenues for some of the harder to manage materials, either within the district or outside of it. The role will include building relationships with central government, especially regarding MfE's Transforming recycling in Aotearoa project and proposed regulated product stewardship proposals for plastic packaging, tyres, electrical and electronic products (e-waste including large batteries), agrichemicals and their containers, refrigerants, and farm plastics.

The role is to also help educate the community of Gore and Districts about the Waste hierarchy and how reduction is first and foremost at the top of GDC's list of priorities.

The Waste minimization officer's role will be to connect to other existing initiatives, such as:

- Education:
 - Kate Mead's Waste Free living (for adults) - nationally focused
 - Waste Free Wanda (for students) - for Southland
 - Food Rescue services
 - Kiwi Harvest - based in Dunedin
- Repair:
 - Repair workshops / cafes - national
 - Tool libraries - national
 - Stitch Kitchen - based in Dunedin
- Recycle organisations (national):
 - Terracycle: recycling of credit cards, face masks, bottle caps, to the entire contents of a bathroom or office.
 - Bata Industrials New Zealand: recycling white gumboots
 - Soft Plastic recycling: recycling the majority of soft plastic packaging
- Upcycle: battery and vape products collection and recycling.

4 Recommendation 3: Complete a feasibility study of a Resource Recovery Park

To understand the requirements for a well-resourced and well-staffed Resource Recovery Park (RRP) a feasibility study needs to be undertaken. Ashburton District Council's RRP, managed by Envirowaste is a great example of how a RRP needs to operate.

Some key points for a successful RRP include:

- Multiple full time equivalent staff members work there (could be employees of a contractor or employees of GDC).
- Well supported staff to come up with new ideas to constantly improve RRP.
- Well-resourced staff to implement those changes.
- Repurposing shop is onsite.
- Repairing workshop is onsite (could include a variety of tools, including sewing machines, etc.).
- A wide range of recycling is available (it is essential that ALL recycling is sorted, clean, dry including glass should be kept out of any recycling), once bins are full they can be delivered to Recycle South (list of what they recycle is above).
- Weighbridge for ALL vehicles, including those dropping off for repurposing, repairing, or recycling (collecting data is essential).
- Ensure ALL vehicles drive through the repurpose, repair, or recycle facilities prior to arriving at the pit.
- Have a staff member present at the pit to help guide the public regarding what can be re-purposed, repaired and recycled before dumping in the pit., also, when safe - remove items that have ended up in the pit that can be repurposed, repaired, or recycled.

A RRP is a good way for GDC to educate the public on the waste hierarchy (image above) and how to refuse, reduce, reuse, repair, repurpose and rot if GDC want to truly Rethink Waste. There is an opportunity to create jobs around repairing and repurposing. To kick start them, some funding may be required (which could come from the Waste Levy, central government have funding for reducing waste to landfill). Rethinking waste and finding value in waste is essential if we are going to change behaviour.

5 Recommendation 4: Re-start kerbside recycling

5.1 Background to any kerbside recycling collection

Quality, quality, quality! It really is all about quality!

There is no money in a tonne of dirty, contaminated materials that have broken glass throughout. The value in a material is its quality. Any material collected at kerbside needs to have as little contamination in it as possible. No matter what options GDC choose for recycling, SORTING and EDUCATION are the two key ingredients.

For example, there are quite a wide variety of materials that can be recycled in Aotearoa New Zealand, including:

- Paper and cardboard
- Steel and aluminium tin cans
- Plastic bottles (No. 1 plastic PET)
- Plastic bottles (No. 2 plastic HDPE)
- Plastic containers and trays (No. 1 PET)
- Plastic containers and trays (No. 2 HDPE)
- Plastic containers and trays (No. 5 PP)
- Glass bottles and jars.

However, despite the Ministry for Environment (MfE) Transforming Waste consultation document stating that these materials may become standardised in kerbside collection in the future, some of those materials cannot be recycled in Southland or Otago.

5.2 Our recommendation: Keep recycling simple and sorted

We recommend GDC keeps kerbside recycling simple and well sorted and runs a well-planned educational campaign.

5.2.1 Collect aluminium, steel, and plastic as mixed recycling

In a household there are four food and drink packaging materials that are easy to recognise, easy to clean, dry, and collect for recycling. These are: aluminium drink cans (beer and soft drinks), steel tin cans (preserved food, soups, etc), milk bottles, and drink bottles (water and soft drinks).



Images above show (from left to right) aluminium drink can, steel tin can, plastic milk bottle, plastic drink bottle

5.2.2 Collect glass separate to mixed recycling

Glass **must** be kept separate from other materials.

The problem with glass: Glass is an issue all on its own. Although it is 100% fully recyclable in Aotearoa New Zealand, it is heavy to transport, hard to colour sort, and valueless when colours are mixed. It also breaks easily and if mixed with other recyclable materials it will end up on the conveyor belts at the Material Recovery Facilities (MRF) where it damages the conveyor belts and, more importantly, is a health and safety risk for the humans who sort some recyclable materials and keep the machines running. Glass sent to landfill is approximately \$180 per tonne.

100% fully recyclable: Glass recycling back into bottles is only possible in Auckland. 5R in Christchurch are the closest collection agent to get it to Auckland. It must be colour sorted and transported to Christchurch.

Crushing glass into aggregate: Closer to Gore there are two glass crushing facilities, one in Cromwell (Fulton Hogan - about 170km away) and one in Winton (McGregor Concrete Ltd, 60km away). The problem with crushing glass into aggregate is there needs to be a market for the end product (bearing in mind aggregate in Southland can be bought very cheaply currently).

Closing the loop: After in depth discussions and research, we recommend that GDC closes the loop with McGregor Concrete. By this we mean McGregor takes the kerbside collected glass (for a fee), turns it into a useable end product and GDC agrees to purchase a % of the end product back for use in its own roads, car parking, footpaths, etc.

5.2.3 Support existing local community initiatives

GDC needs to also support existing community initiatives, such as Pakeke Lions Gore. They are collecting paper and cardboard for recycling and collecting books and magazines for re-sale. Therefore, we recommend these materials are kept out of any kerbside collection.

We recommend advertising Pakeke Lions Gore in all educational campaigns to increase the amount of cardboard and paper they collect. We also recommend including in that advertising that they are a community organisation that takes donations and volunteer help as well.

5.2.4 Run a simple and clear education campaign before kerbside collection starts again

The best education campaigns help the public / rate payer understand what "contamination" means in terms of materials that they think can be recycled and what happens to their recycling when it becomes contaminated.

Contamination is mainly caused by the wrong material being placed in the wrong bin. Contamination can also be caused by how an item is presented for recycling, and the size of an item can also affect its ability to be recycled. For example, if one household uses their recycling bin as a general waste bin, then when this bin is emptied into the truck the kitchen waste, the bathroom waste, the garage waste and everything else that is disgusting and unwanted all mingles in and across everyone else's carefully cleaned and dried recyclable containers. So, in one swift motion the entire truck load of material can be contaminated beyond rescue and must go to landfill.

It is essential that everyone uses their recycling bins carefully and with respect for their neighbours.

There is no need to re-invent the wheel, there are many existing educational campaigns around the country that other Councils have done that have worked well.

6 Recommendation 4: Complete a feasibility study on a food waste collection system

We recommend a feasibility study of a household food waste collection system (kerbside or other) needs to be undertaken.

Secondly, we recommend GDC encourages the region (WasteNet) to complete a regional assessment of waste material flow within Southland, similar to the [Otago Mayoral Forum's Regional Waste Assessment](#). Understanding material flows in and around Southland alongside Otago is essential to understand the joint opportunities for collaboration across both regions for organic waste collection and processing.