

Sustainable waste: solid waste



Indicator 8.1 Waste (kg) per capita per week that is disposed to landfill

STEADY

Purpose of indicator

The amount of waste disposed to the landfill is a measure of the pressure imposed on the district's land, air and water resources. The amount of waste disposed to landfill per person per week provides information about how well Rotorua manages its waste by showing either an increase or decrease each year.

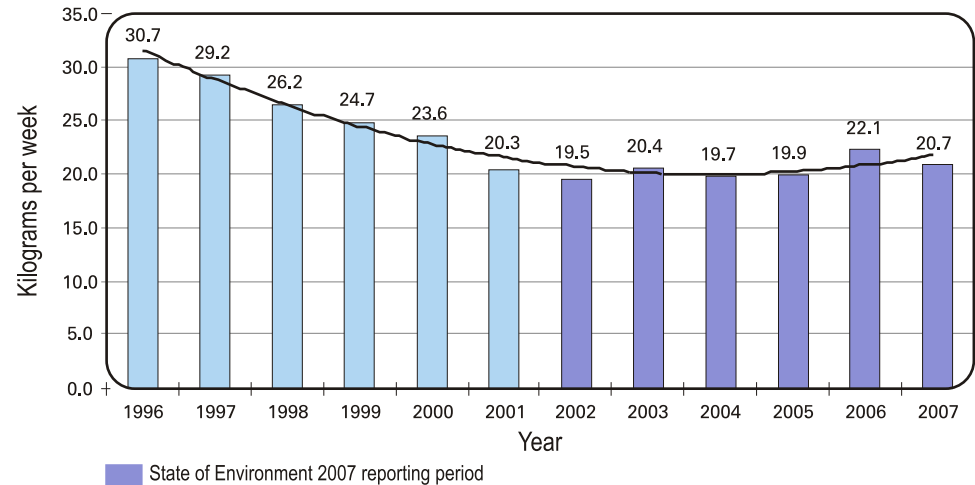
Current information and trend

The long term trend in Figure 8.1 shows that since 1996 there has been an overall decline in the amount of waste to landfill. From 2000 to 2002 there was a significant drop in the kilograms per person per week. Figure 8.2 shows the trend since 2002 has remained steady. The amount of weekly waste per person is 1.2 kg heavier in 2007 than it was in 2002.



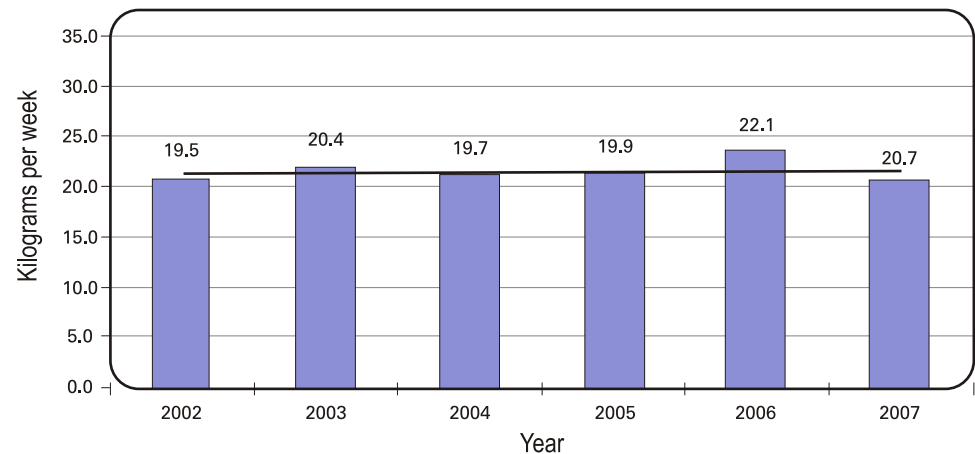
There are many influences that can change the amount of waste that goes to landfill. In 2001 the composting of sludge from the Wastewater Treatment Plant stopped, meaning that all sludge had to be disposed of to landfill. In 2003 composting resumed but not to the pre-2001 levels. Offsetting this to some extent is that in 2002 the 'in town' recycling facility was established and since then recycling has shown a steady increasing trend. The decrease in the amount of waste to landfill is a desirable environmental result. In the past 11 years the number of kilograms of waste to landfill, per person, per week, has fallen by 10 kg (Figure 8.1) due to better waste management and the implementation of the Waste Management Strategy.

Figure 8.1 Kilograms of waste to landfill, per person, per week



Source: Rotorua District Council, 2007

Figure 8.2 Kilograms of waste to Landfill, per person, per week



Source: Rotorua District Council, 2007

Sustainable waste: solid waste



Indicator 8.1 Waste (kg) per capita per week that is disposed to landfill

STEADY

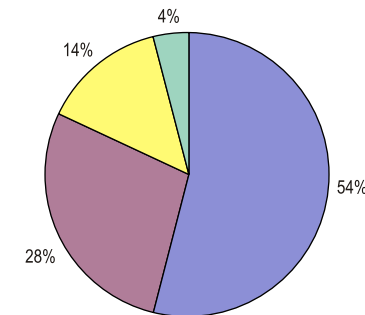
Table 8.1 Waste management methods used in Rotorua households

Waste management methods used	Respondents		
	2002	2006	Change in %
Recycling	63%	81%	+18
Composting	61%	62%	+1
Reduce waste material purchased (e.g. packaging)	23%	44%	+21
Incineration	25%	26%	+1
Dumping/burying	19%	22%	+3
None of the above do not try to reduce waste	7%	5%	+2
Other	1%	5%	+4

Source: Rotorua District Council Environmental Perceptions Survey, 2006

Figure 8.3 shows most waste to landfill is from commercial origin (54%). Domestic and transfer station waste makes up 32% of the total waste stream. Sludge, the solid end product of wastewater treatment, comprises the remaining 14%.

Figure 8.3 Sources of waste to landfill



Commercial Domestic Sludges Transfer station

Source: Rotorua landfill solid waste analysis 2005, Waste Not Consulting



What the community said

Ninety five percent of Rotorua residents thought it was important or very important to reduce the amount of household waste that goes to landfill. This is a 9% increase since 2002. Table 8.1 shows the waste management methods used by the Rotorua community. Recycling is the most common form of waste management method. Almost 80% of residents stated a kerbside recycling service would encourage them to reduce the amount of waste to landfill, while almost 55% stated that they would like more recycling facilities (more than one answer was allowed). Reducing the amount of waste material purchased proved to be the method with the greatest percentage increase (+21%).



Sustainable waste management: solid waste



Indicator 8.2 Recycling (kg) per person per week

GETTING BETTER

Purpose of indicator

Recycling and re-using are important components of sustainable solid waste management. Waste that is recycled is being diverted from the landfill meaning that there is less pressure on the landfill. This indicator shows recycling trends and how well waste minimisation and recycling programmes are working.

Current information and trend

Figure 8.4 shows the kilograms of materials recycled per person per week. The trend line indicates a steady increase in recycling from 4.4kg to 5.9kg per person per week. The number of people who recycle increased 18% in 2006 from 63% to 81%, and those who reduce waste material purchased has increased 21% since 2002, from 23% to 44% (see Table 8.1).



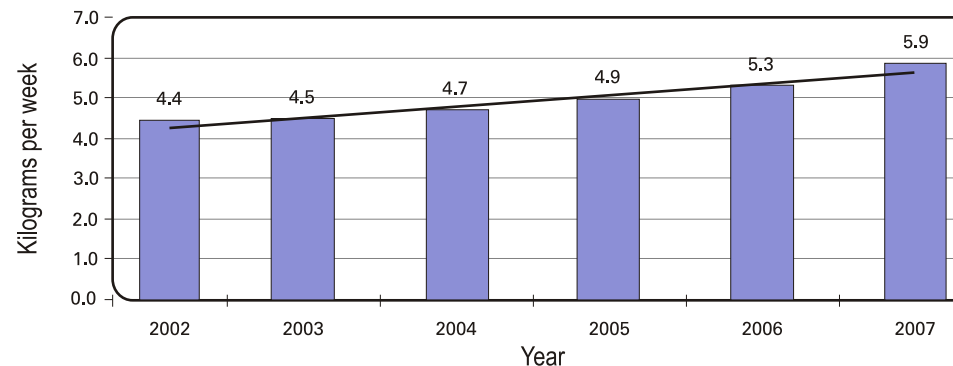
Table 8.2 shows that while there has been a decrease in the amount of mulch, woodwaste, plastic (type 1, 2, 4) and used clothing being recycled, there has been an increase in the amount of concrete product, cardboard, paper, glass, aluminum cans, metal, steel cans, batteries and plastic (types 5, 6, 7) being recycled. The 50% decrease in mulch and woodwaste may be attributed to better use of waste products by the wood pellet industry. A small amount of this may also be due to an increase in home composting.

What the community said

The most common forms of waste reduction reported by Rotorua residents were recycling, composting, and reducing waste material purchase (e.g. packaging).

The number of people who recycle has increased 18% in 2006 (from 63% to 81%) and those who reduce waste material purchased has increased 21% since 2002 (from 23% to 44%).

Figure 8.4 Kilograms of recycled material per person per week



Source: Rotorua District Council, 2007

Table 8.2 Materials recycled 2002-2006

Recyclable material (tonnes)	2002	2006	% change 2002-2006	Trend
Mulch & Woodwaste	9804	4927	-50%	↓
Concrete Product	4749	10822	+228%	↑
Cardboard	71	404	+569%	↑
Paper	155	934	+603%	↑
Glass	387	1210	+313%	↑
Aluminium Cans	5	15	+300%	↑
Metal	93	111	+119%	↑
Plastic Type 1,2,4	144	141	-2%	↓
Plastic Type 5,6,7	3	48	+1600%	↑
Steel Cans	19	37	+195%	↑
Batteries	9	17	+189%	↑

Source: Rotorua District Council, 2007