

3. REPORT BACK ON WASTE MINIMISATION PROJECTS 2009/10

General Manager responsible:	General Manager, City Environment, DDI 941-8608
Officer responsible:	Water and Waste Manager
Author:	Zefanja Potgieter, Senior Resource Planner

PURPOSE OF REPORT

1. To report back on waste minimisation projects for 2009/10.

BACKGROUND

2. On 10 August 2009 the committee approved the following projects

Project	Service Provider / Project Manager	Budget \$	Actual \$
Compost product development (third year of a three year project)	Crop and Food Research	33,750	30,000
Promotion of waste management at events	Timaru District Council staff	38,000	32,000
Business resource efficiency (outside Christchurch)	Target Sustainability	26,000	33,464
Evaluation of web based education tool for schools	None	1,000	0
Collection of used Eco-bulbs	Target Sustainability	32,000	32,772
Investigate use in the region of bylaws to restrict disposal when other options are in place	Waimakariri District Council staff	0	0
Promoting sustainable procurement options to member councils by way of workshops	None	500	0
TOTAL		\$132,250	\$128,236
<i>Unspent</i>		<i>(18,750)</i>	<i>(21,764)</i>

3. As can be seen from the table above the Committee authorised \$132,250 expenditure from a potential \$150,000. By the end of the financial year \$128,236 had been spent. A report-back on each project follows.

Compost Product Development

4. Field trials using municipal compost sourced from Timaru and Christchurch over a period of three years are progressing on multiple sites in Canterbury. *Plant and Food Research* are conducting this research on behalf of partners including the Canterbury Waste Joint Committee (CWJC), Transpacific Industries, Foundation for Agricultural Research and Environment Canterbury. A successful bid to the Sustainable Farming Fund is greatly supporting this project. The total project costs from all sponsors is \$276,000 per year.
5. A successful field day, attended mainly by growers, researchers, farm advisors and the media was held at Lincoln on the 4 March 2010. A handout summarising the research is attached along with two articles published as a result of the field day.
6. A trial at Karina Downs, near Timaru, is into its third year. Results show a single application of compost had a strong effect on crop yield in the first two years, but less effect in the third year. Measurements will be taken over a five year period.
7. One of the largest and most intensive compost trials in New Zealand has been established near Lincoln. Details of the trial design and some promising initial results were provided at the field day and are attached. A full report on the compost trials to-date, is expected to be completed by Plant and Food Research in August and will be circulated to the CWJC.

8. Demonstration sites with billboards have been established in prime locations in Canterbury and will continue to be monitored over time. A forestry conversion demonstration site has been disbanded because of high background variability masking any compost related effect. A replacement site will be established.
9. A project management team comprising of representatives from each of the funding agencies, researchers and host farmers, meet annually to agree logistics. Tony Moore has been representing the CWJC at these meetings. The next meeting has been set for 24 August to review results and consider the coming years programme.

See **Attachments 1, 2, and 3.**

Promotion of Waste Minimisation at Events in Canterbury

10. Canterbury Waste Joint Committee made a sum of money available to all the local governments in our region to provide infrastructure for Zero Waste Events. After discussion with the local authorities concerned, it was decided to purchase bins/lids/ and recycle identifier flags in consistent colours throughout the region. Eight local governments chose to participate, with each receiving several sets of infrastructure.
11. Each set consists of full-body coloured bins in green for composting, yellow for recycling and red for waste to landfill. It was decided not to include signage on the bins or lids, as there are some differences in what products each Council accepts.
12. *WasteWork* bin lids were chosen, as these provide access from both sides of the bins, they are large enough to draw attention, and allow plenty of space for signage. Note that in Timaru we have found that pictures of products are the most effective at getting the message across, especially where alcohol is a feature of the event.
13. *Flexiflags* and bases were also provided, one for each set of bins. These stand 4 metres high, and simply scream RECYCLE in bold black letters on a yellow background.
14. Feedback from the local authorities concerned has been positive.
15. The following District Councils each received four sets of bins, four sets of lids and one flag per set: Waimakariri, Selwyn, Hurunui, Kaikoura, Ashburton, Timaru, Waimate and McKenzie.

Business Resource Efficiency (outside Christchurch)

Dudley Park Aquatic Centre, Rangiora

16. 99 per cent of demolition related materials were diverted from landfill and cleanfill which equated to an estimated 1823 tonnes diverted.
17. 74 per cent of construction related materials were diverted from landfill and cleanfill which equated to an estimated 52 tonnes diverted.

Case study will be presented at the meeting.

CMP Rakaia – Selwyn

Reduced electricity consumption by 16 per cent.
Reduced LPG use by 22.8 per cent.
Waste collections reduced from weekly to fortnightly.

New stock wash will reduce water use by approximately 7m³ per set of animals washed.

Case study will be presented at the meeting.

Mountain River Processors - Selwyn

Reduced waste being incinerated by an estimated 75 per cent
Reduced electricity consumption by 11 per cent.

Case study will be presented at the meeting.

Designline - Selwyn

Waste audit, energy assessment and water audit completed. The company will be working on implementing resource efficiency initiatives during this financial year.

Continental Event Hire Division and Continental Event Catering and Head Office - Rangiora

18. Waste audit, energy assessment and water audit completed. The company will be working on implementing resource efficiency initiatives during this financial year.

Timaru Hospital

19. Reduced waste to landfill by 50 per cent. Diverting approximately 500 kilograms of food waste per week from

Barker's of Geraldine

20. Reduced waste sent to landfill from twelve skips per week to seven skips. Diverting one tonne of food waste per week to the Timaru District Council composting facility.

Case study will be presented at the meeting.

Dominion Breweries Mainland Brewery

21. 96 per cent of glass sent to Fulton Hogan Rongāroa. 2 per cent increase in paper and cardboard recycling by increasing collection cages.

Case study will be presented at the meeting.

- 22.. Report back: Compact Fluorescent Bulb Take back Trial

59 Canterbury hardware, lighting and electrical stores were contacted to see if they were interested in participating in a trial take back compact fluorescent bulb collection system in their store.

An update on the progress of the trial will be presented at the meeting.

Evaluation of Interactive Web-based Resource for Schools

23. The Committee decided not to proceed with this project when it compared the actual \$5,000 quote to the budgeted \$1,000.

Bylaws to restrict disposal

24. Waimakariri District Council staff have prepared a new solid waste bylaw that ensures waste management in the District is undertaken by all waste operators (Council-contracted and private alike) in a safe, effective and efficient manner, without causing nuisance, and also enables the Council to restrict the disposal of specific wastes in future. The Council formally adopted the bylaw in June 2010. It is available in Microsoft Word format for all Canterbury Council staff on request, and is attached as **Attachment 4**.

Promoting sustainable procurement options to member Councils by way of a staff workshop

25. This workshop is now planned for the 2010/11 year.

Potential project: Options for non-recyclable plastics

26. This potential project, in conjunction with SIFT did not proceed due to SIFT not proceeding with

Potential project: Public place infrastructure

27. After consideration by Staff, this potential project was not proceed with, and is not recommended for further action.

SUMMARY

28. The compost product development and business resource efficiency projects extend over more than one year and continue to contribute potentially long term benefits to the community. The provision of materials to promote waste minimisation at events in the district council areas and the compact fluorescent bulb scheme projects were new initiatives with positive outcomes. The provision of a new bylaw to enable territorial authorities to exercise control over what is sent to landfill when there are existing alternatives will assist communities in working towards zero waste targets as set out in the New Zealand Waste Strategy.

STAFF RECOMMENDATION

- (a) That the information be received.
- (b) That the staff and agencies responsible for the successful completion of the different projects be thanked.