



# **Community Perceptions regarding Existing Council Waste and Recycling Services and Proposed New Services**

**A Report to  
Highlands Regional Waste Management Group**

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## EXECUTIVE SUMMARY

### Introduction

Highlands Regional Waste Management Group (HRWMG) is one of 12 Regional Waste Management Groups outside the Melbourne metropolitan area of Victoria. Its purposes (HRWMG, 2008) are:

- to plan for the management of municipal waste in its region, working in partnership with the councils in the region; and
- to co-ordinate the activities of its members in its region to give effect in its region to State policies, strategies and programs relating to waste; and
- to facilitate and foster best practices in waste management.

The Region's Member Councils are Ballarat City Council, Moorabool Shire Council, Golden Plains Shire Council, Hepburn Shire Council, Central Goldfields Shire Council and Pyrenees Shire Council.

The HRWMG is required to prepare a statutory plan for the management of waste in the region every 5 years. In order to inform the preparation of the 2008 Regional Waste Management Plan, the Board of HRWMG commissioned the University of Ballarat to conduct a community survey within the Region to validly and accurately measure and evaluate community attitudes to:

- Existing waste services provided by the Member Councils.
- Proposed new services and price tolerance thresholds.

### Methodology

The survey was conducted by computer-assisted telephone interview (CATI) of a sample of one resident from each of 663 households with fixed telephone lines, across the six councils who are partners to the HRWMG (the City of Ballarat and the Shires of Central Goldfields, Golden Plains, Hepburn, Moorabool, and Pyrenees).

Contact with households was made using random digit dialling (RDD) procedures, within an appropriate range of prefixes associated with each municipality, and with target sample sizes for each municipality. In order to obtain acceptable levels of accuracy in the six municipalities, the proportions sampled in each municipality differed, with the smaller municipalities being "oversampled" relative to the larger municipalities. Interviews were conducted during the period June to October 2008, with calls made primarily on weekdays in the afternoon (1.30-4.30pm) and evening (5.00-8.00pm), and on Saturdays between 10.00am-1.00pm. Wherever possible the resident interviewed was the resident over 18 years of age who was identified by the person who answered the telephone as being the most knowledgeable and responsible regarding household waste and recycling. If that person was not available to be interviewed, either immediately or on a callback basis, an interview was requested with any available resident over 18 years of age.

The structured CATI interview script was based on a questionnaire (see Appendix 1) designed by the researchers in consultation with staff of HRWMG. It incorporates questions related to four key areas: current waste and recycling collection systems; recycling issues; a proposal for a third bin for organic waste; a proposal for a hard waste collection service; and demographic characteristics of households and respondents. Some of the questions were adapted from a similar survey previously conducted in 2004 in the outer eastern suburbs of Melbourne.



The median length of the interview was 12 minutes, excluding introduction and recruitment processes (which took approximately 3 minutes per interview). Completion of a successful interview required a mean number of 2.18 calls to that household. The number of calls per interview can be seen as a measure of the “contactability” of the households. The level of cooperation, or willingness to participate in the survey, was 36.0 percent of contacted households, which was lower than expected given the current prominence of the issues of recycling and environmentally friendly behaviour.

The overall target sample size and the target sample sizes in each municipality were determined in consultation with HRWGMG, with regard to accuracy specifications and budgetary constraints. The sampling errors in reported proportions of respondents are approximately  $\pm 4\%$  (six municipalities combined)  $\pm 6\%$  (City of Ballarat) and  $\pm 12\%$  (other individual municipalities). In addition to sampling error, potential sources of bias in this survey include:

- exclusion of households with no fixed telephone line;
- tendency for less interested people to decline to be involved (self-selection bias); and
- inaccurate responses due to lack of knowledge or comprehension.

The last two were addressed by seeking to interview the most knowledgeable informant in the household. The potential extent of bias was also examined by comparing demographic profiles of responding households and individual respondents with 2006 census population profiles for the HRWGMG region.

## Summary of Findings

- Survey response rate: 36.0 percent.
- Average length of interview: 12 minutes (plus 3 minutes for introduction)
- Higher-income households were over-represented; female respondents and university-educated respondents were over-represented, but tradespeople were under-represented.
- 42.6 percent of households put organic kitchen waste into the rubbish bin, and 19.1 percent put in green waste.
- 17.9 percent of households use the transfer station for disposal of green waste.
- 75.4 percent of households put out their rubbish bin weekly, and 81.3 percent put out their recycling bin fortnightly (i.e. whenever the regular service occurs).
- 73.4 percent of respondents were happy with their level of information provided by the council, but when asked, many suggested that one way to encourage more recycling would be to provide more information.
- Two thirds of households access information about kerbside collections from pamphlets and materials sent by councils, and a similar proportion of respondents would prefer to receive their information through this method.
- Most respondents were satisfied with the kerbside rubbish and recycling services, but there was a somewhat higher level of dissatisfaction with the transfer station. The most common concern regarding the transfer station was the cost of the service.
- The great majority of respondents were unaware of the annual cost of their waste management services. Two thirds of respondents would like the amounts to be itemised on their council bills, but one quarter did not care if this occurred.
- There was strong support for the need for recycling and reducing landfill, but over one third of respondents were concerned that not all materials put out for recycling were actually reused.
- 44.2 percent of respondents indicated that they would probably recycle more if the council provided more suitable collection bins and services.



- Most residents were able to correctly determine the extent to which different items could be recycled, but often used other methods than the kerbside collection to recycle materials. There was a higher degree of uncertainty as to the extent to which scrap metal could be recycled, but only 13.6 percent of individuals indicated that they recycled this material (i.e. not many households actually face the situation where they need to recycle scrap metal).
- Recycling responsibilities are usually handled by the adult males or females in the household, either singly or shared.
- Nearly half of all households indicated a concern for the environment as the main factor influencing their recycling activity; 35.5 percent believed they could be doing more to recycle.
- Whilst a substantial minority of respondents (38.6 %) indicated that they did not perceive any barriers to recycling, the majority (61.4%) nominated a range of barriers which limit their capacity to further recycle. Lack of knowledge and inadequacy of council bins were among the most frequently cited reasons. When asked what could be done to encourage more recycling, provision of more information and provision of green waste and hard waste collections were frequently cited.
- Two thirds of respondents residing in urban centres supported the introduction of an organic waste service costing \$1 per week paid by all households. Only 40 percent of households supported such a service at a cost of \$2 per week, and one third (34.9 percent) supported a call-out service costing \$15 per call.
- 75 percent of respondents would like an organic service to include both kitchen and garden waste, with similar levels of support for collection either weekly or fortnightly.
- 62 percent of households would like other kerbside services to be maintained at the same level if an organic waste collection is introduced.
- 67.6 percent of households would support the introduction of a kerbside hard waste collection service paid for by a \$15 charge to all households. 37.1 percent support a callout service at \$40 per household.

## Key Learnings

Councils should maintain current methods of providing information regarding recycling services, but review new methods for supplementing pamphlet/newsletter information. One common suggestion from the open responses is the use of regular updates in the local newspapers and council newsletters (eg. MyBallarat).

Councils should provide clarification on the capacity for households to recycle materials about which there is some confusion (such as scrap material), and methods for this to occur (such as the hard waste collection).

The introduction of a kerbside organic waste service is supported by urban residents. The maximum cost of this service needs to be no more than \$2 per week (or \$100 per year), and there is stronger support for a service costing closer to \$1 per week (or \$50 per year). The organic waste service should allow for both kitchen and garden waste. Residents would prefer that the other services currently offered be maintained at the same level and frequency.

The introduction of a hard waste collection service is supported by urban residents. The preferred option for cost recovery of this service is a \$15 per year charge to all households.



# 1 Introduction

Highlands Regional Waste Management Group (HRWMG) is one of 12 Regional Waste Management Groups outside the Melbourne metropolitan area of Victoria. Its purposes (HRWMG, 2008) are:

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The HRWMG is required to prepare a statutory plan for the management of waste in the region every 5 years. In order to inform the preparation of the 2008 Regional Waste Management Plan, the Board of HRWMG commissioned the University of Ballarat to conduct a community survey within the Region to validly and accurately measure and evaluate community attitudes to:

- Existing waste services provided by the Member Councils.
- Proposed new services and price tolerance thresholds.



## 2 Methodology

### 2.1 Survey and Sample Design

The survey was conducted by computer-assisted telephone interview (CATI) of a sample of one resident from each of 663 households with fixed telephone lines, across the six councils who are partners to the HRWVG (the City of Ballarat and the Shires of Central Goldfields, Golden Plains, Hepburn, Moorabool, and Pyrenees).

Contact with households was made using random digit dialling (RDD) procedures, within an appropriate range of prefixes associated with each municipality, and with target sample sizes for each municipality. The sampling targets and sampling fractions are shown in Table 1. In order to obtain acceptable levels of accuracy in the six municipalities, the proportions sampled in each municipality differed, with the smaller municipalities being “oversampled” relative to the larger municipalities (see sampling fractions in Table 1). Consequentially, if there are systematic differences between profiles of responses in different municipalities, this could result in estimates for the region as a whole being biased towards the response profiles of the smaller municipalities and away from those of the larger municipalities. To counteract such potential biases, a “weighted” analysis was used to calculate regional profiles of responses, with the responses from oversampled municipalities being correspondingly down-weighted. All tables in this report are based on the weighted analysis, except for the demographic characteristics in Section 3.1, which provide a description of the actual sample.

**Table 1. Sample Design**

	2006 Census population (households)	Target sample size	Sampling fraction (%)	Sampling accuracy (95% confidence)
Ballarat	36,139	300	0.83	±6%
Central Goldfields	5,984	70	1.17	±12%
Golden Plains	6,191	70	1.13	±12%
Hepburn	7,414	70	0.94	±12%
Moorabool	10,168	70	0.69	±12%
Pyrenees	3,359	70	2.08	±12%
Region	69,255	650	0.94	±4%

Interviews were conducted during the period June to October 2008, with calls made primarily on weekdays in the afternoon (1.30-4.30pm) and evening (5.00-8.00pm), and on Saturdays between 10.00am-1.00pm. Some weekday morning shifts were conducted early in the data collection period, but these were discontinued due to a low success rate in contacting households. The RDD method involves the generation of all possible numbers within a particular telephone exchange (in this case the exchanges covering the six municipalities), and then the random selection of a sample within each municipality from this range of possible numbers. Candidate telephone numbers which could not be immediately contacted were called back until contact was made up to a maximum of 10 times, at different computer-generated times of day and days of the week.

Whilst selection of households was randomised, within each contacted household the respondent was not selected randomly. Rather, wherever possible the resident interviewed was the resident over 18 years of age who was identified by the person who answered the telephone as being the most knowledgeable and responsible regarding household waste and recycling. If that person was not available to be interviewed, either immediately or on a callback basis, an interview was requested with any available resident over 18 years of age. This targeted strategy was adopted in



order to optimise both the amount of information collected regarding attitudes and practices in the household, and the relevance and accuracy of that information.

## **2.2 Questionnaire Design**

The structured CATI interview script was based on a questionnaire (see Appendix 1) designed by the researchers in consultation with staff of HRWVG. It incorporates questions related to four key areas: current waste and recycling collection systems; recycling issues; a proposal for a third bin for organic waste; a proposal for a hard waste collection service; and demographic characteristics of households and respondents. Some of the questions were adapted from a similar survey previously conducted in 2004 in the outer eastern suburbs of Melbourne. Draft questionnaires were pilot tested with colleagues and acquaintances by the researchers and staff of HRWVG.

## **2.3 Ethics, Confidentiality and Data Security**

The study was designed and implemented in accordance with the ethical practices stipulated by the University of Ballarat Human Research Ethics Committee, which approved the study.

## **2.4 Data Collection**

Respondents were interviewed by experienced and specifically trained telephone interviewers, using the CATI facility in the Centre for Regional Innovation and Competitiveness at the University of Ballarat. The median length of the interview was 12 minutes, excluding introduction and recruitment processes (which took approximately 3 minutes per interview).

Completion of a successful interview required a mean number of 2.18 calls to that household. The number of calls per interview can be seen as a measure of the “contactability” of the households. The mean number of calls required varied from 2.05 calls per interview in Hepburn Shire, to 2.54 calls per interview in the Central Goldfields Shire.

The level of cooperation, or willingness to participate in the survey, was 36.0 percent of contacted households, which was lower than expected given the current prominence of the issues of recycling and environmentally friendly behaviour. This resulted in the planned period of interviewing being extended. The cooperation rates for this survey varied substantially by municipality, being lowest in Central Goldfields with less than 3 in 10 households (29.3 percent) contacted being willing to participate in the survey. Participation was highest in Golden Plains, with a cooperation rate of 40.2 percent.

## **2.5 Data Analysis**

For each closed-form survey question, profiles of responses were produced, providing sample estimates of the proportion of the population in each municipality who hold particular opinions. Information as to the accuracy of these estimates (sampling and non-sampling sources of uncertainty) are discussed in Section 2.6. Responses to particular questions were cross-tabulated against key demographic and geographic indicators, in order to provide comparative profiles. Summaries of free-text responses to open-ended survey questions are also included.

## **2.6 Validity and Accuracy**

The overall target sample size and the target sample sizes in each municipality were determined in consultation with HRWVG, with regard to accuracy specifications and budgetary constraints.



Table 1 shows, for each municipality, the target number of households and the sampling fraction (fraction of the total population of households) that this represents.

Most of the results in this report are sample estimates of population proportions (ranging from 0% to 100%). The uncertainty associated with such a sample estimate diminishes with increasing sample size. For a given sample size, the uncertainty is greatest (the “worst case”) when the sample estimate is close to the centre of the scale (50%). Table 1 indicates the worst-case 95% confidence range of sampling uncertainty for each municipality. For example, if 100 respondents out of 300 interviewed in Ballarat (i.e. 67% of respondents) report a particular opinion, it is estimated with at least 95% confidence that the proportion of the Ballarat population who hold this opinion is within the range  $67\% \pm 6\%$ , i.e. between 61% and 73%. It must be stressed that the sampling accuracy depends on the sample size, not on the sampling fraction.

The above accuracy calculations are based on the assumption that the sample of households and respondents is representative of the population, with respect to the subject matter of the survey. Inaccuracy of estimates can be increased by non-sampling errors (also referred to as sample bias). Potential sources of bias in this survey include:

- exclusion of households with no fixed telephone line;
- imprecise correspondence between telephone prefixes and municipal boundaries;
- tendency for less interested people to decline to be involved (self-selection bias); and
- inaccurate responses due to lack of knowledge or comprehension.

The second of these was addressed by asking questions designed to provide confirmation of the respondent’s municipality. The third and fourth were addressed by seeking to interview the most knowledgeable informant in the household. Whilst the first, and to some degree the third, are beyond the control of the researchers, it should be noted that the presence or absence of a particular characteristic (such as having a fixed phone line) does not necessarily bear any relation to the attitudes or practices that are the subject matter of the survey, and hence does not necessarily lead to bias in the responses obtained.

An empirical assessment of the risk of bias was undertaken by comparing demographic profiles of responding households and individual respondents with 2006 census population profiles for the HRWVG region (ABS, 2007).



### 3 Results and Discussion

This chapter includes 49 tables summarizing the aggregated survey data for the region, together with brief interpretative notes highlighting key features. To compensate for any bias introduced by the different sampling rates in different municipalities, all results except for the demographic characteristics in Section 3.1 are based on a weighted analysis (see Section 2.5). Separate sets of tables for each of the six municipalities have also been provided to HRWMMG.

Demographic characteristics of surveyed households and respondents are presented in Section 3.1. Current services and practices are summarised in Section 3.2. Opinions regarding current services are presented in Section 3.3. Recycling issues are considered in Section 3.4. Sections 3.5 and 3.6 deal with proposals regarding the collection of organic waste and hard waste respectively.

#### 3.1 Characteristics of Households and Respondents

Table 2 shows that the household sample targets were achieved for all municipalities except Central Goldfields, where the contact and response rates were lowest. Table 3 shows the urban / rural breakdown of the sample, and Tables 4 to 13 show the characteristics of the 663 households surveyed.

**Table 2. Achieved Sample Size: by Municipality**

	2006 Census population (households)	Target sample size	Achieved sample size	Sampling fraction (%)	Sampling accuracy (95% confidence)
Ballarat	36,139	300	312	0.86	±5.5%
Central Goldfields	5,984	70	52	0.87	±13.6%
Golden Plains	6,191	70	74	1.20	±11.4%
Hepburn	7,414	70	81	1.09	±10.9%
Moorabool	10,168	70	72	0.71	±11.5%
Pyrenees	3,359	70	72	2.14	±11.5%
Region	69,255	650	663	0.96	±3.8%

**Table 3. Type of Geographical Location**

Location	Count	%	Cumulative %
City or large town	386	58.2	58.2
Small town / township	165	24.9	83.1
Rural	112	16.9	100.0
Total	663	100.0	

For the 112 rural residents, the distance to the nearest town ranged from 1 km to 50 km, with an average of 11.8 km.



**Table 4. Dwelling Structure**

Dwelling type	Count	%
Single storey house	592	89.3
Double storey house	44	6.6
Flat or unit on the ground floor	25	3.8
Other	2	0.4
Total	663	100.0

Where possible, the risk of response bias was investigated where possible by comparing demographic profiles of responding households with corresponding 2006 census profiles for the HRWGM region (ABS, 2007). These comparisons, shown in Tables 5, 6 and 9-12, reveal a degree of self-selection bias with regard to a number of characteristics. These biases may relate partly to the survey methodology (landline telephone contact and timing) partly to different levels of willingness to participate in surveys generally, and partly to the subject matter of this particular survey. Tables 5 and 6 show that tenants and single-person households were under-represented in the survey sample. Table 9 shows that single-person households and couples with no children were under-represented, whilst couples with children were over-represented. Table 10 suggests that households with internet access were over-represented in the survey sample, although the proportion of households with internet access may have increased since the 2006 census. Table 12 shows that, among the 376 households for which household income was disclosed, low-income households were under-represented and high-income households were over-represented.

**Table 5. Tenure Type**

	Survey sample		Census
	Count	%	%
Owner / occupier (includes paying off)	549	82.8	77.5
Tenant	97	14.6	22.5
Live here, but not an owner or tenant	15	2.3	
Other	2	0.3	
Total	663	100.0	

**Table 6. Number of Occupants in Household**

Number	Survey sample			Census
	Count	%	Cumulative %	%
1	124	18.7	18.9	25.9
2	241	36.3	55.2	35.2
3	111	16.7	71.9	14.8
4	106	16.0	87.9	14.3
5	57	8.6	96.5	7.0
6	13	2.0	98.5	2.8*
7	3	0.5	98.9	
8	5	0.8	99.7	
9	1	0.2	99.8	
10	1	0.2	100.0	
Total	662	100.0		100.0

\* 6 or more.



**Table 7. Number of Children in Household**

Number	Count	%	Cumulative %
0	393	59.3	59.3
1	87	13.1	72.4
2	119	17.9	90.3
3	50	7.5	97.9
4	7	1.1	98.9
5	3	0.5	99.4
6	2	0.3	99.7
7	1	0.2	99.8
8	1	0.2	100.0
Total	663	100.0	

**Table 8. Number of Schoolchildren in Household**

Number	Count	%	Cumulative %
0	434	65.6	65.6
1	101	15.3	80.8
2	79	11.9	92.7
3	37	5.6	98.3
4	6	0.9	99.2
5	2	0.3	99.5
6	1	0.2	99.7
7	2	0.3	100.0
Total	662	100.0	65.6

**Table 9. Household Composition**

Composition	Survey sample		Census
	Count	%	%
One person	124	18.7	26.0
Couple with no children	145	21.9	27.8
Couple with dependent children	225	33.9	22.6
Couple with non-dependent children	78	11.8	6.4
Couple with both dependent and non-dependent children	11	1.7	2.1
Single parent family with dependent children	33	5.0	7.5
Single parent family with non-dependent children	22	3.3	3.8
Single parent with both dependent and non-dependent children	2	0.3	0.5
Shared house (group of unrelated people)	13	2.0	3.5
Rather not say	7	1.1	
Other	3	0.5	
Total	663	100.0	100.0



**Table 10. Internet Access at Home**

Internet access	Survey sample		Census
	Count	%	%
Yes	456	68.8	56.9
No	207	31.2	43.1
Total	663	100.0	100.0

**Table 11. Language Other Than English Spoken at Home**

Other language	Survey sample		Census*
	Count	%	%
Yes	32	4.8	3.3
No	631	95.2	96.7
Total	663	100.0	100.0

\* Census percentages are based on persons rather than households.

**Table 12. Annual Household Income (before Tax)**

Household income	Survey sample			Census*
	Count	%	Cumulative %	%
Less than \$20,000	30	8.0	8.0	19.8
\$20,000 - \$39,999	51	13.6	21.5	29.3
\$40,000 - \$59,999	60	16.0	37.5	21.0
\$60,000 - \$79,999	62	16.5	54.0	14.0
\$80,000 - \$99,999	70	18.6	72.6	5.6
\$100,000 - \$149,999	70	18.6	91.2	7.9
\$150,000 or more	16	4.3	95.5	2.2
Don't know	17	4.5	100.0	
Total stated	376	100.0		

\* Approximate correspondence – census categories are based on weekly income.

**Table 13. Home Business**

Home business	Count	%
Yes	76	11.5
No	584*	88.5
Total	660	100.0

\* Includes 88 for whom no answer was recorded for this question; these are assumed to be "No" responses. Three persons declined to answer this question.

Tables 14 to 18 show the characteristics of the 663 individual respondents to the survey. The risk of response bias was investigated by comparing selected demographic profiles of respondents with 2006 census population profiles for the HRWMG region (ABS, 2007). As with the household characteristics above, these comparisons, shown in Tables 14-17, reveal a degree of self-selection bias with regard to a number of characteristics. These biases may relate partly to the survey methodology (landline telephone contact and timing) partly to different levels of willingness to participate in surveys generally, and partly to the subject matter of this particular survey.



Table 14 shows women were over-represented and men under-represented in the survey sample. Table 16 shows that persons with university qualifications were over-represented, whilst persons with trade qualifications were under-represented. This may be due in part to the gender imbalance. Tables 15 and 17 show no evidence of bias with respect to age or employment status.

**Table 14. Gender**

Gender	Survey sample		Census
	Count	%	%
Male	243	36.7	48.9
Female	420	63.3	51.1
Total	663	100.0	100.0

**Table 15. Age**

Age (years)	Survey sample			Census
	Count	%	Cumulative %	%*
18-24	23	3.5	3.5	
25-34	81	12.3	15.8	16.1
35-44	155	23.6	39.4	20.7
45-54	160	24.4	63.8	21.0
55-64	121	18.4	82.2	17.4
65+	117	17.8	100.0	21.3
Total	657	100		

\* Because census categories encompass all age groups, and because 18-24 is not a standard census age category, census percentages have been rescaled to match the overall proportion of the sample in the 25+ age range.

**Table 16. Highest Completed Educational Level**

Level	Survey sample		Census
	Count	%	%*
Year 10 or below	138	21.0	
Year 11 or equivalent	92	14.0	
Year 12 or equivalent	136	20.7	
Trade certificate / apprenticeship	33	5.0	18.0
Associate Diploma (TAFE)	40	6.1	
Advanced Diploma (TAFE)	28	4.3	6.3**
University bachelor degree	120	18.3	8.7
University postgraduate	57	8.7	3.3
Other	12	1.8	
Total	656	100.0	

\* Census percentages based on persons aged 15 years and over. No census data available regarding proportion of persons for whom highest level of education is secondary school.

\*\* Advanced Diploma and Diploma.



**Table 17. Employment**

Category	Survey sample		Census
	Count	%*	%**
Employed full-time ongoing	239	36.0	33.2
Employed part-time ongoing	106	16.0	17.8
In casual employment	38	5.7	
Unpaid / volunteer work	10	1.5	
Unemployed	26	3.9	
Home duties / homemaker	66	10.0	
Studying	26	3.9	
Retired	155	23.4	
Other	20	3.0	
<b>Total</b>	<b>691</b>	<b>104.2</b>	

\* Multiple responses permitted, hence percentages add to more than 100.0

\*\* Census percentages based on persons aged 15 years and over. Census data available for the first two categories only.

**Table 18. Self-employment**

Self-employed	Count	%
Yes	69	18.1
No	313	81.9
<b>Total</b>	<b>382*</b>	<b>100.0</b>

\* Only employed persons were asked this question

### 3.2 Current Services and Practices

As explained in Section 2.5 and in the introduction to this chapter, to compensate for any bias introduced by the different sampling rates in different municipalities, all results in Sections 3.2-3.6 are based on a weighted analysis.

Tables 19 to 30 summarise the responses regarding current waste and recycling services and practices. A number of respondents who reported either having no current kerbside service or having little knowledge of current services or household practices, did not answer some or all questions in this section of the survey.

Tables 19 and 20 confirm the mix of bin and container types in use across the region.

**Table 19. Current Kerbside Rubbish Bin**

Type	Count	%*
Large wheelie bin (240 litre)	152	24.8
Medium wheelie bin (120-140 litre)	329	53.6
Small wheelie bin (80 litre)	118	19.2
Wheelie bin but not sure of size	23	3.8
Not sure	17	2.8
<b>Total</b>	<b>640</b>	<b>104.1</b>

\* Multiple responses permitted, hence percentages add to more than 100.0



**Table 20. Current Kerbside Recycling Container(s)**

Type	Count	%*
Large wheelie bin (240 litre)	486	75.4
Medium wheelie bin (120-140 litre)	68	10.5
Wheelie bin but not sure of size	12	1.8
Bin or Crate	23	3.6
Other	4	0.7
Not sure	7	1.1
No kerbside recycling service	50	7.7
<b>Total</b>	<b>650</b>	<b>100.8</b>

\* Multiple responses permitted, hence percentages add to more than 100.0

Table 21 shows that 42.6% of households put some or all of their organic kitchen waste into their rubbish bin.

**Table 21. Disposal of Organic Kitchen Waste**

Method	Count	%*
Goes into normal rubbish	266	42.6
Compost	320	51.4
Worm farm	29	4.6
Give to poultry or animals	127	20.3
Other	14	2.2
Not sure	2	0.4
<b>Total</b>	<b>757</b>	<b>121.6</b>

\* Multiple responses permitted, hence percentages add to more than 100.0

Table 22 shows that whilst more than half the respondents reported composting or mulching, 19.1% of households put some or all of their green waste into their rubbish bin. The most common responses in the "Other" category were: burning; disposal by landlord, gardener or private greenwaste collector; and feeding to animals or poultry.

**Table 22. Disposal of Green Waste**

Method	Count	%*
Goes into normal rubbish	126	19.1
Bundled collection	15	2.3
Compost / mulch	383	58.2
Worm farm	6	0.9
Transfer station	118	17.9
At call collection	17	2.6
Don't have any green waste	52	7.8
Other	129	19.6
<b>Total</b>	<b>850</b>	<b>129.2</b>

\* Multiple responses permitted, hence percentages add to more than 100.0

Tables 23 and 25 indicate that the great majority of households put their rubbish bin and recycling bin out each time a collection occurs. Table 24 shows that for around 40% of households the rubbish bin is normally half full or less; in only around 30% of households is the bin normally full. Table 26 shows that for around 25% of households the recycling bin is normally half full or less; in only around 45% of households is the bin normally full.



**Table 23. How Frequently is Rubbish Bin Put Out for Collection**

	Count	%	Cumulative %
Weekly	476	76.5	76.5
Fortnightly	115	18.5	95.0
Every three weeks	8	1.3	96.2
Monthly	8	1.4	97.6
Other	15	2.4	100.0
Total	622	100.0	

**Table 24. How Full is Rubbish Bin Normally**

	Count	%	Cumulative %
Quarter	42	6.7	6.7
Third	46	7.5	14.2
Half	171	27.4	41.6
Two thirds	60	9.6	51.3
Three quarters	115	18.4	69.7
Full	178	28.6	98.3
Don't know	11	1.7	100.0
Total	622	100.0	

**Table 25. How Frequently is Recycling Bin Put Out for Collection**

	Count	%	Cumulative %
Weekly	24	3.8	3.8
Fortnightly	506	81.3	85.1
Every three weeks	6	0.9	86.0
Monthly	44	7.1	93.1
Other	43	6.9	100.0
Total	622	100.0	

**Table 26. How Full is Recycling Bin Normally**

	Count	%	Cumulative %
Quarter	14	2.3	2.3
Third	18	2.8	5.1
Half	130	20.9	26.0
Two thirds	38	6.0	32.1
Three quarters	118	19.0	51.0
Full	280	45.0	96.0
Don't know	25	4.0	100.0
Total	622	100.0	



Some residents of the Shire of Golden Plains currently have a 240 litre bin and a weekly collection. Consideration is being given to changing this. Respondents who would be affected were asked to indicate their preference for one of three options. Table 27 shows that around two thirds preferred the status quo, with the other one third splitting equally between reduced size of bin or reduced frequency of collection.

**Table 27. Preference for Change to Rubbish Bin Collection**

Preference	Count*	%
240 litre bin collected fortnightly	12	17.4
140 litre bin collected weekly	13	18.8
No change	43	62.3
Not sure	1	1.4
Total	69	100.0

\* Unweighted analysis (since only one municipality is involved)

### 3.3 Opinions Regarding Current Services

As for Section 3.2, a number of respondents who reported either having no current kerbside service or having little knowledge of current services or household practices, did not answer some or all questions in this section of the survey.

Tables 28 to 30 indicate that the great majority of respondents were satisfied with the amount of information received from councils about waste management and recycling services, and with the ways in which they access this information. The most common responses in the "Other" category were rates notices, newspapers, Council newsletters such as the MyBallarat magazine, and fridge magnets.

**Table 28. Does Council Provide Enough Useful Information**

	Count	%
Yes	457	73.4
Yes, but only if you ask for it	37	5.9
No	99	15.9
Not sure	30	4.9
Total	622	100.0

**Table 29. Method of Access to Information regarding Kerbside Waste Collection**

	First mentioned		Also mentioned		Total
	Count	%	Count	%	
Pamphlet / booklet / newsletter	406	65.2	23.5	3.8	622
Booklet picked up at Council office	6	1.0	6.2	1.0	622
Council website	11	1.8	23.0	3.7	622
Stickers inside the lids of the bins	80	12.8	71.7	11.5	622
Neighbours	6	1.0	12.4	2.0	622
Other	57	9.2	14.5	2.3	622
Not sure	68	10.9	5.5	0.9	622



**Table 30. Preferred Method of Access to Information regarding Kerbside Waste Collection**

	First mentioned		Also mentioned		Total
	Count	%	Count	%	
Pamphlet / booklet / newsletter	421	67.7	24.0	3.9	622
Booklet picked up at Council office	6	0.9	2.9	0.5	622
Council website	32	5.2	18.8	3.0	622
Stickers inside the lids of the bins	92	14.8	34.0	5.5	622
Other	36	5.8	15.3	2.5	622
Not sure	22	3.6	2.2	0.4	622

Table 31 summarises the reported levels of satisfaction with five aspects of waste collection and recycling Council services. Around 90% of respondents were either “satisfied” or “very satisfied” with kerbside rubbish collection and recycling services. Opinions regarding the waste transfer station were more varied, with almost 50% neutral responses, reflecting lack of knowledge or experience of the transfer station. It should be noted that green waste and hard waste collection services are currently provided only by the Shire of Central Goldfields to residents of Maryborough; only residents of Maryborough were asked about these services. Two thirds of responses were neutral, and one quarter were “satisfied”.

**Table 31. Satisfaction with Council Waste Collection and Recycling Services**

Service	Very dissatisfied		Dissatisfied		Neither		Satisfied		Very satisfied		Total
	Count	%	Count	%	Count	%	Count	%	Count	%	
Kerbside rubbish collection service	5	0.8	22	3.6	15	2.5	385	61.8	195	31.3	622
Kerbside recycling service	6	0.9	26	4.2	33	5.3	362	58.3	195	31.3	622
The council waste transfer station	10	1.6	62	10.0	300	48.2	193	31.1	57	9.1	622
Garden organic service (green waste)	1	2.7	1	2.7	28	69.8	10	24.7	0	0.0	40
Hard waste collection	2	5.5	0	0.0	28	69.8	10	24.7	0	0.0	40

Respondents who expressed dissatisfaction with any aspect of Council services were invited to make suggestions for improvements. Many of the responses were complaints or criticisms rather than positive suggestions. Table 32 contains a summary of the types of comments made.

**Table 32. Concerns about Services and Suggestions for Improvement**

<b>Kerbside rubbish collection service</b>
Larger bin or more frequent collection required
Distance from house to collection points in rural areas
Careless of collectors – missed collection, spillage, bins tipped over or left on road
Noise of collectors
<b>Kerbside recycling service</b>
Larger bin or more frequent collection required
Distance from house to collection points in rural areas
Careless/noise of collectors (as for rubbish)
Collectors emptying recycling bin into rubbish (rural area)
Concern about what happens after collection
<b>The council waste transfer station</b>
Too expensive (by far the most common concern – 47 responses)
Lack of vouchers
Limited opening hours
Limited recycling options, inadequate or inconsistent assessment by staff

Respondents were asked to estimate the current Council charge for their kerbside garbage and recycling services. The great majority of respondents said that they did not know. Tables 33 and



34 respectively summarise the responses of the small proportion of respondents who estimated the charge on either an annual or a weekly basis. In both cases the estimates were spread over a wide range. The median (middle) estimates were \$4 per week and \$140 per year.

Because these charges differ across the region, readers who wish to compare the perceptions of respondents with the actual charges levelled by each municipality should consult the tabulations for individual municipalities (Appendices 2 to 7).

**Table 33. Estimated Annual Charge for Kerbside Garbage and Recycling Services**

Annual Charge (\$)	Count	%	Cumulative %
14	1	0.9	0.9
50	4	3.4	4.3
60	2	1.3	5.6
65	0	0.4	6.0
70	1	0.7	6.7
73	1	1.1	7.8
75	1	0.7	8.6
80	9	7.8	16.3
85	1	0.9	17.2
90	2	2.1	19.3
100	19	16.1	35.5
110	4	3.4	38.8
120	8	6.8	45.6
130	1	0.7	46.3
134	1	0.9	47.2
135	1	1.1	48.3
138	1	0.9	49.2
140	5	3.7	53.0
141	2	1.3	54.3
150	6	5.1	59.4
153	1	0.7	60.0
157	1	0.7	60.7
158	1	0.7	61.4
160	2	1.3	62.7
170	2	2.0	64.7
175	4	3.0	67.7
176	1	0.7	68.4
180	11	9.0	77.4
184	0	0.4	77.8
190	0	0.4	78.1
200	13	10.5	88.6
210	3	2.2	90.9
217	6	4.6	95.4
250	0	0.4	95.8
260	1	0.9	96.7
277	1	0.9	97.6
280	1	0.7	98.4
300	1	0.7	99.1
550	1	0.9	100.0
<b>Total</b>	<b>121</b>	<b>100.0</b>	

**Table 34. Estimated Weekly Charge for Kerbside Garbage and Recycling Services**

Weekly Charge	Count	%	Cumulative %
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(\$)			
2	8	45.5	45.5
4	1	7.9	53.5
5	6	34.9	88.4
6	2	11.6	100.0
Total	17	100.0	

Table 35 shows that around two thirds of respondents who estimated charges thought that the charges were about right, and one third thought they were too high.

**Table 35. Perception of Charges**

	Count	%	Cumulative %
Too low	2	1.1	1.1
About right	89	65.7	66.9
Too high	45	33.1	100.0
Total	136	100.0	

Table 36 shows that almost two thirds of respondents would like the cost of their waste management service to be shown separately on their rates notice, and a further one quarter do not care either way.

**Table 36. Would you like the cost of your waste management service to be shown separately on your rates notice**

	Count	%	Cumulative %
Yes	386	62.0	62.0
No	69	11.2	73.1
Don't care	167	26.9	100.0
Total	622	100.0	

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### 3.4 Recycling Issues

Respondents were invited to indicate their level of agreement or disagreement with six statements regarding recycling in general. These statements were presented to respondents in random order. The responses are summarised in Table 37. Agreement or strong agreement predominated for the first three statements and the fifth statement, the strongest agreement being with the second and fifth statements. In the case of the fourth statement, which was framed in negative form, there was a fairly even three-way split between those who agreed, those who disagreed, and those who were either neutral or stated that they did not know. Responses to the sixth statement were also evenly balanced, with around 40% agreeing and 40% disagreeing.

**Table 37. Perceptions about Recycling**

Statement	Strongly Disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		Don't know		Total
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
Our household is recycling more than it did two years ago	12	1.8	116	17.4	80	12.0	319	48.1	124	18.7	13	2.0	663
It is very important that the amount of waste going into landfills	2	0.3	6	0.9	11	1.6	377	56.9	262	39.5	5	0.7	663
My efforts to recycle are making a real difference to the environment	4	0.6	48	7.3	56	8.5	417	62.9	101	15.3	36	5.4	663
I don't believe all materials put out for recycling end up recycled or re-used	9	1.4	174	26.3	83	12.5	236	35.7	22	3.4	138	20.8	663
I am very conscious of the need and importance of recycling	1	0.1	9	1.3	18	2.8	363	54.8	271	40.9	0	0.1	663
I would probably recycle more if my Council provided more suitable collection bins and services	21	3.1	260	39.3	73	11.0	221	33.4	72	10.8	16	2.4	663

Respondents were also asked about the recycling of 12 specific items, selected in consultation with HRWVG. Four are items which should be placed in recycling bins and for which little uncertainty was anticipated; four are items which should not be placed in recycling bins and for which little uncertainty was anticipated; and four are items for which higher levels of uncertainty were anticipated. The 12 items were presented to respondents in alphabetical order, but the responses in Tables 38 and 39 are presented in group order.

Table 38 shows what the respondents reported that they actually do. Over 90% of respondents reported recycling each of the recyclable items. Except for disposable nappies, the level of compliance with non-recyclable items was somewhat lower, with the proportion of respondents who reported not recycling ranging from 81% (paint tins) to 86% (batteries). The four "high uncertainty" items were not recycled by the majority of respondents, with the proportions ranging from 73% (plastic bags) to 85% (plastic wrapping film).

The proportions of "don't know" responses were similar for the non-recyclables and the "high uncertainty" items. The proportions of "it depends" responses ranged from zero (disposable nappies) to 4% (plastic bags).



**Table 38. Recyclable Items: Practices**

Item	Yes - I recycle these		No - I do not recycle these		It depends		Don't know		Total
	Count	%	Count	%	Count	%	Count	%	
<i>Recyclable items</i>									
Cardboard	620	93.5	32	4.8	5	0.8	6	0.9	663
Glass bottles and jars	625	94.3	28	4.3	5	0.7	5	0.7	663
Newspaper	612	92.4	41	6.3	1	0.2	8	1.2	663
Plastic bottles and jars	614	92.6	24	3.6	20	3.0	5	0.8	663
<i>Non-recyclable items</i>									
Batteries	69	10.5	571	86.2	8	1.3	14	2.1	663
Building materials and rubble	58	8.8	563	84.9	15	2.3	27	4.1	663
Disposable nappies	9	1.3	622	93.8	0	0.0	32	4.9	663
Paint tins	74	11.2	534	80.6	18	2.7	36	5.5	663
<i>Items for which confusion was anticipated</i>									
Plastic bags	139	20.9	485	73.1	29	4.3	11	1.7	663
Plastic wrapping film	80	12.1	561	84.6	7	1.0	15	2.3	663
Polystyrene foam	109	16.4	514	77.5	7	1.1	33	5.0	663
Scrap metal, engine parts, old appliances, etc.	90	13.6	528	79.7	22	3.3	22	3.4	663

Table 39 shows, for those respondents who reported that they did not recycle each particular item, whether they thought it could be recycled. A narrow majority of those who did not recycle recyclables nevertheless believed that they could be recycled, and a larger majority of those who did not recycle non-recyclables believed that they could not be recycled. Similar majorities believed that the “high uncertainty” items could not be recycled. This indicates that people are generally able to accurately identify the recyclables and non-recyclables, regardless of their recycling behaviour.

**Table 39. Recyclable Items: Beliefs**

Item	Yes – can be recycled		No - cannot be recycled		It depends		Don't know		Total
	Count	%	Count	%	Count	%	Count	%	
<i>Recyclable items</i>									
Cardboard	22	57.3	9	24.1	1	2.1	6	16.5	38
Glass bottles and jars	20	60.3	9	28.2	0	0.0	4	11.4	33
Newspaper	32	62.4	10	20.6	2	3.8	7	13.2	51
Plastic bottles and jars	17	60.0	5	18.6	0	0.0	6	21.4	29
<i>Non-recyclable items</i>									
Batteries	57	9.7	432	73.3	33	5.5	67	11.4	589
Building materials and rubble	64	10.8	395	67.0	45	7.6	87	14.7	590
Disposable nappies	11	1.6	555	84.5	9	1.3	83	12.6	657
Paint tins	39	6.9	406	71.1	45	7.8	81	14.2	571
<i>Items for which confusion was anticipated</i>									
Plastic bags	35	7.0	405	81.4	28	5.7	29	5.9	497
Plastic wrapping film	27	4.7	474	81.9	5	0.9	72	12.5	579
Polystyrene foam	20	3.6	440	79.9	4	0.7	87	15.8	551
Scrap metal, engine parts, old appliances, etc.	74	13.4	347	63.1	49	8.9	81	14.6	551



Table 40 summarises who in the household was most active in organising and carrying out rubbish disposal and recycling. In most households either the female head (56%) or the male head (41%) had responsibility for both sorting and putting out for collection. The responsibility was shared or diffused in around one household in six. Children had a role in these activities in only a very small minority of households.

**Table 40. Person(s) Most Responsible for Rubbish Collection and Recycling**

Person(s)	Sorting		Putting out for collection		Both		Neither		Total
	Count	%	Count	%	Count	%	Count	%	
Wife / partner / mother / female head	25	3.8	4	0.7	371	56.0	262	39.5	663
Husband / partner / father / male head	10	1.4	9	1.4	274	41.3	371	55.9	663
Other adult / child 18+	0	0.0	0	0.0	9	1.3	654	98.7	663
Teenage child(ren)	1	0.2	2	0.3	14	2.1	646	97.5	663
Child(ren) aged 12 or under	3	0.5	1	0.2	6	0.9	653	98.5	663
Child(ren) various ages or age unspecified	1	0.1	4	0.7	7	1.0	651	98.2	663
Other	4	0.6	2	0.3	4	0.5	653	98.5	663
Varies / no-one in particular	0	0.0	0	0.0	12	1.7	651	98.3	663
Shared	2	0.4	3	0.4	98	14.7	560	84.5	663
No-one at all	2	0.3	1	0.2	13	2.0	647	97.6	663

Respondents were asked to nominate (unprompted) one or more factors that had influenced recycling practices in their household. Table 41 summarises the responses, as categorised by the interviewer. Concern for the environment was the clearly predominant response, being mentioned first by 50% of respondents, and mentioned subsequently by a further 8% of respondents. The most common response recorded in the "Other" category was "media", indicating that the question had been interpreted in terms of the mechanism of influence rather than the underlying motivation. The remaining responses recorded in the "Other" category were mostly specific individual expressions of concern about the environment, waste of resources, use of landfill etc.

**Table 41. Factors That Have Influenced Recycling**

Factor	First mentioned		Also mentioned		Total
	Count	%	Count	%	
Concern about environment	329	49.7	55	8.3	663
Social responsibility	68	10.3	76	11.4	663
Council collection provided	89	13.4	44	6.6	663
Own children / school education	38	5.7	30	4.5	663
Recycle at work	7	1.1	16	2.3	663
No room in garbage bin / change in council bin sizes	24	3.6	14	2.1	663
Habit / done it for years / grown up with it	51	7.6	31	4.6	663
Other	79	11.9	19	2.9	663



Table 42 shows that one third of respondents believed that more could be done in the area of recycling.

**Table 42. Beliefs regarding Extent of Recycling**

	Count	%
I am sure we could be doing more	235	35.5
There is really not much more we could be doing that we aren't doing now	267	40.3
We are already doing everything that can be done	160	24.2
Total	663	100.0

Respondents were asked to nominate (unprompted) the most important barrier or problem their household faces inside or outside their home in trying to recycle more. Table 43 summarises the responses, as categorised by the interviewer. Over one third of respondents perceived no barriers. The three most common barriers (each cited by around 10% of respondents) were lack of knowledge, lack of time and inadequacy of bins provided by Councils. The “Other” category included comments regarding: lack of information or knowledge; lack of a green waste collection; lack of capacity to recycle items such as batteries, scrap metal, electronic items, paints and oils; lack of a hard rubbish collection and the need to drive to a transfer station.

**Table 43. Perceived Barriers to Recycling**

	Count	%
Don't know enough about how to go about recycling correctly / too complex	70	10.5
Lack of time, just too busy	79	11.9
Requires a fair bit of extra effort	23	3.5
Other things regarded as more important, requiring attention	8	1.2
Not enough space where I live	2	0.2
Council bins provided are inadequate	73	11.0
No incentive to do more	11	1.7
Cost of some services	20	3.0
Non-recyclable containers	17	2.5
No barriers / feel like I am already doing enough	256	38.6
Other	105	15.9
Total	663	100.0

Respondents were asked whether there was anything else that would encourage them to recycle more at home. One third of respondents (228; 34.4%) said that there was. Table 44 summarises the factors nominated by these respondents. The most common suggestion was “more information” (47 respondents; 20.6% of those who made suggestions).

**Table 44. Ways of Encouraging More Household Recycling**

More information on recycling and on what can and cannot be recycled
Green waste collection
Hard rubbish collection
Reduce transfer station charges
Bigger bins or increased frequency of collection
Partitioned bins
More recyclable packaging
Incentives, rebates, rewards



### 3.5 Possible Introduction of an Organic Waste Collection Service

Respondents who reside in larger urban centres (Ballarat, Ballan, Bacchus Marsh, Beaufort, Bannockburn, Creswick, Daylesford/Hepburn Springs and Maryborough) were asked questions regarding the possible introduction of a third bin for organic waste; that is, kitchen scraps and garden waste. They were informed that the cost of the bin would be included in the council's waste service charge, and were asked a series of questions about their level of support for such a service under different cost scenarios, bin sizes and frequency of collections.

Table 45 shows that three quarters of respondents supported the introduction of a third organics bin, two thirds would be prepared to pay \$1 per week, and less than half (40.1%) would be prepared to pay \$2 per week. Furthermore, one third supported the notion of providing this service on a \$15 callout basis.

**Table 45. Support for Introduction of a Third Organics Bin**

	Generally		At a cost of \$1 per week (all households)		At a cost of \$2 per week (all households)		On a \$15 callout basis	
	Count	%	Count	%	Count	%	Count	%
Yes	336	73.0	302	65.7	187	40.7	161	34.9
No	107	23.3	137*	29.8	244*	53.0	269	58.4
Not sure	17	3.8	21	4.6	29	6.3	31	6.7
Total	460	100.0	460	100.0	460	100.0	460	100.0

\* Includes respondents who were not asked this question because they answered no to the first question

Respondents were also invited to nominate a maximum charge that they would be prepared to pay for this service. Tables 46 and 47 respectively summarise the responses of the small proportion (less than one third) of respondents who nominated the maximum charge on either a weekly or an annual basis. In both cases the nominated charges were spread over a wide range. The median (middle) maximum charges were \$2 per week and \$100 per year.

**Table 46. Maximum Acceptable Weekly Cost for Organics Bin**

Weekly Cost (\$)	Count	%	Cumulative %
0	11	6.0	6.0
1	58	31.5	37.5
2	72	39.2	76.7
3	9	4.8	81.5
4	11	6.0	87.5
5	16	8.9	96.4
7	1	0.6	97.0
9	2	1.2	98.2
10	2	1.2	99.4
11	1	0.6	100.0
Total	184	100.0	



**Table 47. Maximum Acceptable Annual Cost for Organics Bin**

Annual Cost (\$)	Count	%	Cumulative %
0	1	2.7	2.7
5	1	2.1	4.8
15	1	2.7	7.4
20	2	5.3	12.8
25	1	2.1	14.9
30	1	2.7	17.5
50	8	18.5	36.0
80	1	2.7	38.7
100	18	42.6	81.3
120	1	2.7	84.0
150	6	13.3	97.3
200	1	2.7	100.0
<b>Total</b>	<b>42</b>	<b>100.0</b>	

Table 48 shows that a clear majority of respondents favoured the collection of both garden waste and kitchen scraps, with opinion dividing equally between a 240 litre bin collected fortnightly and a 140 litre bin collected weekly. With respect to the effect of a third organics bin on rubbish collection, Table 49 shows that almost two thirds of respondents would wish the status quo to be maintained. Around one quarter of respondents would support a reduction in bin size or frequency of collection or both, and one in ten were unsure.

**Table 48. Size and Frequency of Collection of Organics Bin**

Preference	Count	%
Garden waste only, 240 litre bin, collected fortnightly	56	15.8
Garden waste and kitchen scraps, 240 litre bin, collected fortnightly	138	39.0
Garden waste and kitchen scraps, 140 litre bin, collected weekly	127	36.0
Not sure	32	9.2
<b>Total</b>	<b>353</b>	<b>100.0</b>

**Table 49. Effect of a third Organics Bin on Rubbish Collection**

Preference	Count	%
Same as now	289	62.8
Same bin, less frequent collection	69	14.9
Smaller bin, same frequency of collection	36	7.8
Smaller bin and less frequent collection	22	4.8
Not sure	44	9.7
<b>Total</b>	<b>460</b>	<b>100.0</b>



### 3.6 Possible Introduction of a Hard Waste Collection Service

With regard to the possible introduction of a hard waste collection service, details of what would and what would not be suitable for collection were given by the interviewer (see Appendix 1), and then respondents were asked about their level of support for such a service under two different cost scenarios. Residents of Maryborough, which already has such a service were not asked these questions.

Table 50 shows that two thirds of respondents supported the introduction of a hard waste service at an annual cost of \$15 to all households, and a little over one third supported the notion of providing this service on a \$40 callout basis.

**Table 50. Support for Introduction of a Hard Waste Collection**

	At a cost of \$15 per year (all households)		On a \$40 callout basis	
	Count	%	Count	%
Yes	423	67.6	232	37.1
No	179	28.6	348	55.7
Not sure	24	3.8	45	7.2
Total	625	100.0	625	100.0



## 4 Conclusions

### 4.1 Summary of Key Findings

- Survey response rate: 36.0 percent.
- Average length of interview: 12 minutes (plus 3 minutes for introduction)
- Higher-income households were over-represented (Table 12); female respondents (Table 14) and university-educated respondents (Table 16) were over-represented, but tradespeople were under-represented (Table 16).
- 42.6 percent of households put organic kitchen waste into the rubbish bin (Table 21), and 19.1 percent put in green waste (Table 22).
- 17.9 percent of households use the transfer station for disposal of green waste (Table 22).
- 75.4 percent of households put out their rubbish bin weekly, and 81.3 percent put out their recycling bin fortnightly (i.e. when the regular service occurs) (Tables 23 and 25).
- 73.4 percent of respondents were happy with their level of information provided by the council (Table 28), but when asked, many suggested that one way to encourage more recycling would be to provide more information (Table 44).
- Two thirds of households access information about kerbside collections from pamphlets and materials sent by councils (Table 29), and a similar proportion of respondents would prefer to receive their information through this method (Table 30).
- Most respondents were satisfied with the kerbside rubbish and recycling services, but there was a somewhat higher level of dissatisfaction with the transfer station (Table 31). The most common concern regarding the transfer station was the cost of the service (Table 32).
- The great majority of respondents were unaware of the annual cost of their waste management services (Tables 33 & 34). Two thirds of respondents would like the amounts to be itemised on their council bills, but one quarter did not care if this occurred (Table 36).
- There was strong support for the need for recycling and reducing landfill, but over one third of respondents were concerned that not all materials put out for recycling were actually reused (Table 37).
- 44.2 percent of respondents indicated that they would probably recycle more if the council provided more suitable collection bins and services (Table 37).
- Most residents were able to correctly determine the extent to which different items could be recycled (Table 39), but often used other methods than the kerbside collection to recycle materials (Table 38). There was a higher degree of uncertainty as to the extent to which scrap metal could be recycled, but only 13.6 percent of individuals indicated that they recycled this material (i.e. not many households actually face the situation where they need to recycle scrap metal).
- Recycling responsibilities are usually handled by the adult males or females in the household, either singly or shared (Table 40).
- Nearly half of all households indicated a concern for the environment as the main factor influencing their recycling activity (Table 41); 35.5 percent believed they could be doing more to recycle (Table 42).
- Whilst a substantial minority of respondents (38.6 %) indicated that they did not perceive any barriers to recycling, the majority (61.4%) nominated a range of barriers which limit their capacity to further recycle. Lack of knowledge and inadequacy of council bins were among the most frequently cited reasons (Table 43). When asked what could be done to encourage more recycling, provision of more information and provision of green waste and hard waste collections were frequently cited (Table 44).
- Two thirds of respondents residing in urban centres supported the introduction of an organic waste service costing \$1 per week paid by all households. Only 40 percent of households



supported such a service at a cost of \$2 per week, and one third (34.9 percent) supported a call-out service costing \$15 per call (Table 45).

- 75 percent of respondents would like an organic service to include both kitchen and garden waste, with similar levels of support for collection either weekly or fortnightly (Table 48).
- 62 percent of households would like other kerbside services to be maintained at the same level if an organic waste collection is introduced (Table 49).
- 67.6 percent of households would support the introduction of a kerbside hard waste collection service paid for by a \$15 charge to all households. 37.1 percent support a callout service at \$40 per household (Table 50).

## 4.2 Key Learnings

Councils should maintain current methods of providing information regarding recycling services, but review new methods for supplementing pamphlet/newsletter information. One common suggestion from the open responses is the use of regular updates in the local newspapers and council newsletters (eg. MyBallarat).

Councils should provide clarification on the capacity for households to recycle materials about which there is some confusion (such as scrap material), and methods for this to occur (such as the hard waste collection).

The introduction of a kerbside organic waste service is supported by urban residents. The maximum cost of this service needs to be no more than \$2 per week (or \$100 per year), and there is stronger support for a service costing closer to \$1 per week (or \$50 per year). The organic waste service should allow for both kitchen and garden waste. Residents would prefer that the other services currently offered be maintained at the same level and frequency.

The introduction of a hard waste collection service is supported by urban residents. The preferred option for cost recovery of this service is a \$15 per year charge to all households.



## REFERENCES

- Australian Bureau of Statistics (2007). *Basic Community Profile. 2006 Community Profile Series.* Cat. No. 2001.0. Accessed from [www.abs.gov.au](http://www.abs.gov.au) 10 June 2008.
- Highlands Regional Waste Management Group (2008). *Community Attitudes to Waste and Litter Issues in Highlands Waste Management Region: Project Brief.* March 2008.



**Appendix 1.** This document provided the basis for the CATI interview script.

## **HRWMG Householder Survey May 2008**

### **INTRODUCTION**

Hello, my name is \_\_\_\_\_ and I'm calling from the University of Ballarat. We are conducting a survey into council waste management services in your area. Could I please speak to the person in your household, aged 18 years or over, who has most responsibility and knowledge regarding household waste and recycling.

### **REINTRODUCE IF NECESSARY**

I'm calling on behalf of two researchers at the University of Ballarat, Dr Jack Harvey and Dr Steve McEachern. I am not trying to sell you anything. We are carrying out a study into council waste management services for the Highlands Regional Waste Management Group, which includes the City of Ballarat and the Shires of Central Goldfields, Golden Plains, Hepburn, Moorabool and Pyrenees. We are seeking residents' opinions about household waste and recycling and about future improvements to council services in this area. Anonymous data from this survey will also be kept indefinitely and may also be used in other studies relating to waste management and recycling.

Your telephone number has been randomly chosen. The survey will take about 25 minutes and the results will be used to improve council services. Your responses will be treated as confidential. You can opt out at any time if you wish, and if you do so none your responses will be used. Would you like to participate in this study?

**IF NECESSARY ADD:** If now is not a good time to do the survey, we can call back at a more convenient time for you.

### **INTRODUCTION & QUALIFYING CRITERIA**

- |  |  |
|--|--|
| <p>Q1. Can I ask your first name? (answering is optional)</p> <p>Q2. Are you or any of your immediate family or friends involved in a group or work in an industry or job role related to waste management or recycling?</p> <p>Q3. RECORD PHONE NUMBER</p> <p>Q4. What municipality do you live in?</p> | <p><b>NAME of respondent:</b><br/>_____</p> <p>Yes <b>(Continue)</b>----- 1<br/>No <b>(Continue)</b>----- 2</p> <p>Record phone number<br/>(03)_____</p> <p>Ballarat ----- 1<br/>Central Goldfields ----- 2<br/>Golden Plains ----- 3<br/>Hepburn ----- 4<br/>Moorabool ----- 5<br/>Pyrenees ----- 6<br/>UNSURE ----- 7</p> <p>IF UNSURE, what locality?<br/>_____</p> |
|--|--|



- Q5. Do you live in ....?  
**(Read out 1-2)**
- City or large town** (e.g. Ballarat, Ballan, Bacchus Marsh, Beaufort, Bannockburn, Maryborough, Daylesford/Hepburn Springs, Creswick)----- 1
  - Small township** (e.g. Trentham, Avoca, Linton, Snake Valley) ----- 2
  - Rural** (in the country) ----- 3

**SECTION A:CURRENT SERVICES**

- Q6. Which of the following best describes the type of kerbside **rubbish or garbage bin** supplied to your household? **Multiple response**
- Large wheelie bin (240 litre) ----- 1
  - Medium wheelie bin (120-140 litre) ----- 2
  - Small wheelie bin (80 litre) ----- 3
  - Wheelie bin but not sure of size ----- 4
  - Not sure ----- 5
- Q7. Which of the following best describes the type of **kerbside recycling container** supplied to your household? **Multiple response**
- Large wheelie bin (240 litre) ----- 1
  - Medium wheelie bin (120-140 litre) ----- 2
  - Wheelie bin but not sure of size ----- 3
  - Bin or crate----- 4
  - Not sure ----- 5
  - No recycling service ----- 6
- Q8. Which of the following best describes what you do to dispose of kitchen waste (organic material)? **Multiple response**
- Goes into normal rubbish ----- 1
  - Compost ----- 2
  - Worm farm ----- 3
  - Poultry or animals ----- 4
  - \*\*\*\*\*do not read below here unless necessary\*\*\*\*\*
  - Any combination of 2/3/4----- 5
  - Not sure ----- 6
  - Other, please specify \_\_\_\_\_ 7
- Q9. How does your household manage green waste? By green waste, I mean leaves, clippings and other garden waste. You may choose more than one option, **First response + multiple response**
- Bin.....
  - Bundled collection.....
  - Compost /mulch .....
  - Worm farm.....
  - Transfer station.....
  - At call collection.....
  - Don't have any green waste.....
  - Other (Specify)\_\_\_\_\_
  - No further mentions.....
- Q10. How often do you or your household put your **rubbish bin** out for collection? (this may be different to how often your council makes a collection)
- Weekly----- 1
  - Fortnightly----- 2
  - Every three weeks----- 3
  - Monthly ----- 4
  - Other ----- 5



Q11. And when you put your **rubbish bin** out for collection, how full is it normally? Would you say....? **(read out)**

Quarter ----- 1  
 Third----- 2  
 Half ----- 3  
 Two thirds----- 4  
 Three quarters ----- 5  
 Full----- 6  
 Don't know----- 7

Q10A. How often do you or your household put your recycling bin out for collection? (this may be different to how often your council makes a collection)

Weekly----- 1  
 Fortnightly----- 2  
 Every three weeks ----- 3  
 Monthly ----- 4  
 Other ----- 5

Q11A. And when you put your **recycling bin** out for collection, how full is it normally? Would you say....? **(read out)**

Quarter ----- 1  
 Third----- 2  
 Half ----- 3  
 Two thirds----- 4  
 Three quarters ----- 5  
 Full----- 6  
 Don't know----- 7

Q12. **(Golden Plains residents with 240 litre bins or unsure in Q6 only)** Golden Plains Shire is considering a change in its rubbish collection service. Which of the following options would you prefer?

240 litre bin collected fortnightly----- 1  
 140 litre bin collected weekly----- 2  
 No change ----- 3  
 Not sure ----- 4

Q13. Does your Council provide you with enough useful information on how to use its kerbside waste collection services correctly?

Yes ----- 1  
 Yes, but only if you ask for it----- 2  
 No ----- 3  
 Not sure ----- 4

Q14. How have you received or accessed this information?

**First response + multiple response**

Pamphlet/booklet/newsletter delivered to your home ----- 1  
 Booklet picked up at Council office ----- 2  
 Council website ----- 3  
 Stickers inside the lids of the bins ----- 4  
 From neighbours ----- 5  
 Other ----- 6  
 Not sure ----- 7

Q15. How would you prefer to receive or access this information?

**First response + multiple response**

Pamphlet/booklet/newsletter delivered to your home ----- 1  
 Booklet picked up at Council office ----- 2  
 Council website ----- 3  
 DVD from Council ----- 4  
 Stickers inside the lids of the bins ----- 5  
 Call council as required ----- 6  
 From neighbours ----- 7  
 Other ----- 8  
 Not sure ----- 9



**SECTION B: SATISFACTION WITH SERVICES USED**

Q16. How satisfied are you with each of the following services?

		Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
16.1	Kerbside rubbish collection service	1	2	3	4	5
16.2	Kerbside recycling service	1	2	3	4	5
16.3	Garden organic service (green waste) <b>(Ask Maryborough (Q5) only)</b>	1	2	3	4	5
16.4	Hard waste collection <b>(Ask Maryborough (Q5) only)</b>	1	2	3	4	5
16.5	The council transfer station	1	2	3	4	5

**For each service in Q16 answered 1 or 2 ask**

Q17. What suggestions do you have on how this service could better meet your needs?  
**(Probe fully)**

1. KERBSIDE RUBBISH COLLECTION SERVICE

2. KERBSIDE RECYCLING SERVICE INCLUDING PAPER AND CARDBOARD

3. GARDEN ORGANIC SERVICE (GREEN WASTE)

4. HARD WASTE COLLECTION

5. TRANSFER STATION

Q18. About how much do you think you are currently paying for your kerbside garbage and recycling services? \$ \_\_\_\_\_ per week  
\$ \_\_\_\_\_ per year  
Don't know ----- 1

Q19. **(Don't ask if "Don't know" in Q 18)** Too low----- 1  
How do you feel about the cost of About right ----- 2  
your current kerbside garbage and Too high ----- 3  
recycling services?

Q20. Would you like the cost of your waste management service to be shown separately on your rates notice? Yes ----- 1  
No ----- 2  
Don't care ----- 3



**SECTION C: RECYCLING ISSUES**

*The next few questions are about recycling.*

Q21. Do you tend to *agree* or *disagree* with the following statements?

Randomised order		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know/ Can't say
21.1	Our household is recycling more than it did two years ago	1	2	3	4	5	6
21.2	It is very important that the amount of waste going into landfills or rubbish tips is reduced	1	2	3	4	5	6
21.3	My efforts to recycle are making a real difference to the environment	1	2	3	4	5	6
21.4	All the materials I put out for recycling end up recycled or re-used	1	2	3	4	5	6
21.5	I'm very conscious of the need and importance of recycling	1	2	3	4	5	6
21.6	I'd probably recycle more if my Council provided more suitable collection bins and services	1	2	3	4	5	6

Q22 & Q23. For each of the following, do you recycle it in your kerbside recycling bin? If NO or DON'T KNOW.... Do you think it can be recycled? **(Same response categories for both questions – randomised order of presentation)** *Note the 12 materials listed have been selected to represent 4 fairly clear YES, 4 fairly clear NO, and 4 most likely to be borderline as identified by HRWVG.*

		Yes	No	Some types/ Depends	Don't know
N	Batteries	1	2	3	4
N	Building materials & rubble	1	2	3	4
Y	Cardboard	1	2	3	4
N	Disposable nappies	1	2	3	4
Y	Glass bottles and jars	1	2	3	4
Y	Newspaper	1	2	3	4
N	Paint tins	1	2	3	4
Y	Plastic bottles and jars	1	2	3	4
B	Plastic bags	1	2	3	4
B	Plastic wrapping film (e.g. cling wrap, shrink wrap, food packaging)	1	2	3	4
B	Polystyrene foam	1	2	3	4
B	Scrap metal, old appliances, car parts etc.	1	2	3	4



- Q24. Including yourself, who in your household is most active in making sure that things get (a) sorted & recycled and (b) put out for collection **(Probe to classify, single response – if says ‘self’ record role in household)**
- Wife/partner/mother/female head .....-01
  - Husband/partner/father/male head.....-02
  - Other adult/child 18+ .....-03
  - Teenage child(ren).....-04
  - Child(ren) aged 12 or under .....-05
  - Child(ren) various ages or age unspecified .....-06
  - Other (please specify).....-07
  - Varies/no-one in particular.....-08
  - Both 1 & 2** .....-09
  - Shared.....-10
  - No-one at all.....-11

**Multiple response**

- Q25. What factors have influenced recycling in your household?
- First response + multiple response**
- Environment.....-01
  - Re-use materials, reduce waste .....-02
  - Social responsibility ..... 03
  - Council collection provided..... 04
  - Own children/school education.....-05
  - Recycle at work .....-06
  - Habit/done it for years/grown up with it .....-07
  - Advertising .....-08
  - Not sure .....-09
  - Other (specify) .....-10

**SECTION D: MOTIVATING HOUSEHOLDS TO RECYCLE MORE**

- Q30. Given more time or an ideal situation, which one of the following three statements best describes what else your household could be doing to recycle? **(Read out and single response)**
- I’m sure we could be doing more..... 1
  - There is really not much more we could be doing that we aren’t doing now ..... 2
  - We are already doing everything that can be done ..... 3
- Q31. What is the main barrier or problem your household faces inside or outside your home in trying to recycle more? **(do not read out options, record first mention)**
- Don’t know enough about how to go about recycling correctly/too complex to work out- ..... 01
  - Lack of time, just too busy..... 02
  - Requires a fair bit of extra effort ..... 03
  - Other things regarded as more important, requiring attention ..... 04
  - Not enough space where live ..... 05
  - Our bins are in an awkward location/not easy to access ..... 06
  - Council bins provided are inadequate - 07
  - See little need for it, can’t see how it will make a difference, how will be better off ..... 08
  - No incentive to do more ..... 09
  - Cost of some services ..... 10
  - Non-recyclable containers..... 11
  - No barriers/ Feel already doing enough 12
  - Other mentions not listed (specify) ..... 13



Q32. **Is there anything else** that would encourage you to recycle more at home? YES.....1  
 (Probe fully) NO.....2

Record suggestions

**SECTION E: ORGANIC WASTE COLLECTION**  
**Ask only city or large town dwellers (Q5)**

Councils are considering the introduction of a third bin for organic waste; that is, garden waste and kitchen scraps. The cost of the bin would be included in the council's waste service charge. The next few questions are about this.

Q33. Would you support the introduction of a third bin for garden waste and kitchen scraps? Yes ----- 1  
 No----- 2  
 Not sure ----- 3

**If NO go to Q37.**

Q34. Would you support it if it cost an extra \$1 per week per household (charged to everybody, regardless of whether or not they used the service)? Yes ----- 1  
 No----- 2  
 Not sure ----- 3

**If NO or NOT SURE go to Q35A.**

Q35. Would you support it if it cost an extra \$2 per week per household (charged to everybody, regardless of whether or not they used the service)? Yes ----- 1  
 No----- 2  
 Not sure ----- 3

Q35A. What is the most you would be prepared to pay for an organic waste service? \$ \_\_\_\_\_ per week  
 \$ \_\_\_\_\_ per year  
 Don't know ----- 1

Q36. Which of these three options would you prefer? Garden waste only:  
 240 l collected fortnightly ----- 1  
 Garden Waste and kitchen scraps:  
 240 l collected fortnightly ----- 2  
 140 l collected weekly ----- 3  
 Not sure ----- 4

Q37. Would you prefer that only users pay for this service on a callout basis, at \$15 per call. (Note: Central Goldfields already has this service) Yes ----- 1  
 No----- 2  
 Not sure ----- 3

Q38. Supposing that a new 240 litre third bin for garden waste and kitchen scraps, collected fortnightly, was introduced for everybody. What level of kerbside rubbish collection would you prefer then? Same as now ----- 1  
 Same bin but less frequent collection --- 2  
 Smaller bin, same frequency of collection 3  
 Smaller bin and less frequent collection 4  
 Not sure ----- 5



**SECTION F: HARD WASTE COLLECTION**

Q42. Currently 40 Councils in Victoria provide some form of kerbside hard waste collection for residents. Councils in this region are considering the introduction of such a service, which would occur once or twice a year.

<p><b>Items suitable for collection would include:</b>          Tin, scrap iron, spouting          Sinks, wash basins, and chinaware.          Household furniture          Tools, equipment and mowers.          Toys, old sporting goods and playground equipment.          Carpet and linoleum          Household appliances.          Hot water services.</p>	<p><b>Items not suitable for collection would include:</b>          Waste from industrial and commercial premises          Waste material from construction, renovation or demolition.          Concrete blocks or edging.          Clay, sand or soil.          Liquid waste including paints and paint tins, oils, etc.          Car parts, engine blocks, or tyres.          Broken glass or ashes.</p>
---	--

Would you support the introduction of this service if it cost an extra \$15 per year per household (charged to everybody, regardless of whether or not they used the service)?

Yes ----- 1  
 No ----- 2  
 Not sure ----- 3

Q42A Would you support the introduction of this service if it was on a user pays basis with each collection costing \$40?

Yes ----- 1  
 No ----- 2  
 Not sure ----- 3

**SECTION G: HOUSEHOLD CHARACTERISTICS**

Now I'd like to ask you a few questions about your household.

Q43. Please choose the first option that I read out that **describes your home**. Do you live in a....?  
 (*Read out 1-4*)

Single storey house ----- 1  
 Double storey house ----- 2  
 Flat or unit on the ground floor ----- 3  
 Flat or unit NOT on the ground floor ----- 4  
 Refused (Do not read out) ----- 5  
 Other (please specify) ----- 6

Q44. Are you the **owner** or **tenant** of these premises, or neither (just live here)?

Owner/occupier (includes paying off) ---- 1  
 Tenant ----- 2  
 Live at home, but not an owner or tenant 3  
 Other ----- 4

Q45. **How many people in total** usually live in your household?

No of people in household

Q46. **How many children** (people under 18 years) usually live in your household? **If NONE go to Q48**

No of children under 18 years



Q47. How many children who usually live in your household attend **primary or secondary school**?

No of children attending school

**SECTION H: PERSONAL CHARACTERISTICS**

Finally, just a few questions about yourself for classification purposes...

Q48A Could you please indicate which of the following best describes your family structure at home. Is it ...

- <1> Living alone
- <2> Couple with no children
- <3> Couple with dependent children
- <4> Couple with non-dependent children
- <5> Couple with both dependent and non-dependent children
- <6> Single parent family with dependent children
- <7> Single parent family with non-dependent children
- <8> Single parent family with both dependent and non-dependent children
- <9> Shared house (group of unrelated people)
- <10> Other - please specify [specify]
- <11> Rather not say

Q48B What is the highest level of education you have completed?

- <1> Did not go to school
- <2> Year 10 or below
- <3> Year 11 or equivalent
- <4> Year 12 or equivalent
- <5> Trade certificate/apprenticeship
- <6> Associate Diploma (TAFE)
- <7> Advanced Diploma (TAFE)
- <8> University bachelors degree
- <9> University postgraduate degree
- <10> Rather not say

Q48C1 Could you please describe your current employment status?  
This includes self-employment.

Please choose all that apply

- Employed full-time ongoing      <1> Yes <2> No
- Employed part-time ongoing    <1> Yes <2> No
- Casual employment            <1> Yes <2> No
- Unpaid/volunteer work        <1> Yes <2> No
- Unemployed                      <1> Yes <2> No
- Home duties/homemaker        <1> Yes <2> No
- Studying                         <1> Yes <2> No
- Retired                            <1> Yes <2> No
- Other - please specify          <1> Yes <2> No
- Rather not say                   <1> Yes <2> No

If employed...

Q48C2 Do you work for an employer or are you self-employed?

- <1> Self-employed
- <2> Work for employer [go to Q48D]
- <3> Not sure



If self-employed...

Is your business based at home?

<1> Yes <2> No <9> Rather not say

Q48D1 Do you have internet access at home?

<1> Yes <2> No <9> Rather not say

Q48D2 Do you speak a language other than English at home?

<1> Yes <2> No <9> Rather not say

Q49 Which of the following age categories do you fall within?

- <1> 18-24
- <2> 25-34
- <3> 35-44
- <4> 45-54
- <5> 55-64
- <6> 65+
- <9> Rather not say (do not read out)

Q50 RECORD GENDER (ONLY ASK IF NECESSARY)

- <1> Male
- <2> Female

Q50A Would it be okay if I asked about your household income?

<1> Yes <2> No - rather not say [go to Q51]

Could you please tell me which of the following income bands your household's annual income falls within? This is your household income from all sources BEFORE tax is taken out.

- <1> Negative income
- <2> No income
- <3> \$1 - \$19999
- <4> \$20000 - \$39999
- <5> \$40000 - \$59999
- <6> \$60000 - \$79999
- <7> \$80000 - \$99999
- <8> \$100000 - \$149999
- <9> \$150000 or more
- <10> Dont Know
- <11> Rather not say @B

Q51 Could I please confirm your postcode?

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<p>Q52. One final question: Would you be interested in being contacted by UB or HRWMG to participate in other research into environmental issues. If you agree, we will only record your phone number, email (if you consent to this) and your first name, and will not pass this information on to any other organisation.</p>	YES	1
	NO	2
	YES UB only	3
	YES HRWMG only	4



**THAT'S ALL OF MY QUESTIONS**

Thank you for your time with this survey. My name is \_\_\_\_\_ and I'm calling from the University of Ballarat on behalf of Highlands Regional Waste Management Group. The information you have provided will be used to improve waste and recycling services in your area. Just confirming that I was speaking to [respondent's first name]. Thankyou very much [respondent's first name] for the information you have provided to the survey

If you have any concerns about this survey or about the conduct of this interview, I can give you contact numbers for the University, the researchers, or for HRWGM. Do you have any concerns?

**If YES**

HRWGM Ph (03) 5333 7770

Dr Jack Harvey, School of Human Movement and Sport Sciences (03) 5327 9065

Dr Steve McEachern, School of Business (03) 5327 9475

UB HREC Ph: (03) 5327 9765

**If NO**

Thanks very much. Goodbye.