



2019

**King Island**  
**Waste Management Strategy**  
*Rethinking Waste and Resource Recovery*

Results of community consultation and stakeholder engagement



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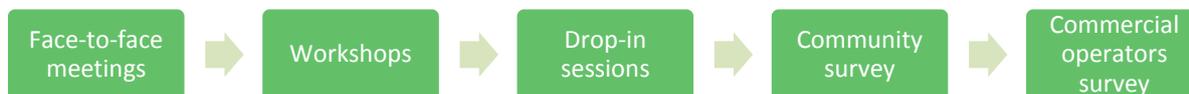
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## 1. EXECUTIVE SUMMARY

King Island Council is developing a new waste management strategy for the island. One component of the process is to gain an understanding of the views of the community, businesses and other stakeholders. These views are to be gained through the following activities:



King Island community and stakeholder views were gained through 123 responses to the community survey, with 31 responses received for the commercial waste survey and visitor accommodation, comprising 78% of respondents representing 77 tourist beds. Twentynine (29) interviews at the Charles Street depot were analysed in addition to the one-on-one and drop-in sessions held. The key findings of the consultation activities are summarised below.

<b>Satisfaction with waste collection</b>	<ul style="list-style-type: none"> <li>• Most householders (66%) and businesses (42%) are satisfied or very satisfied in relation to Council's waste collection service</li> <li>• Dissatisfaction by businesses related to costs and lack of recycling</li> <li>• Dissatisfaction by residents is related to a desire to reduce collection frequency from weekly to fortnightly for a reduced cost, and a desire for a recycling service</li> </ul>
<b>People want to recycle</b>	<ul style="list-style-type: none"> <li>• 48% residents want a recycling service</li> <li>• Strong desire across the community for more recycling options but they don't always want to pay extra for recycling</li> <li>• Residents and businesses are conscious of the cost of exporting recyclables</li> </ul>
<b>Willingness to pay for waste improvements</b>	<ul style="list-style-type: none"> <li>• 73% of respondents were willing to pay more under certain circumstances</li> <li>• 27% if at point of service, 47% up to \$50 p.a. and 19% up to \$100 p.a.</li> </ul>
<b>Food waste is well managed</b>	<ul style="list-style-type: none"> <li>• Residents (75%) and businesses (44%) are proactively recycling food waste through composting, chickens, pets and worm farms or a combination of these</li> <li>• Almost half (48%) of businesses said their business would separate food waste to facilitate Council using it in compost</li> </ul>
<b>Infrastructure and capacity</b>	<ul style="list-style-type: none"> <li>• People are concerned about lack of landfill capacity and increasing waste volumes</li> <li>• People are aware that Council's infrastructure (e.g. baler, shredder) have been unsuccessful and there is concern about litter from the Parenna site</li> </ul>

<b>Charles Street Depot</b>	<ul style="list-style-type: none"> <li>• 96% of residents support a tip shop, though many don't want cost increases as a result</li> <li>• 34% of residents want opening hours changed, with 54% seeking increased opening hours on the weekends and 22% on weekdays</li> <li>• 63% of businesses would like longer opening hours</li> </ul>
<b>Differential charging for businesses</b>	<ul style="list-style-type: none"> <li>• The majority of commercial premises (66%) support the introduction of differential charging based on different types of waste or recyclables requiring disposal</li> </ul>
<b>Commercial waste composition</b>	<ul style="list-style-type: none"> <li>• Based on 28 responses, waste composition comprises on average: cardboard (33%), plastic containers (14%), glass (11%), plastic film and shrink-wrap (11%), food/meat/coffee grounds (8%), timber (6%) and aluminium cans (5%)</li> <li>• Up to 88% of the reported waste streams could be diverted from landfill if KIC were to introduce a compost and recycling program</li> </ul>
<b>Domestic waste composition</b>	<ul style="list-style-type: none"> <li>• There is a willingness by households to separate and recycle if facilities were provided.</li> </ul>
<b>Cost recovery options from visitors/tourists</b>	<ul style="list-style-type: none"> <li>• An environmental levy on air tickets and a bed tax based on occupancy were the preferred options, with a departure tax less popular</li> </ul>

Stakeholders nominated the following as key challenges and opportunities for waste management on King Island:

Challenges	Opportunities
<ul style="list-style-type: none"> <li>•Waste generation</li> <li>•Lack of recycling</li> <li>•Facilities and infrastructure</li> <li>•Cost</li> <li>•Management</li> <li>•Education and behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Waste reduction</li> <li>• More recycling</li> <li>• Reduce domestic waste collection frequency</li> <li>• Improved facilities and infrastructure</li> <li>• Differentiated costs and incentives</li> </ul>

## 2. BACKGROUND

In mid-2018, King Island Council (KIC) appointed waste consultants A.Prince Consulting (APC) to guide the development of a new waste management strategy for King Island. Council is seeking a clear set of prioritised actions to provide the council and the community with improved waste management outcomes that are politically acceptable, socially responsible, economically viable and environmentally sustainable.

The following is a summary of the tasks being performed by APC to develop the new waste strategy:

Stage 1 (complete)	• Preliminary tasks
Stage 2 (complete)	• Site visit
Stage 3 (complete)	• Discussion paper and presentation to KIC
Stage 4 (this report)	• Community consultation, stakeholder engagement
Stage 5	• Prepare strategy, presentation to KIC
Stage 6	• Deliver final report

This report details the method and results for Stage 4 of the project: *Community consultation and stakeholder engagement*.

### 3. FRAMEWORK FOR COMMUNITY CONSULTATION AND STAKEHOLDER ENGAGEMENT

The aim of this phase of the project is to engender interest and participation by the broader community in future waste management on the island. Any community consultation and stakeholder engagement program should meet the following objectives:



Successful public consultation provides the participants with the necessary facts and information to make informed decisions. When selling the benefits of any new approach, it is important to frame the possible options and relative costs of any new service against the broader social, economic and environmental benefits that can be realised. It is important to move beyond the narrow focus of fees and charges to successfully capture the hearts and minds of the community.

APC proposed to set the consultation in the broadest possible context, otherwise it could be difficult to achieve the required shift in community attitudes and awareness essential to embracing a new direction.

We believe it is imperative that all members of the community be consulted. By developing a multi-pronged consultation strategy, including offering a variety of forums and venues, APC is engaging with community members and inviting them to be heard. Consultation could consist of a combination of qualitative and quantitative methods to determine community opinion. The mix of elements should aim to capture the widest range of responses from the community in a non-threatening way.

#### 4. METHOD OF COMMUNITY CONSULTATION AND STAKEHOLDER ENGAGEMENT

Face-to-face meetings, workshops, drop-in sessions, a community survey, and a business survey were used to gain insight into community views. Table 1 shows the face-to-face meetings, workshops and visits undertaken on the consultants 2<sup>nd</sup> visit to the island.

**Table 1 Waste Management Strategy consultation meetings and visits**

Tuesday 19 March	
12:30pm	Meeting – King Island Natural Resource Management Group
3:00pm	Meeting – King Island Dairy – Trevor Stones
6:30pm	Workshop – Waste Management – Councillors
Wednesday 20 March	
10:00am	Meeting – Ocean Dunes Hotel – John Smith
11:45am	Drop-in session – Currie Post Office
2:00pm	Meeting – King Island Constructions/Lead Light Investments – Guy Barnes
3:00pm	Meeting – Chamber of Commerce – Rose Hallett
Thursday 21 March	
12:30pm	Meeting – Cape Wickham Links – Jane Bell
2:15pm	Meeting – King Island Tourism Inc. – Adam Hely
5:00pm	Drop-in session – King Island Club
6:30pm	Ordinary meeting of Chamber of Commerce
Friday 22 March	
9:30am	Meeting – Council General Manager – Kate Mauric
10:30am	Meeting and site visit – Senior Manager Operations – Neil Strickland

Copies of the community surveys distributed are attached in **Appendix A** -householder survey and **Appendix B** - commercial operator survey.

**5. SURVEY RESULTS: HOUSEHOLDS**

One hundred and twenty-three (123) responses were received for the household waste survey. Some respondents skipped questions. Results are discussed below for each question.

**5.1 Respondent demographics**

Most respondents live in Currie, as shown in Table 2.

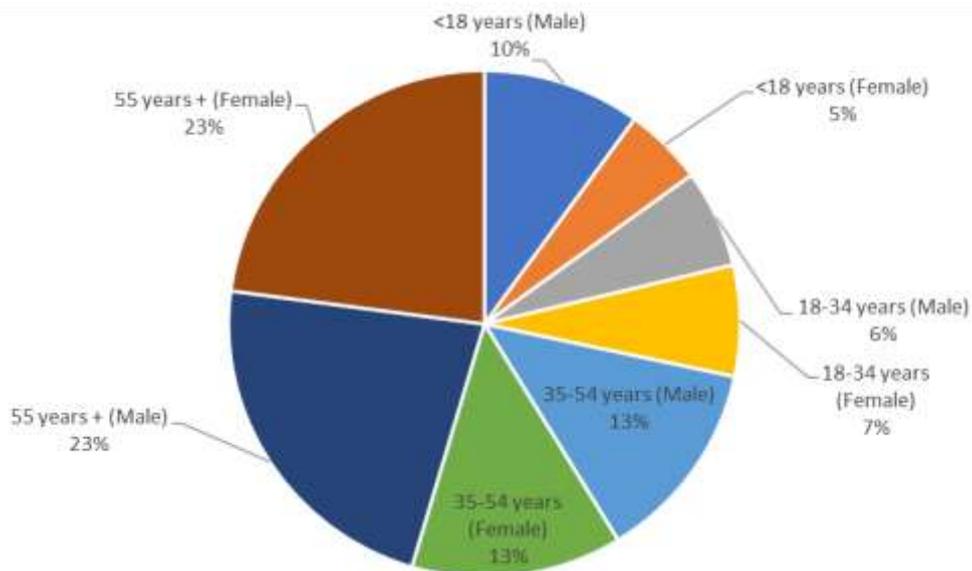
**Table 2 Location of respondent households**

Location	Number of respondent households
Currie	47
Loorana	13
Pegarah	8
Naracoopa	7
Nugara	6
Grassy	5
Lymwood	5
North	3
Egg Lagoon	2
Yarra creek	2
East Wickham	1
Eastern	1
Outside Currie	1
South	1
Yambacoona	1

Answered: 103 Skipped: 20

Almost half the household residents surveyed were over 55 years of age, as shown in Figure 1.

**Figure 1 Age and gender of inhabitants of respondent households**

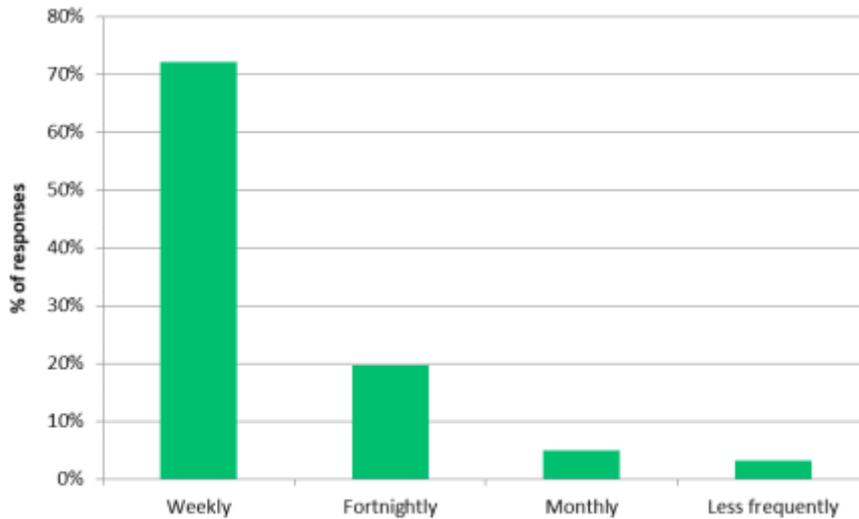


Answered: 106 Skipped: 17

## 5.2 Bin presentation

Most residents (72%) put their bin out for collection weekly. Twenty per cent (20%) put their bin out fortnightly and the remaining 8% put their bin out monthly or less frequently.

**Figure 2** How often do you put your home garbage bin out for collection?

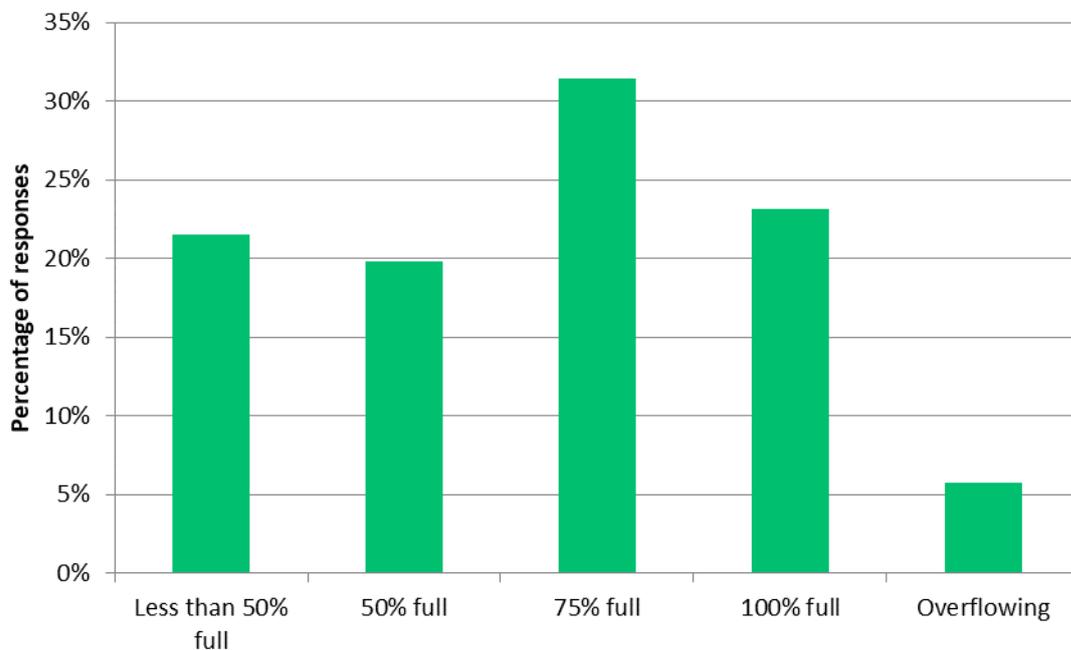


Answered: 122 Skipped: 1

## 5.3 Bin fullness

Only a small number (6%) of bins are overflowing when they are put out for collection and 22% are less than half full, suggesting that the bin size is adequate for most residents.

**Figure 3** On average, how full is your garbage bin each time you place it out for collection?

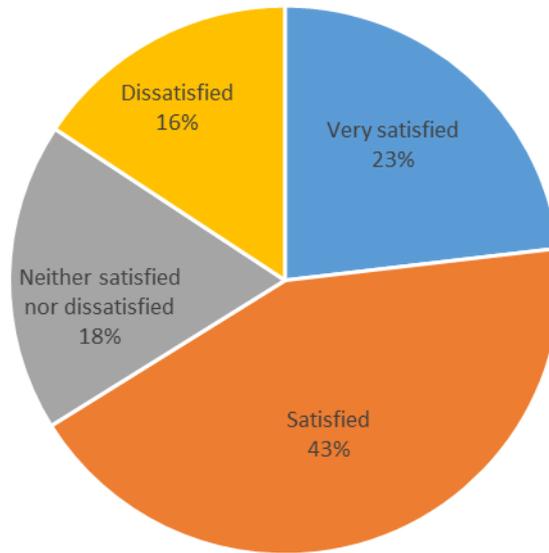


Answered: 121 Skipped: 2

#### 5.4 Satisfaction with Council's residential garbage service

Most residents (66%) are satisfied with Council's residential garbage service, with 43% satisfied and 23% very satisfied. Sixteen per cent (16%) of respondents were dissatisfied with the service and 18% impartial.

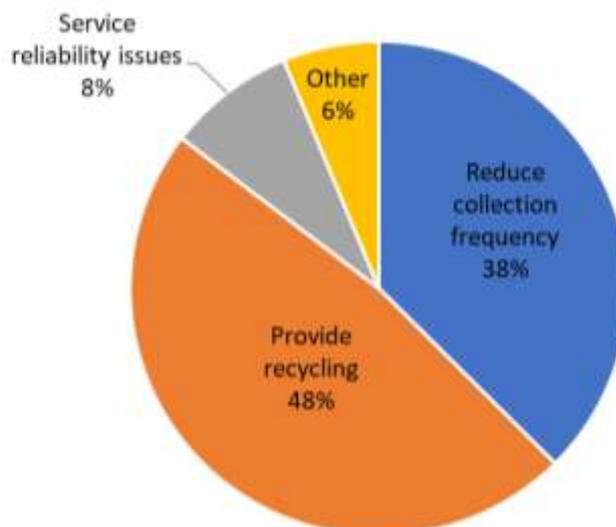
**Figure 4 Overall, how happy are you with Council's current residential garbage collection service?**



Answered: 121 Skipped: 2

Residents were asked what Council could do to improve its residential garbage collection service and 38 comments were received. There were three common and recurring themes, with the most common responses being: provide recycling (48%), reduce collection frequency (38%), service reliability (8%). Miscellaneous opinion is captured under other (6%).

**Figure 5 Domestic garbage improvements suggested by residents**



A full list of all residents' comments is categorised and presented below (some comments covered more than one topic).

**Table 3 Resident ideas for improving the domestic collection service**

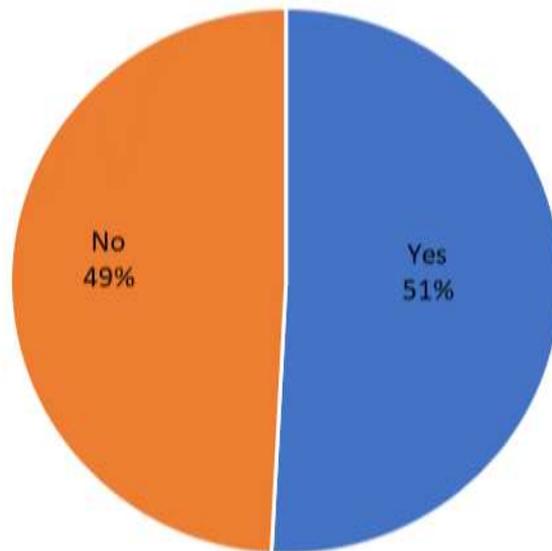
Comments regarding recycling	Comments regarding garbage collection frequency	Comments regarding both recycling and frequency	Comments regarding service reliability	Comments regarding other topics or ideas
Recycling bins	Stop increasing the rates to justify a weekly collection of my waste as I will look to fill my bin with waste to justify what it costs me	Reduce collection to fortnightly and introduce recycling in between, e.g. cardboard, cans, glass, on a rotating schedule	Have one garbage truck not two	Hard waste collection every six months to help people who do not have a car or trailer
Separating green waste from other is a first step. Followed by recyclables e.g. glass/cans to be separated out. (These are easier to recycle than plastics)	Reduce weekly collections to encourage people to recycle/think about their waste.	Rationalise – one truck – volumes affect final costs. Smaller bins and less frequent collections and lower charges. If composting introduced, use green bag or similar system. A strong baler will be essential, redesigned to bale all waste including separated salvaged scrap (bales should fit in containers)	Buy a new garbage truck instead of it breaking down all the time and having to wait for parts to come in before our rubbish can be taken	Rendering plant?
We need to recycle and make efficiencies to the service	Collection should be fortnightly not weekly	Collect once per fortnight and have more consideration for recycling	Constantly picking up of bins, maintaining trucks. Constant break down of trucks seems to be ongoing.	Offer a 'hard' collection six monthly (kerbside)
Recycling of some kind	Cost of rates for a weekly garbage run	Many households are single person according to census data. Given the cost of service, maybe we could go back to fortnightly pick-up and more recycling	My bin gets missed occasionally	One voucher per household per year for equipment and cars, etc. to be brought to the tip for free
Need separate bins for recycling and green waste	Reassess collection instead of wasting fuel and maintenance costs in running each week	Save money by collecting fortnightly. Have large recycling bins for plastics, glass and cardboard throughout different areas of the island to be collected once every three weeks. Supply composting bins to all residents for recycling organic waste. Look into ways of recycling plastics and glass commercially		Put the baler back in place and stop waste at Pegarah going everywhere

Comments regarding recycling	Comments regarding garbage collection frequency	Comments regarding both recycling and frequency	Comments regarding service reliability	Comments regarding other topics or ideas
Current service good except we need a recycling service	I am satisfied but I think we only need the service fortnightly	Provide recycle bin in addition to general rubbish bin – perhaps collect general rubbish every second week and recycle bin weekly		
Provide recycling collections	Go back to fortnightly collections	Collect rubbish one week and collect recycle, cardboard, glass, aluminium cans on the alternate week		
Recycling and green waste separated out	Fortnightly collect was good and less expensive			
Offer recycling	Collect every second week			
Recycling collection quarterly	Reduce it! We don't need it every week.			
Recycling bin for fortnightly collection				
Kerbside recycling				
Offer more ways to recycle				
Collect recyclables				
Introduce a bin for recyclable items and collect fortnightly				
Every second week, have a recycling waste pickup				

### 5.5 Charles Street Waste Management Centre

Just over half (51%) of respondents had visited the Charles Street Depot in the past 12 months.

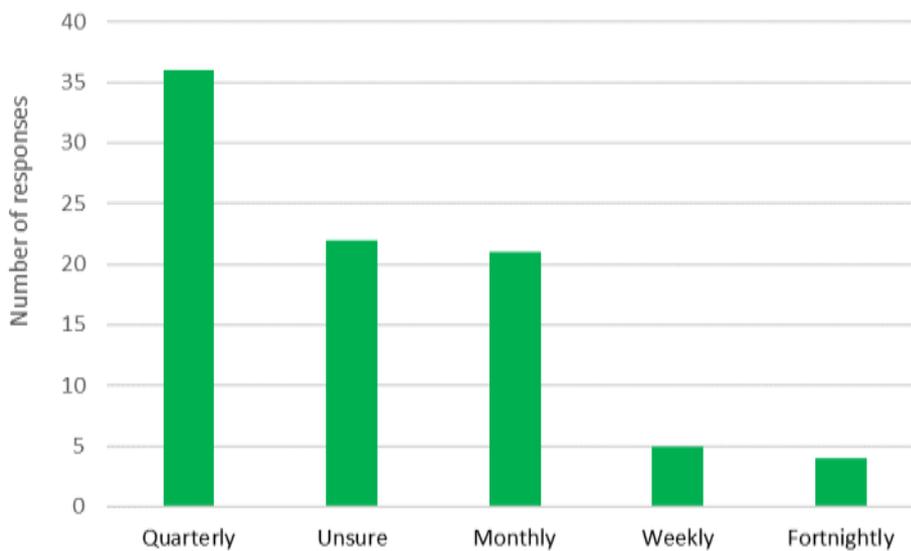
**Figure 6** Have you visited Council’s Waste Management Centre at Charles Street in the last 12 months?



Answered: 118 Skipped: 5

When asked how often they visited, most respondents visited quarterly or monthly. A much smaller proportion visited weekly or fortnightly, and many were unsure.

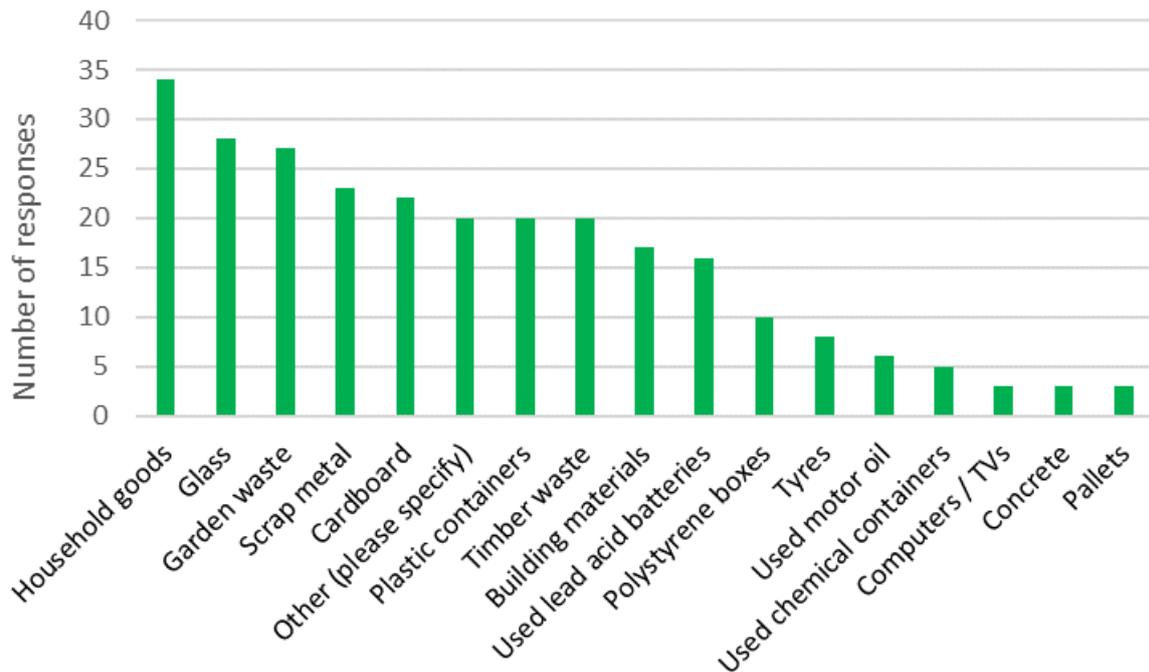
**Figure 7** How often do you visit the facility at Charles Street?



Answered: 88 Skipped: 35

The top five materials residents reported taking to Charles Street depot were household goods, glass, garden waste, scrap metal and cardboard. Figure 8 shows the full range of materials reported by residents.

**Figure 8 What materials do you normally take to the Charles Street depot?**

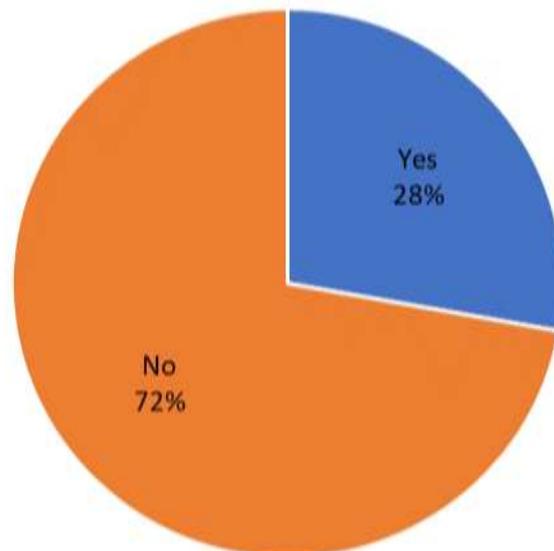


Answered: 79 Skipped: 44 (can tick more than one box)

Smaller amounts of other items were also recorded, including plastic bottles, fencing wire, recyclable cans and bottles.

Most residents (72%) had not removed any items from Charles Street for reuse.

**Figure 9 In the last 12 months, have you removed items from the facility that you found for reuse?**



Answered: 90 Skipped: 33

Of those that had removed items, the most common categories of items were:

**Table 4 Reuse items recovered from Charles Street depot**

Things for the garden	Timber	Metal	Other
Items I can reuse in my garden, i.e. old wheel burrow, wooden boxes	Timber	Corrugated iron	One vinyl album
Rope, garden stakes, buckets, trays, usually garden-use type objects	Small pieces of timber for kids' projects	Metal, household items	Pallets and household goods
Timber offcuts, corrugated iron, iron mesh, rocks, metal gratings – all for use in garden	Timber and scrap metal	Drums	Power tools, furniture
I didn't know it was allowed. I once had a carton there so that people could leave their flowerpots for me. Others made use of it too, but then it disappeared.	Bricks and timber		Craypot, pottery jars, bentwood chair, bricks
Mulched garden waste, windows to make mini hothouse	Wood/building materials and household items		Household items
			Books
			Glass, cardboard, plastics, aluminium
			Bicycle

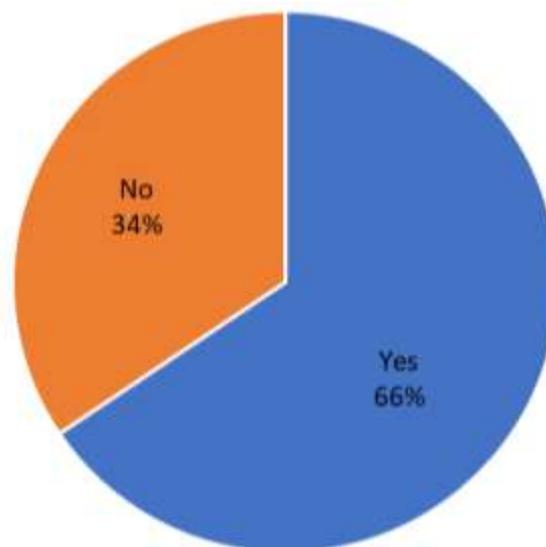
The Charles Street depot is currently open at the following times:

**Table 5 Charles Street depot current opening hours**

Day	Times
Monday	Closed
Tuesday	8am to 12pm
Wednesday	Closed
Thursday	8am to 12pm
Friday	Closed
Saturday	Closed
Sunday	10 am to 2pm

Two thirds of respondents (66%) said that these opening hours were adequate for their needs while 34% indicated the current hours were unsatisfactory.

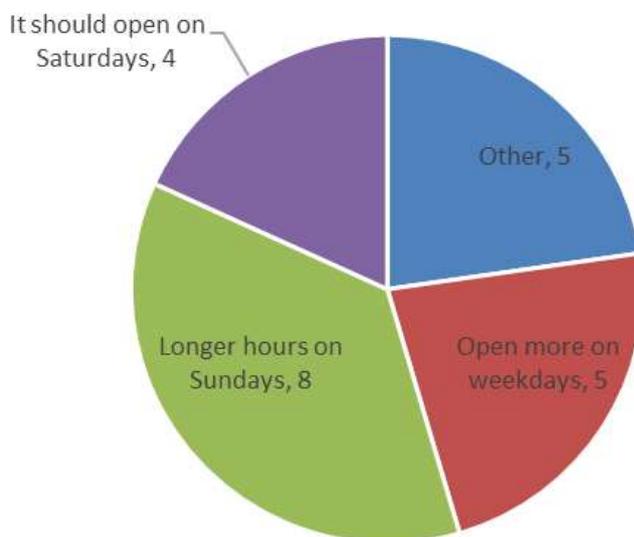
**Figure 10 Are the current opening hours at Charles Street adequate for your needs?**



Answered: 90 Skipped: 33

When asked what the opening hours should be, 54% indicated longer hours on the weekend and 23% wanted extended hours on weekdays:

**Figure 11 Charles Street depot opening hours suggestions by number of responses**



Comments are categorised below:

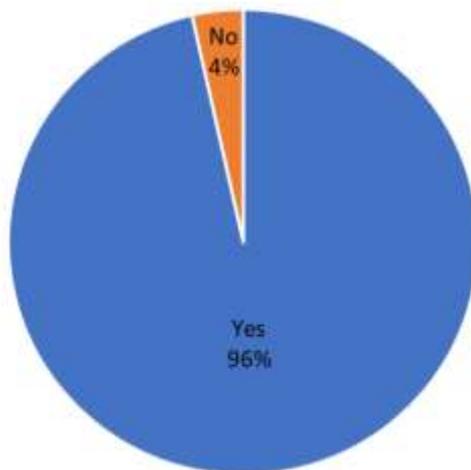
**Table 6 Resident suggestions for Charles Street depot opening hours**

It should be open Saturdays	Longer hours on Sundays	Open more on weekdays	Other
I would probably use this a bit more if the tip was open on a Saturday instead of Sunday	I'd rather it was open later time on Sundays, because we mostly work in the garden over the weekend and haven't finished much before 4pm Sunday afternoon so have to wait until the following weekend to later on a Sunday get rid of the weeds	I am working during the week and it would be useful to have longer access to the Charles St tip as it is a 30-minute drive to and from the tip. If I have multiple loads, it reduces my ability to complete the tasks in the time frame allotted	These hours are restrictive for businesses that have a regular need to dispose of waste
Saturday opening 12pm–4pm	Make Sunday longer hours	Would be handy having three weekdays open	Depot needs to be open for a full day
Saturday would be a great option for those working during the week	Sunday opening till 3 or 4.00pm would be more convenient	Wednesday 8am–12pm	Opening hours should be the same as in most municipalities in TAS
Should be open all weekend. Hard to drop off green waste if you run out of space in car on Saturday and have to wait to empty it.	Sunday gets a bit busy – one road in/out is a hassle with a trailer and oncoming traffic	At least one day (Tues/Thurs) should also be open until 2pm	Opening hours would need to be more often if you have a tip shop but it would reduce the amount of waste
	Longer on Sunday would be good	Later opening hours during the weekday would be beneficial and more convenient	Would prefer pick-up of recyclables as I am never in town during opening hours
	Open all day Sunday or for a half day Saturday on top of existing hours		Maybe a bit longer at the weekends, even once a month – longer weekend hours

### 5.6 Tip shops

In many parts of Tasmania and Australia, waste facilities operate tip shops, where items can be separated for future reuse. Respondents were overwhelmingly in favour of a tip shop (96%).

**Figure 12 Would you be supportive of a tip shop on King Island?**



Answered: 114

While residents were enthusiastic, some qualifications to their support were noted (refer Table 7).

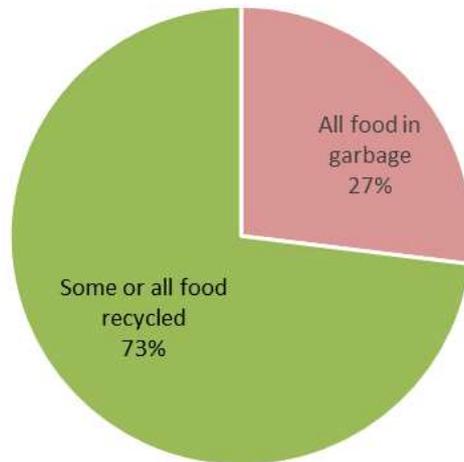
**Table 7 Resident comments on having a tip shop**

Supportive	
It would be a great place to deposit household goods/toys in good order	There is great potential for recycling of furniture, timber and plumbing pipes, fittings, etc.
See a lot of items that could be reused or repurposed elsewhere	Suggested this on previous page – would work well here
I have worked in one of these facilities in Tasmania and the impact I seen have was amazing. So much stuff can be reused or upcycled and it’s amazing what you can actually find in a tip shop that’s great to use	We need this. Too much is going to waste that can be reused with proceeds to go to community projects and charities
A small area where goods that are still working are put aside for people to reuse	This allows for less rubbish to accumulate and makes goods available for reuse
Absolutely! One’s trash is another one’s treasure	Great idea
Well overdue	Excellent idea
Why put it in landfill if someone can reuse?	I'm a great believer in recycling so would check it out
Would be great and well used	
Supportive but with qualifications	
If it doesn't cost the ratepayers extra	Resourcing people to man the shop would be a challenge
As long as no extra employee was required	Provided it doesn't add extra expense
Only if it could be done without extra cost to Council	Provided all profits went to community upgrades and organisations
Only interested if rates don’t go up	
Other ideas	
It would be great if garden waste could be composted and then made available to residents	This could be viable employment for someone, good hot water supply essential
Perhaps unemployed 'work for the dole' labour	Maybe Facebook's buy/swap/sell gets rid of a lot of items otherwise destined for the tip, but a shop might work too.
Not supportive	
Personally, not interested	

### 5.7 Management of food waste

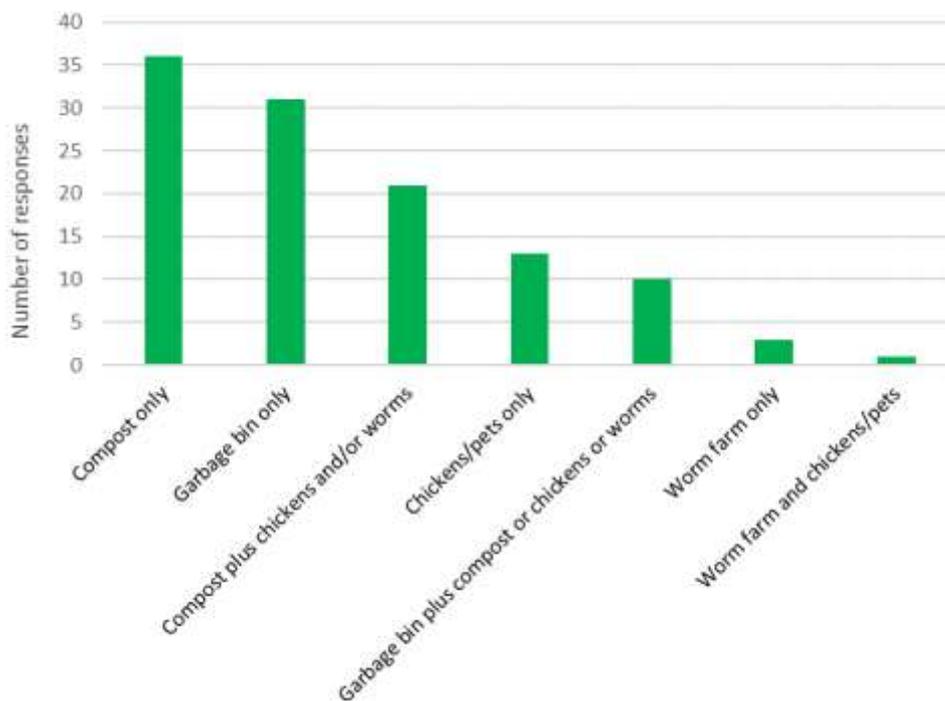
Typically, household garbage bins contain large amounts (up to 50%) of food waste. Residents were asked how they managed the majority of their food waste. Encouragingly, almost three-quarters (75%) said they recycled some or all their food waste.

**Figure 13 Summary of food waste management**



Composting was the most common way of managing food waste, with many respondents using several methods at their household, such as composting, feeding to chickens/pets and worm farms.

**Figure 14 What does your household currently do with the majority of its food waste?**



Answered: 115 Skipped: 8

## 5.8 Challenges and opportunities

Respondents were asked what they considered to be the biggest challenge or challenges for King Island regarding future waste management. One hundred and one (101) comments were received, with many addressing multiple issues. Most comments expressed the desire for more recycling. The comments fell into the following six main themes:

Waste generation	Recycling	Facilities and infrastructure	Cost	management	Education and behaviour
<ul style="list-style-type: none"> <li>• concern over rising waste volumes due to population and commercial increases</li> <li>• desire to minimise the amount of waste generated</li> <li>• desire to minimise packaging waste</li> </ul>	<ul style="list-style-type: none"> <li>• desire for more recycling</li> <li>• particularly glass and plastics</li> </ul>	<ul style="list-style-type: none"> <li>• concern about having a waste facility in forestry area</li> <li>• litter</li> <li>• under-performance of equipment e.g. baler, crusher</li> <li>• concern there is a lack of landfill capacity and waste infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• cost to ratepayers</li> <li>• cost of compliance</li> <li>• cost of exporting recyclables</li> </ul>	<ul style="list-style-type: none"> <li>• lack of leadership and management by Council</li> </ul>	<ul style="list-style-type: none"> <li>• educating residents and changing ingrained attitudes towards waste</li> </ul>

The comments are categorised and provided below.

**Table 8 What do you consider the biggest challenges for King Island regarding future waste management? Comments by themed response**

Waste generation	Recycling	Facilities and infrastructure	Cost	Management	Behaviour and education
Shops receiving high amounts of packaging materials	Recycle/compost our waste and reduce our landfill (should aim to reduce this by 90%)	Where to put it	The use and cost of the Pegarah Forestry Site	Having the key data (historical content) to inform long-term plans	Training resident,
Population growth	Recycling should be available	Where will it all go?	Cost	EPA fines	Behavioural changes
Size increase. Every piece of rubbish or waste brought onto the island is still here somewhere. If it doesn't dissolve or degrade into something else, rubbish will stay on the island forever	Local solutions for recycling, e.g. glass. Given the recycling crisis within mainland Australia (e.g. China no longer taking our products therefore decreasing actual recycling post-kerbside collection) – we need to find solutions that work for KI. It can be done in combination with reducing and reusing	Need to prevent waste blowing around the Parenna site and into the forest. some way of containing waste. It's starting to look like the area surrounding the Meech Street area years ago before dumping area built at forestry	Keeping waste out of landfill – shipping off as much as possible. That cost would surely reduce the cost of digging more holes	Council not providing enough options. We are too small for private opportunities to work so local government should take the lead. There are many other councils around the country doing interesting things with waste that would be happy to share their experiences	Cynicism as the community has been told that they are recycling previously, only to find out that it basically all gets shoved in the same hole
We must reduce/re-think all packaging that is sent to KI	Recycling	Compact the rubbish in a baler. Collect other waste other days	Freighting recyclables off the island is of great cost	To do it efficiently, sustainably and without poisoning our environment	Educating residents on the benefits of recycling and putting it into practice
Make less waste	Lack of recycling	Somewhere to put it all	Compliance costs	Resourcing – employing staff	The people
More people, more waste, creates a big problem	No recycling bin for bottles, cardboard, etc.	Finding somewhere to put it all – waste cells	Economics	Funding compliance and eventually improvement	Changing residents' attitudes to waste reduction
Reduction in the quantity of landfill	Separation of materials before collection	Council not repairing baling machine	Cost – small ratepayer base	Correct management by KIC	Changing old habits
Single-use plastic containers going into landfill. Food packaging and cardboard. (The cardboard can be composted.)	Plastic bottles, thrown away but still usable articles that could be recycled. How much rubbish do we want to bury the island in? Recycle as much as we possibly can through own and Council initiatives	The need for Charles Street to be developed as a collection/transfer facility. The remaining life of Parenna tip and the development of a new long-term waste facility	Putting the rubbish in the ground – the cheapest way without faulty machines that break down and cost the earth to fix or unable to fix	Cynicism as the community have been told that they are recycling previously only to find out that it basically all gets shoved the same hole	Changing mindset re garbage disposal, talking to people about the need for a milk machine like they have in NZ – community bring glass bottles to a machine and buy the milk

Waste generation	Recycling	Facilities and infrastructure	Cost	Management	Behaviour and education
Getting the supermarkets and small business owners on board to own the waste they create. Facilitate avenues to reduce the potential for waste, most particularly in packaging e.g. offering bulk self-serve options for some grocery items i.e., pet food biscuits. This could also be cost saving for consumers particularly in relation to household cleaning products	Recycling and educating the residents to recycle. There should be a separate site on the island for old cars, engines, maybe roofing iron that generally is not biodegradable	The disposal of waste AFTER it is collected: need a complete review of current operations. Compressing waste is essential. Current site (forestry) creating a huge bird problem. Need to keep all recycling gear in order and operating (e.g. glass crusher)	Cost to ratepayers. Waste charges are very high and are only going to get higher	The fact that burning household and garden waste is now not allowed unless you live on 2,000 m <sup>2</sup> – ridiculous rule, puts more pressure on Council costs	Changing mindset re garbage disposal, talking people into the need for a milk machine like they have in NZ, where community bring glass bottles to a machine and buy the milk
I would think the challenge is to deal with the increase in waste as the Island grows in population and commerce	Recycling – local recycling on the island into products we can use locally. Incentives for community to stop producing waste. Limiting packaging and plastic, including waste from online shopping purchases.	Suitable disposal site and correct management of said site	Keeping cost to ratepayers down	The current 'Lord Nelson' approach can hardly be described as 'management' especially in regard to unconsolidated landfill	Educating residents on the benefits of recycling and putting it into practice
Reducing waste going into landfill	Need for recycling of cardboard, paper, glass, etc., that currently goes into the garbage bin	How to compact it and dispose of it in an economical way	Cost and limited opportunities due to isolation	For council to continue to offer a service that is accessible, reliable, sustainable and affordable for the community	We must change culture and habits on KI – landfill of so much waste isn't feasible on our small island
Reducing waste	Recycling	Cleaning up the mess in the forestry area. Look at Singapore	Freight charges	The bureaucracy will not allow for creative thinking and informed decision making	Educating households
Excessive packaging from online goods coming into the island	Recycling, costs, training many in public to change old habits to benefit the environment	Safe storage of rubbish in the forestry area. Don't let it blow around or do environmental damage.	Cost	Management of Parrenna – it is a disgrace at the moment. Litter, including what is washed up from the sea onto our beaches	Roadside rubbish – how do we stop/encourage people not to do this?
Plastics – I have some degradable bags – why aren't more plastics degradable?	Recycling – it still goes into landfill Asbestos – there is so much of it to be disposed of into Council's landfill	Parrenna not beautiful. Being used as it was initially intended to be	Costs of recycling		I really would like to recycle plastic

Waste generation	Recycling	Facilities and infrastructure	Cost	Management	Behaviour and education
Bringing less plastics to the island, e.g. fertiliser bulk bags and plastic to cover round bales of silage	Recycling, increasing visitor numbers = waste generated while visiting + maintenance (upkeep of visitor accommodation)	Five-star waste-trained operators of machinery (make investment last – people taking care)	Get cost down		The People
A focus on zero waste	Recycling glass, metal, etc. as it's too expensive to ship off the island	A lot more investment in appropriate state-of-the art recycling equipment			
Disposal of plastic	Recycling	Limited space			
Reducing the mass of waste	Recycling, reuse and repurposing of potentially valuable 'waste' products, i.e. whey, animal skins and bones, etc. from abattoir, etc.	Action must be prioritised – consolidated, baled waste can work and lends itself to basic sorting, progressive stacking and covering, a high degree of wind and bird damage-proofing was achieved			
Minimisation of waste	Money/people (workers) doing something constructive with recycled waste	Finding placement for waste			
	Properly managed recycling and free green waste disposal	Landfill cannot go on the way it is currently			
	To be able to do something with what has been recycled and to be able to extend the life of our tip	Having somewhere to put the waste. What damage some of the waste is creating			
	Recycling. This is a major issue and there isn't much support or systematic processes in place to deal with it	Space, so we need to recycle as much as we can. We are an island, not a dump			
	Recycle bins at households; education on food scrap recycling	Reducing the quantity of landfill			
	More options for recyclables				
	Waste segregation				
Bulk waste and recycling					
	Recycling				

Waste generation	Recycling	Facilities and infrastructure	Cost	Management	Behaviour and education
	Recycling is the biggest challenge as it can't be taken off Island (cost prohibitive) The Island should consider recycling glass bottles, jars etc Getting proper long-term fit to need recycling equipment - no short cuts Recycling the glass, plastic and other recyclable items Recycling glass and plastics Recycling Recycling Lack of recycling options Separating rubbish and recyclables Recycling, re-thinking what is going into land fill as waste Glass (e.g. wine bottles/beer bottles) and plastic bottles (e.g. water/soft drink bottles) Gathering all the recyclables that can be economically reused or sent off the island No recycling is done				

Respondents were asked if there was anything else, they would like to share about current or improved services, or any opportunities that Council should be considering. Fifty-five (55) people responded. The comments fell into the following categories:



The comments are categorised and shown below.

**Table 9 Suggested improvements and opportunities**

Comments regarding waste reduction	Comments regarding recycling	Comments regarding domestic waste collection	Comments regarding facilities and infrastructure	Comments regarding costs and incentives	Other comments
A ban on sale of single-use plastic. Reduction of packaging	Get funding to immediately do something with recycling. This would 'save' costs so Council could concentrate on recycling	Reduce the service to one pick-up per fortnight instead of two and reduce cost to say \$250 per year.	Purchase a new collection vehicle instead of purchasing parts constantly	Reduce cost to \$250 per year through fortnightly pick-ups not weekly	Don't waste money on more studies into waste management
Ban single-use plastics	Use of glass for road building	Get rid of fortnightly pick-up immediately	Is the rubbish baler still operational?	Charging for second bins on those properties that have more than one bin	Good work on getting community input on this issue :)
Promote 'keep cups' for businesses providing coffee. Discourage plastic bags for fruit and veg. Not sure if anything could be done with silage wrap? Reduce printing	Am happy to separate waste into different categories if structure in place in the future to allow it	Revisit weekly and fortnightly pick-up	Reinstate a compactor. Train staff to use it properly. Is there a way to identify who owns material compacted and prosecute offenders who put in non-compacted material	Residents who aren't interested in trying to reduce waste should pay a penalty. We shouldn't all be penalised when trying to do the right thing by the environment	Could we model our plan on current existing plans for similar communities, i.e. Flinders Island, Lord Howe Island, Cocos Keeling Islands or pick the areas that we could use here
Have an island-wide plastic straw ban. Trial more island-wide initiatives like the butchery to use paper bags, bakery should follow suit and takeaway food outlets.	Recycled cardboard briquettes, recycling bins for glass, etc., accessible 24 hours, waste separation at home, use food waste for biofuel.	Weekly pick-up is great	The tip cell site could be at the end of Kentford Road on the coast. No future development for that region and no issues of waterlogging as it's coastal sand	Have free tip access on certain days throughout the year for residents to deposit hard waste in lieu of Council doing a hard rubbish collection around the island	There are many communities all over the world that are about the same population and isolated that are doing it better than we are. Research, plan and work towards the solutions that will make our island truly "clean & green"!
Work with local businesses to reduce unnecessary packaging	Much more economic recycling and keep materials for use on the island where possible, e.g.	As a resident of Snodgrass Park, we only need a fortnightly pick-up	Essential to repair baling machine to reduce amount of waste going to forestry and need for new cells. Forestry site poorly managed as wastepaper	Charge households who have overflowing bins with an extra bin and or fines.	Get a new works manager who listen to king islander

Comments regarding waste reduction	Comments regarding recycling	Comments regarding domestic waste collection	Comments regarding facilities and infrastructure	Comments regarding costs and incentives	Other comments
	compost, crushed glass, newspaper – fire bricks		and plastic intruding into forest – third-world standard		
	Try and do something with e-waste. Individual members of the public shouldn't have to fill their car and take it to Melbourne	We like the weekly collection, but think every second week should be a recycling bin	Please help with getting a tip shop started. It would be fantastic! SO much building material is thrown away at the tip because builders come over here from away and have leftover materials, they are not going to pay to take back with them, so it gets thrown out. We have built a woodshed out of materials that were at the tip (including guttering to catch the water from the roof and a big barrel) and are just about to start on a cow milking shed with other materials from the tip	Reward for personal reduction in waste. I pay for a 100L bin, I'll chuck everything into wheelie bin just to get value for my money. If I could pay 50% less for 50% sized bin, I would reduce my waste, retain bio-organic's at home, reducing demand on service.	I think that a company off-island that can look at the long-term contract and make a genuine financial plan that is smart and viable for both King Island and for the company will be extremely important. That partnership will allow King Island to become a sustainable beacon in Tasmania over the long term.
	Glass aggregate system shipping off e-waste to Sims metal Melbourne. Convert plastics to oil for reuse to keep as much out of landfill as possible	We do not need a weekly garbage service Alternating collections of recyclables and waste should be instigated			
	Bring back separation of plastics at Charles St and mulching of garden waste	Collection bi-weekly to incentivise separation and awareness			
	We need more recycling opportunities for various materials		A better glass-crushing machine, using this crush in road base. A heavy-duty paper, cardboard crusher. Could be added to Council compost. Green bin can have food waste as well. All good waste except bones and oyster shells. All into a crusher, shredder, into council compost bins for parks, etc. or for residents who supply it, at a small charge or free	Tip fees - people dump waste elsewhere on our beautiful island because of the fees, maybe each household could be given a couple of tip vouchers per year to help stop this. Going to the tip can be quite expensive, depending on what the person feels like charging you for the day.	
	Reuse of materials surplus to other requirements. Facilitating compost making on a larger scale				
	Recycling waste to be used back in the community – i.e., crushed glass in cement or bitumen, compost/green waste to be sold as fertiliser				
	Cardboard is a huge issue and it would be a great		Start bailing waste again to preserve the life of waste cell		

Comments regarding waste reduction	Comments regarding recycling	Comments regarding domestic waste collection	Comments regarding facilities and infrastructure	Comments regarding costs and incentives	Other comments
	ingredient in any large-scale composting system				
	The ability to separate our own waste. Sort newspaper, glass and aluminium for collection.		Waste facility that is efficient in waste management and reduces landfill		
	Sending plastic bottles back for 10c that is offered		Fix the baler at Charles Street and stop polluting the forestry		
	Glass-crushing looked to be too fine on level for inclusion into road sealing		Consider privatising Charles Street transfer and Pareenna. Council needs to concentrate on roads		
	Reuse and recycle		Bale the rubbish		
	Recycling				
	More effort on recycling to reduce the amount going into landfill				
	Recycling and composting/worm farms				
	Recycling				
	Recycling green waste				
	Would like to see if recycling is viable.				
	Disposal of IT equipment, TVs, etc.				
	Recycling and composting food waste				

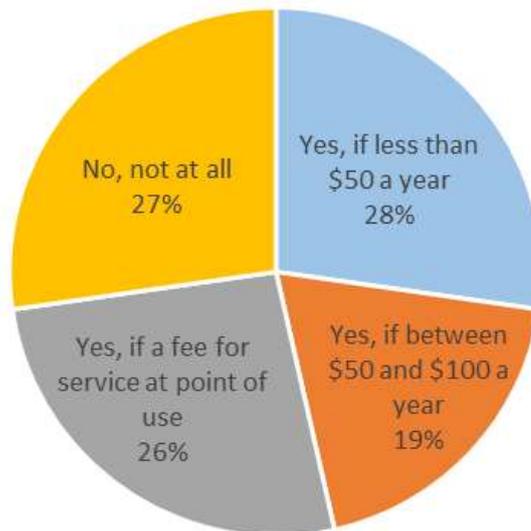
## 5.9 Willingness to pay

Residents were asked the following question:

‘Each residence on the island is currently charged \$408.50 a year for waste management. Given that most improvements to waste management will incur additional cost to Council, would you accept a higher waste charge to help cover these costs?’

Twenty-seven per cent (27%) were not willing to pay more. The remaining 73% were willing to pay more under certain circumstances, as shown in Figure 15.

**Figure 15** Would you accept a higher waste charge to help cover the cost of waste management improvements?



Answered: 99 Skipped: 24

Twenty-nine people added comments on this issue. Most comments were against cost increases or stated the need to see concrete improvements in order to justify the cost. The issues of collection frequency adding to current costs was also re-stated. Comments are categorised below.

**Table 10 Comments on willingness to pay**

Against cost increases	Qualified support for cost increases	Other ideas for charges and incentives	Collection frequency	Other comments
As I have stated earlier, residents that embark on smart living choices and try to minimise their consumption of waste and turn certain apparent waste into viable reusable products shouldn't be at the mercy of increased rates for waste management.	I would also support a cost increase but as cost of living is so high already couldn't support more than a \$50–100 increase in any one year and would need to see some definite achieved outcomes in that year for the extra revenue raised.	Rate payers should also get tip vouchers for hard garbage disposal	Why does the truck have to empty the bin every week? Every fortnight worked very well. The community wasn't consulted about the change when it went to weekly collections.	We have a costly glass crusher and cardboard shredder either broken or not being used due to health reasons. Better decisions need to be made by Council on what will help reduce costs
Work smarter not harder. Reduce demand on current system for equal result. Stop putting my bills up, spend MY money smarter.	It would depend if I believe it is an improvement	Other councils use a voucher system for ratepayers. The vouchers are issued upon payment of rates and when used up reverts to user-pays for using the local tip	I would prefer fortnightly pickup, for less cost p.a.	I bet you get 'crickets & tumble weed' noise on this one... Tell the people that they will be paying more for a 'so-called' recycle program and you'll NEVER hear anything more about waste.
That is <u>so</u> expensive already for one rubbish bin! It would be easier to dig a hole yourself.	Depends on the solutions and management undertaken	Make recycling normal and cheap and general waste costly	I am happy to reduce my weekly garbage pick-up to allow for a tip shop to be made.	Wasting money is what this council does best.
I do not accept the assumption that costs need to increase with a BETTER waste management agenda	Unsure – it would depend on what the improvements were.	User-pays system		I believe that the longevity of sustainability on King Island is worth the price increase.
Find cost savings to pay for changes	More info please. Are the fees one-off – what is this?			Fee at point of service may incur admin. costs
It is already expensive	Provided Council can show it will be used on waste reduction and not on salaries			Charging for waste collection might encourage dumping in environment
Hard to stomach another increase when waste costs have been increased dramatically over the past few years will little fanfare. Also, it seems that we are now paying for the incompetence and mismanagement of previous regimes, but no one wants to (openly) acknowledge this.	It would need to be linked to recycling Depends			Using glass as aggregate and selling compost could reduce costs and raise revenue. The waste transfer station does not have to be manned to be open – most of the time you are ignored by staff when you drop things off so maybe have it open every day in daylight hours and have remote cameras and occasional visits.

## 6 SURVEY RESULTS: COMMERCIAL OPERATORS

Thirty-one responses were received for the commercial waste survey. Some respondents skipped some questions. Visitor accommodation, including motel, hotel or self-contained units comprised 78% of respondents totalling 77 tourist beds.

Results are discussed below for each question.

### 6.1 Business location and size

Over half of the businesses that responded were located in Currie, as shown in Table 11.

**Table 11 Location of respondent businesses**

Location	Number of employees
Currie	13
Main Street	2
Grassy	1
Home	1
King Island	1
Lymwood	1
Naracoopa	1
North	1
Grassy	1

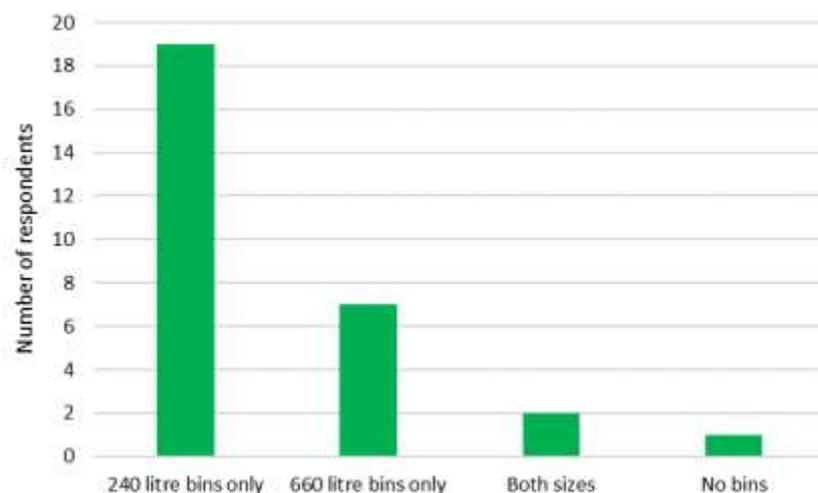
Answered: 21 Skipped: 10

Over half the respondents (13 of the 21 respondents) had five or fewer employees, four respondents had six to 10 employees and three respondents had between 20 and 30 employees.

### 6.2 Bin use

Most respondents' businesses used 240 litre bins. A smaller number had only 660 litre bins, and two businesses used both bin sizes. One business had no bins.

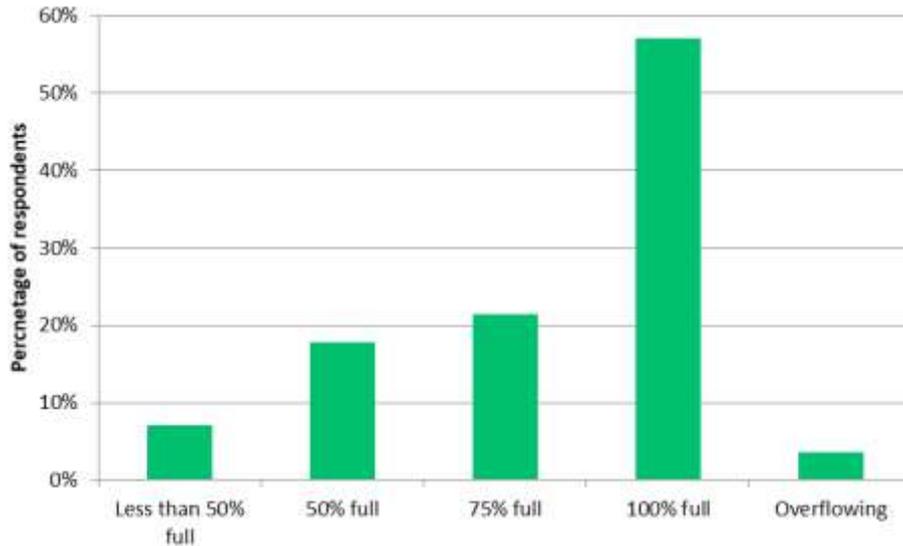
**Figure 16 Bin sizes used by businesses**



Answered: 29 Skipped: 2

Business using only 240 litre bins had a range of one to six bins, with an average of two bins per premises. Businesses using only 660 litre bins had a range of one to four bins, with an average of two bins per premises. Of the premises using both bin sizes, there was one large business with nineteen 240 litre bins and eleven 660 litre bins, and one small business with one of each bin size. Commercial bins are well utilised, with more than half of respondents reporting that their bins were 100% full when placed out for collection, and only 7% less than half full, as shown in Figure 17.

**Figure 17 Bin fullness at commercial premises**

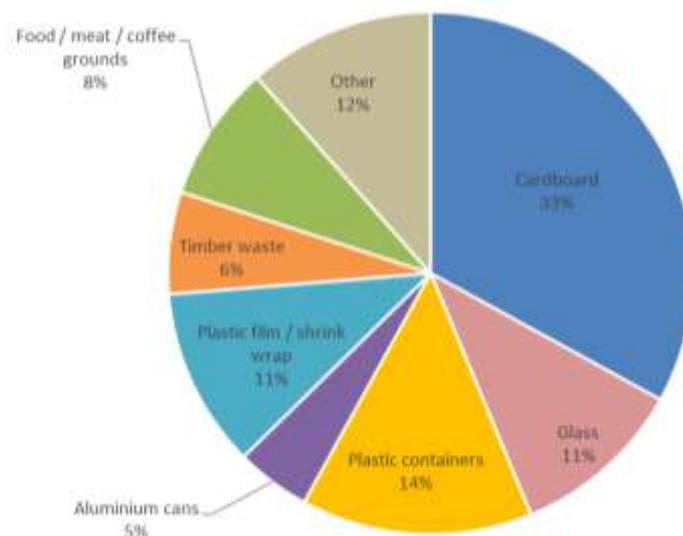


Answered: 28 Skipped: 3

### 6.3 Waste composition

Respondents were asked to estimate the composition of their waste. When these averaged, the largest component of waste is cardboard at 33%, followed by plastic containers (14%), glass (11%), plastic film and shrink-wrap (11%), food/meat/coffee grounds (8%), timber (6%) and aluminium cans (5%), as shown in Figure 18. ‘Other’ waste comprised an average of 12%. Descriptions of ‘other’ waste included paper, garden, demolition, oily rags, floor sweepings, lunchroom waste, shredded paper and mixed general waste.

**Figure 18 Average composition of commercial waste**



Answered: 28 Skipped: 3

Table 12 shows the range of reported values for each waste type.

**Table 12 Range of composition values by material**

Waste type	Average % in waste	Lowest % recorded	Highest % recorded
Cardboard	33%	0%	90%
Plastic containers	14%	0%	100%
Glass	11%	0%	50%
Plastic film/shrink-wrap	11%	0%	55%
Food/meat/coffee grounds	8%	0%	70%
Timber	6%	0%	100%
Aluminium cans	5%	0%	35%
Other	12%	0%	90%

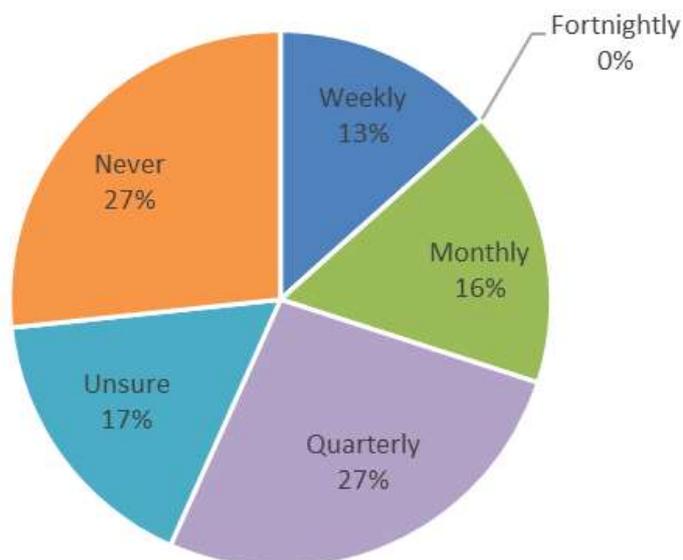
### 6.3 Differential charging

Respondents were asked if they would support differential charging for different types of waste. Twenty-nine respondents answered this question; 69% said yes and 31% said no.

### 6.4 Use of Charles Street Waste Management Facility

Of the 29 respondents to this question, 55% had taken commercial waste to Charles Street depot within the last three months and 45% had not. When questioned on the frequency of visits to Charles Street depot, 27% had not visited and 27% went quarterly, with the remainder visiting more frequently or not sure, as shown in Figure 19.

**Figure 19 Frequency of visits to Charles Street depot for commercial waste**



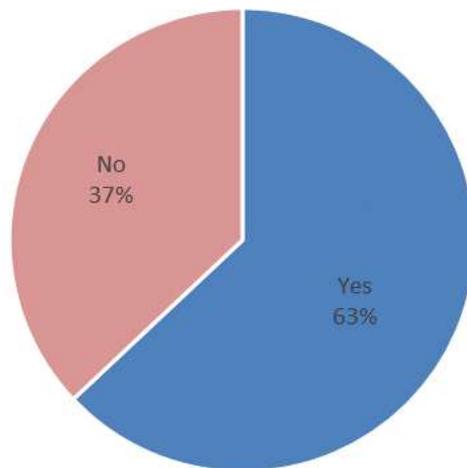
The Charles Street depot is currently open at the following times:

**Table 13 Current opening hours**

Day	Times
Monday	Closed
Tuesday	8am to 12pm
Wednesday	Closed
Thursday	8am to 12pm
Friday	Closed
Saturday	Closed
Sunday	10 am to 2pm

Similarly, to the domestic users, almost two-thirds (63%) of commercial respondents said that these opening hours were adequate for their needs.

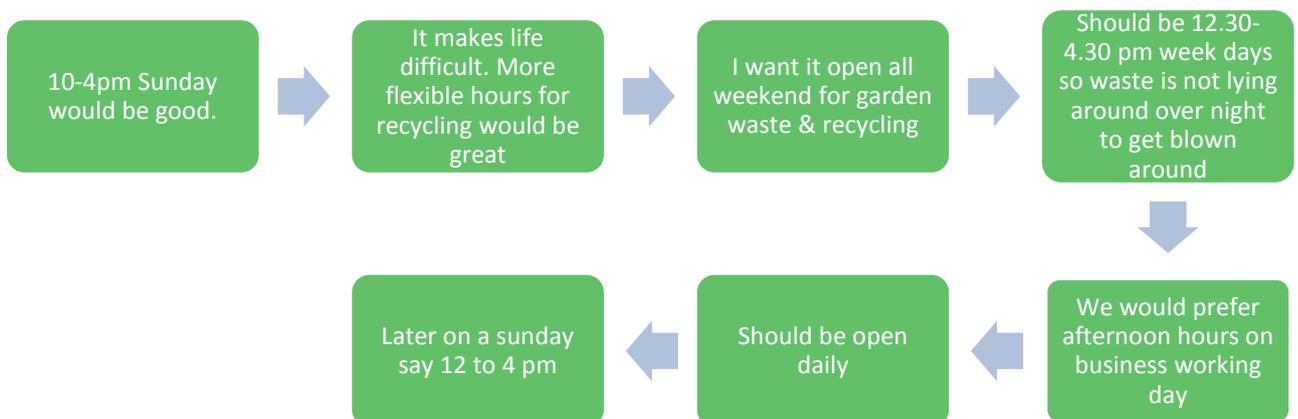
**Figure 20 Are the current opening hours at Charles Street adequate for your needs?**



Answered: 28 Skipped: 3

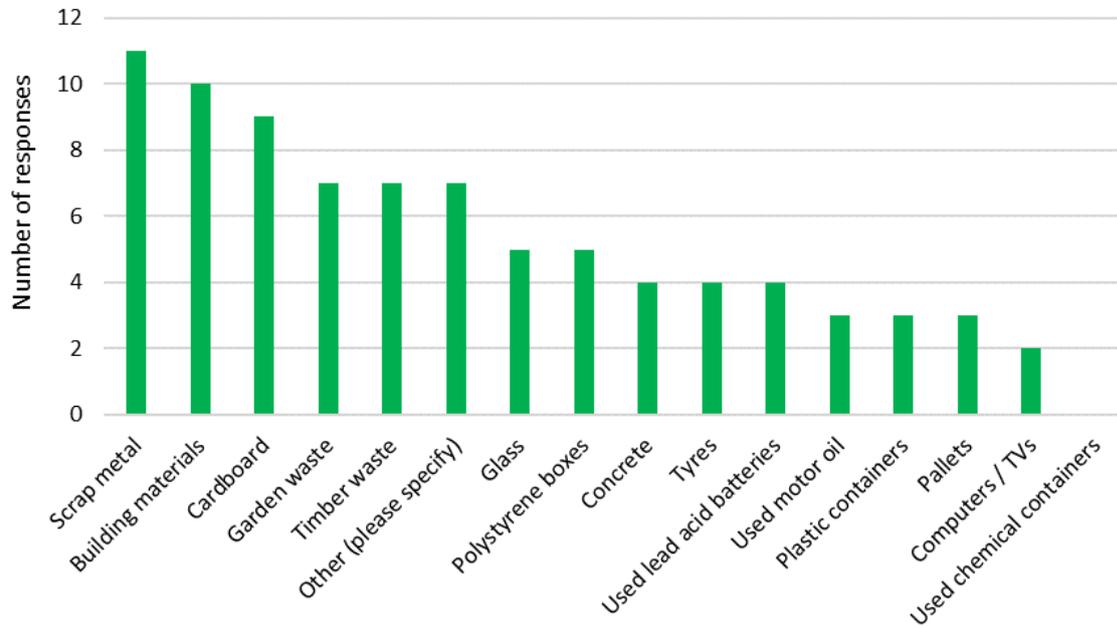
Those who responded 'no' gave the following suggestions:

**Figure 21 Commercial users' suggestions for Charles Street opening hours**



The top five materials that businesses reported taking to Charles Street depot were scrap metal, building materials, cardboard, garden waste and timber. Figure 22 shows the full range of materials reported by residents. The 'other' material reported included furniture, appliances, plastics and cans.

**Figure 22 Commercial waste taken to Charles Street depot**

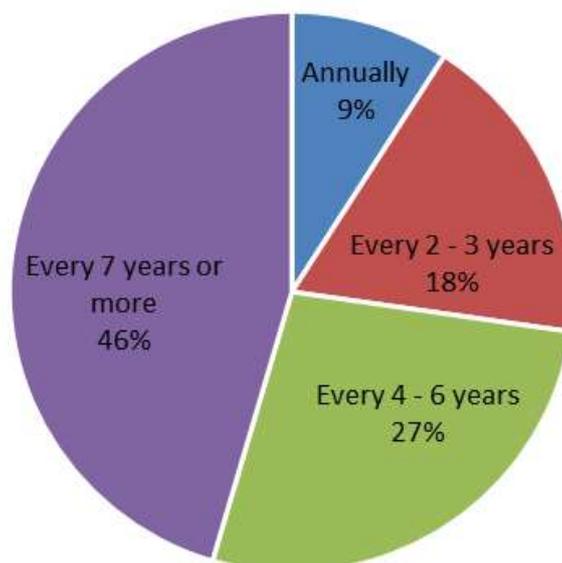


Answered: 24 Skipped: 7

### 6.5 White goods replacement

Respondents were asked how often they replace white goods such as fridges and washing machines. Almost half of respondents (46%) waited seven years or more to replace white goods, as shown in Figure 23.

**Figure 23 How frequently are white goods replaced?**

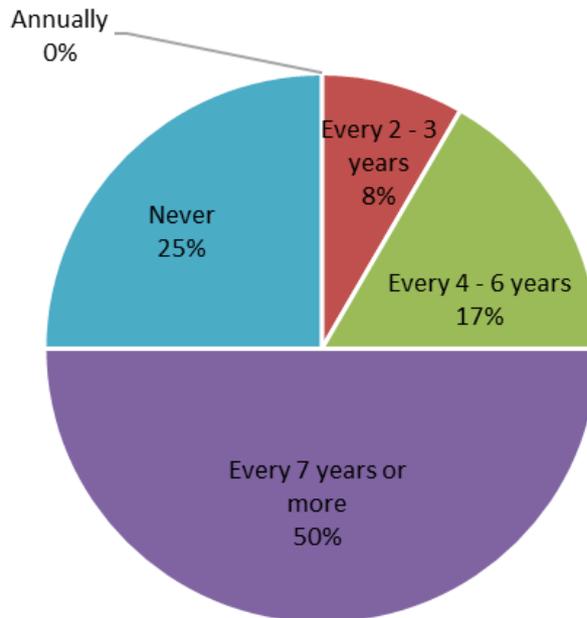


Answered: 22 Skipped: 9

## 6.6 Accommodation businesses and mattresses

Of the 23 respondents to this question 78% said their business was a provider of visitor accommodation such as a motel, hotel or self-contained units. The number of beds managed ranged from one to 31, averaging 13 beds and totalling 77 beds. Respondents were asked how frequently mattresses were replaced, with half stating a frequency of seven years or more, and a quarter had not replaced mattresses.

**Figure 24 Frequency of mattress replacement**

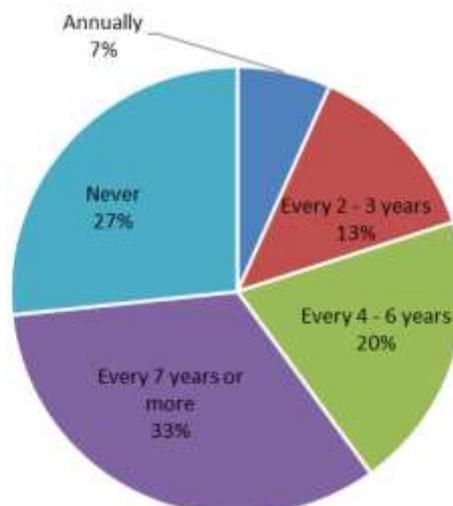


Answered: 12 Skipped: 19

## 6.7 Refurbishments

Businesses were asked how often they refurbished their properties to the extent that building waste or packaging is generated, such as broken concrete, bricks, timber, pallets or plastic wrap. Most answered never or a frequency of seven years or more, as shown in Figure 25.

**Figure 25 Frequency of refurbishments of commercial premises**



Answered: 15 Skipped: 16

## 6.8 Funding waste services

Respondents were asked the following question:

*'Council is exploring ways that visitors to the island can contribute to the cost of providing effective waste services within a small rate base. We have looked at what other islands do and are seeking your views on the following options. Please rank your preferences.'*

The options presented were:



Having an environmental levy on air tickets gained the most first preferences, closely followed by a bed tax based on occupancy. A departure tax was less popular. Responses are shown below:

**Table 14 Options for funding waste services**

Option	Number of first preferences	Number of second preferences	Number of third preferences
Environmental levy on air tickets	6	2	3
Bed tax based on occupancy	5	3	4
Departure tax charged at airport	1	5	5

Answered: 14 Skipped: 17

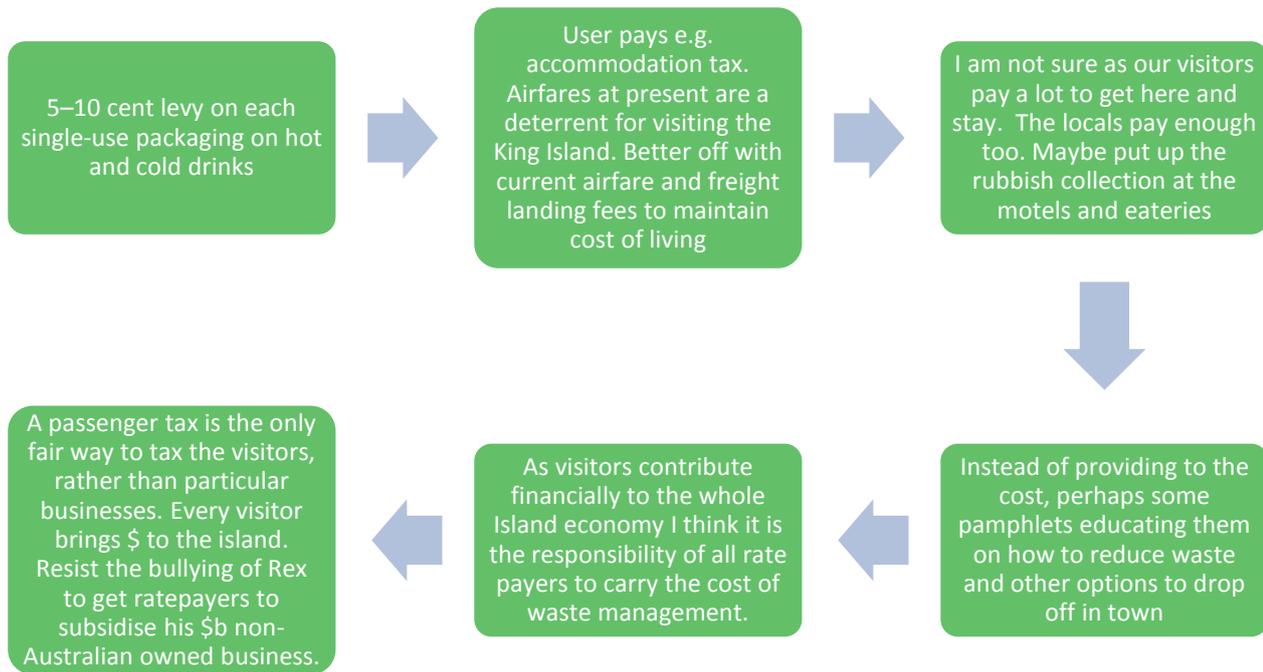
The options were weighted by giving three (3) points for a first preference, two (2) points for a second preference and one (1) point for a third preference. Using this method, an environmental levy on air tickets and a bed tax based on occupancy scored equally, with the departure tax scoring lower.

**Table 15 Options for funding waste services: weighted score**

Option	Weighted score
Environmental levy on air tickets	25
Bed tax based on occupancy	25
Departure tax charged at airport	18

Respondents had the following suggestions on the funding of waste services:

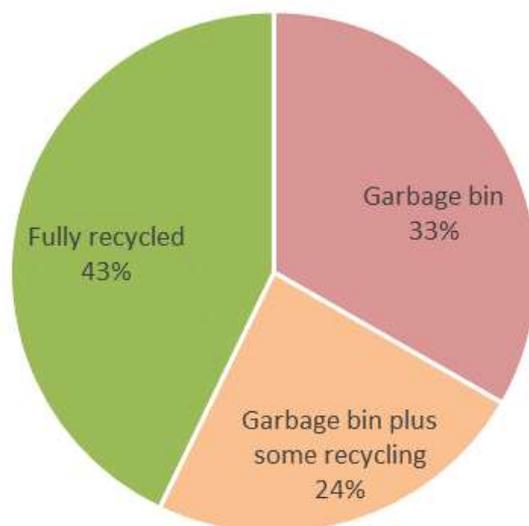
**Figure 26 Views on funding waste services through levies or taxes**



**6.9 Food waste**

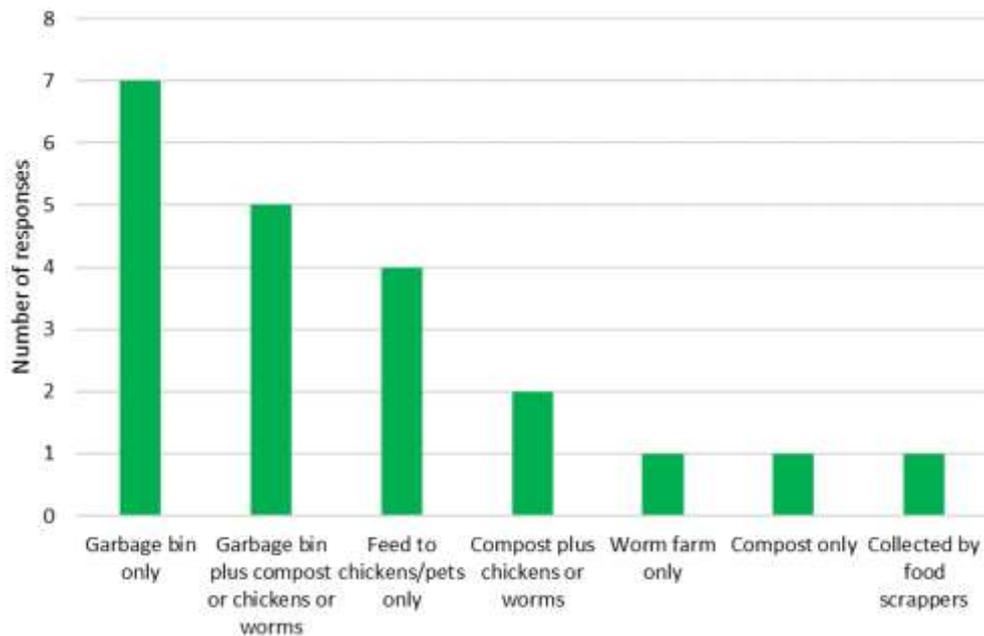
Of the 27 respondents to this question, 44% said their business created food waste and 56% said they did not create food waste. Businesses were asked how they manage their food waste and encouragingly two-thirds said they recycled some or all of their food waste. Forty-three percent (43%) recycled all food waste, as shown in Figure 27.

**Figure 27 Commercial food waste management**



Many respondents used a combination of methods for food waste management, such as composting, feeding to chickens/pets, and worm farms, as shown in Figure 28.

**Figure 28 How does your business manage food waste?**



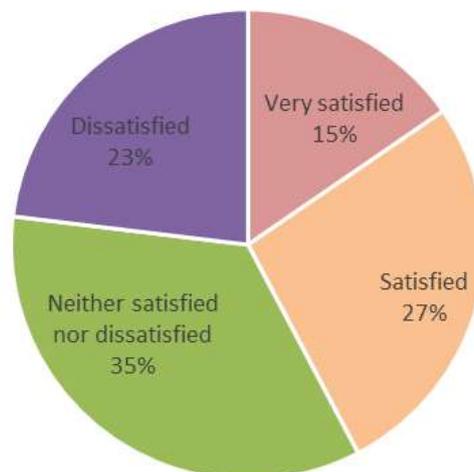
Answered: 22 Skipped: 9

The high existing recycling rate for food waste may be the reason that only 48% of 23 respondents said that their business would be interested in separating food waste from other types of waste to facilitate Council using it in compost.

**6.10 Satisfaction with Council’s commercial waste services**

Respondents were asked the following: ‘Overall, how happy are you with Council's current commercial waste services?’ Results are shown in Figure 29, with 42% satisfied or very satisfied and 23% dissatisfied.

**Figure 29 Satisfaction with Council’s commercial waste services**



Answered: 26 Skipped:5

Dissatisfied customers were mainly concerned about cost and lack of recycling. Comments have been categorised and are shown below.

**Table 16 Issues with commercial waste collection**

Cost	Lack of recycling	Other
As I only put my bin out once every few months, we should have a pay-as-you-use service for business that don't generate much waste	Encourage recycling, i.e. bins for glass and/or cans. Separate from other garbage	Care taken with garbage bin collection
The waste management on an island is difficult and costly. Ratepayers on KI pay a fraction of what councils and ratepayers on mainland Australia pay. Councils generally pay \$180 m <sup>3</sup> of landfill, so this has to be passed on the users. How much does KI charge per m <sup>3</sup> ?	Compost our cardboard and paper (largest component of our waste) and bale the plastics	More open hours for tip
You changed everything from fortnightly to weekly without consulting people and expect us to pay	Pick up of recycling, tip market, 'upcycling'	
	Compost bin	

### 6.11 Challenges and opportunities

Respondents were asked what they considered were the biggest challenges for King Island regarding future waste management. Nineteen comments were received, with many addressing more than one issue. Most comments expressed the desire for more recycling. The comments fell into the following main themes:

cost	recycling	facilities and infrastructure
<ul style="list-style-type: none"> <li>the cost of exporting recyclables</li> <li>small rate base</li> </ul>	<ul style="list-style-type: none"> <li>desire for more recycling</li> <li>challenges of getting people to recycle</li> </ul>	<ul style="list-style-type: none"> <li>concern there is a lack of landfill capacity and waste infrastructure</li> </ul>

The comments are categorised and provided below.

**Table 17 Businesses: what are the biggest waste challenges facing the island?**

Comments regarding cost	Comments regarding recycling	Comments regarding facilities and infrastructure
Small rate base; higher costs/m <sup>3</sup> to process, no commercial recycling options; ratepayers unwilling to pay the real cost to manage waste	To cut down on as much packaging as possible; find economically viable ways to utilise all the waste products not being utilised now, i.e. whey from cheese factory, converting green waste and manure into fertiliser; find uses for waste glass (brick making) and tyres (and glass in road sealant?), bones, hooves, etc. (King Island Bone Broth), meat scraps and offal (pet food), etc.	Future volumes – at present we have a waste cardboard stratagem but as the island increases usage, we have to have adequate disposal capacity even allowing for our own agenda
Cost to consumers – protecting our clean, green image	Complaining locals not wanting to change; changing mindset; should be user-pays – those who produce largest amount of waste & don't try & recycle their own need to pay the most	Too much waste for a small island; consumer behaviour; where to put it; not being able to reduce the size of waste by compaction; not having a compostable site
Cost of transport of recycling; economy of scale – local govt having to take the lead	Glass crushed into roads but what about plastics and cans?	Without the ability to bale, the current system is terrible and making our beautiful forest into a wasteland with all the rubbish that has blown from the landfill site

Comments regarding cost	Comments regarding recycling	Comments regarding facilities and infrastructure
Getting it off the island if required	Getting the public to recycle	Where does it go?
Cost of recycling if we need to freight it out	Recycling	A better place to put the waste. The forestry area is not a suitable place.
Not enough space to bury it and HIGH COSTS	Unavailability of recycling items (glass, etc.)	Running out of space to bury
Export of recyclable waste means \$\$\$		

Respondents were asked if there was anything else, they would like to share about current or improved services, or any opportunities that Council should be considering. Sixteen people responded. The majority of comments were to do with recycling, with other responses covering bulky waste and provision of infrastructure/facilities. Comments are categorised and provided below.

**Table 18 Suggested improvements and opportunities: commercial respondents**

Recycling	Infrastructure and facilities	Bulky waste	Other comments
Last time Council implemented recycling, it baled and then buried the bales. Waste of time and money. When it got a glass crusher to recycle, I am not aware that this made any positive impact. I understand the crusher was expensive and rapidly fell into disuse.	Charles Street should be open when the Council said it would open. Twelve hours a week is not too hard to provide a service	Annually provide ratepayers with one or two free tickets per year or provision by Council of big bins in towns for hard waste per year. This would encourage people to correctly dispose/recycle it instead of dumping in the bush	Lots of councils do waste management well. Except for the small rate base and higher costs on KI, the technology and current practices should be emulated
Could be more true recycling, not just separating rubbish types then putting in landfill anyway	Reintroduce palletisation for household rubbish	A hard waste collection would be good. If that is not achievable, a free day at the tip once a year	
Melt all plastics down and use for plastic extrusion pipe on KI	Using skip bins and contracting it out		
Make recycling work effectively			
Enable ratepayers to drop-off recycling at their convenience			
Ensure that recycling is efficient and being constructively re-used			
Recycling, recycling, recycling			
Separate scrap metal crush and export for resale			
Crush all glass and use crushed glass in roadworks, etc.			
Recycling, recycling, recycling, recycling			
Business waste oil collection and possible recyclables collection			
Press cardboard into briquette for fuel			

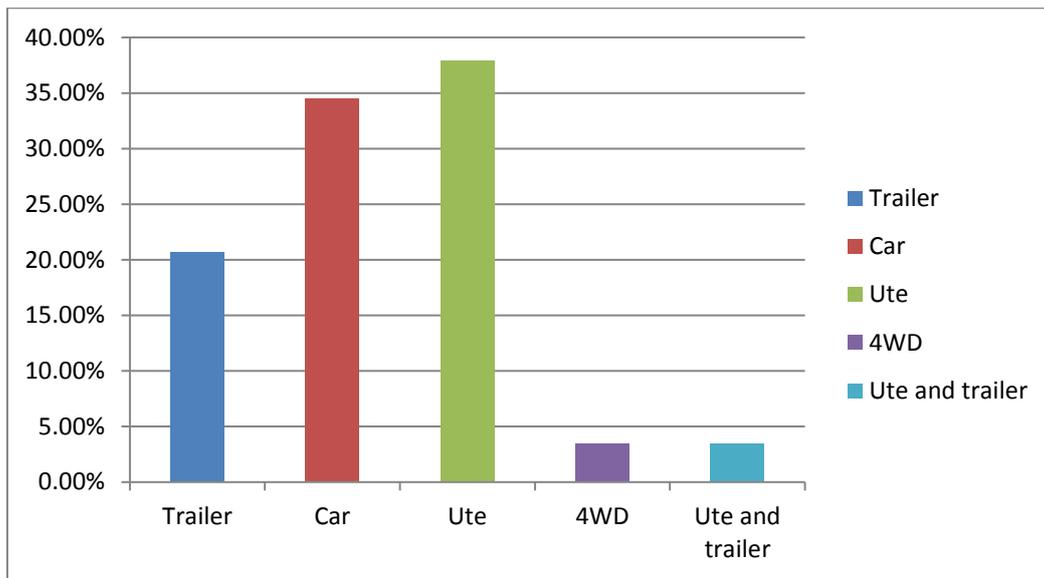
## 7 TIP USERS SURVEY

Anne Prince interviewed 29 residents delivering waste to Charles Street during her first trip to the island. The key outcomes of those informal discussion are shown in the following charts and tables.

### 7.1 Vehicle type

The most common vehicle type delivering waste to the facility on Sunday was utes, cars and trailers.

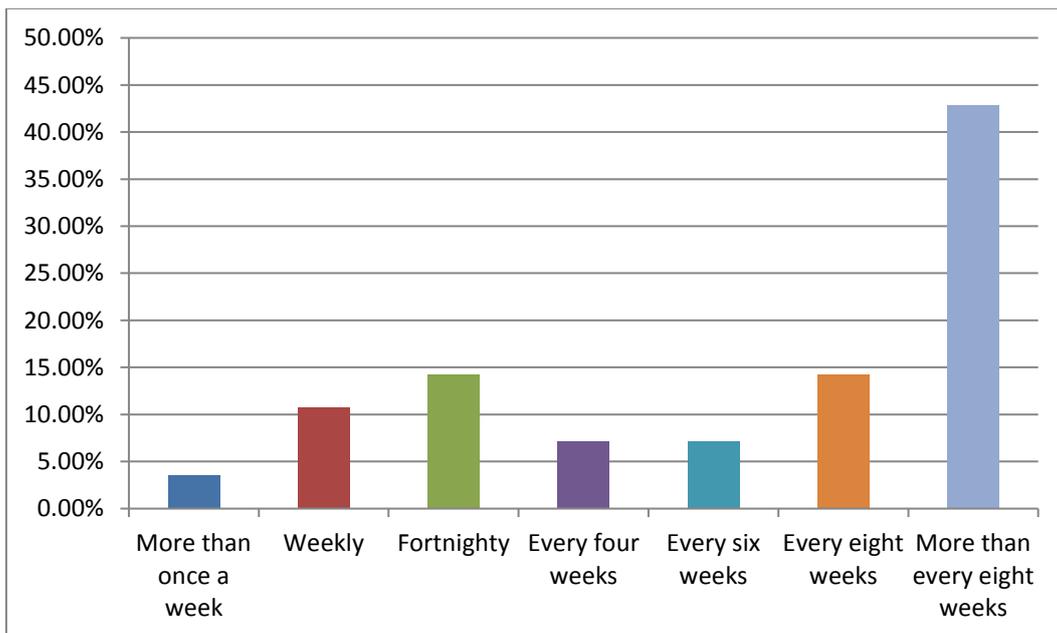
Figure 30 Vehicle type



### 7.2 Frequency of use

The majority of users (43%) are infrequent users, visiting at a frequency greater than every two months, while 33% visited up to monthly and 10% weekly.

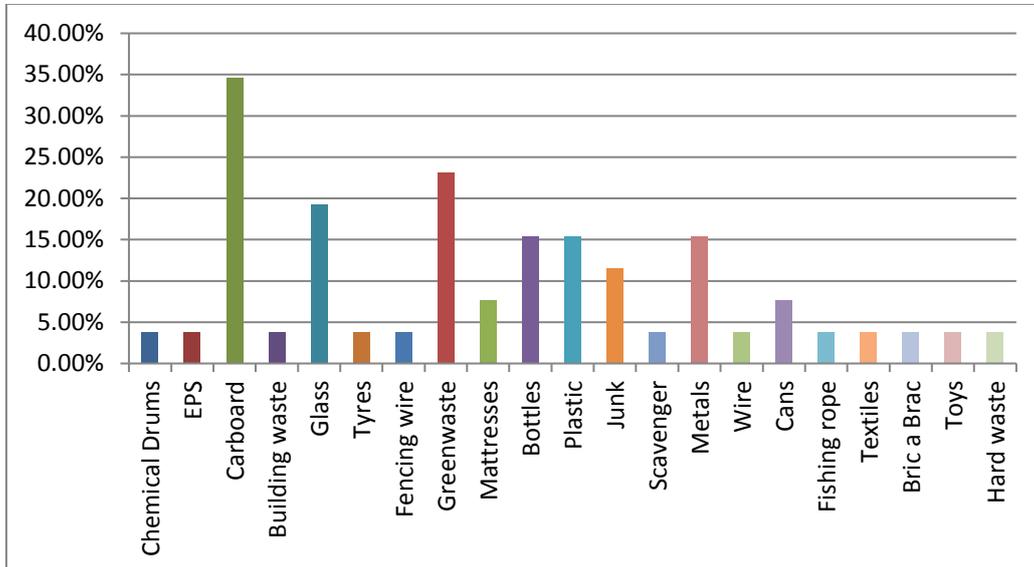
Figure 31 Frequency of use of facility



### 7.3 Materials for disposal

The majority of users were disposing of cardboard (35%), green waste (23%), glass (19%), and metals, bottles and plastic (20%). In addition to these common materials, there is a diverse range of other materials disposed of by fewer users, as shown below.

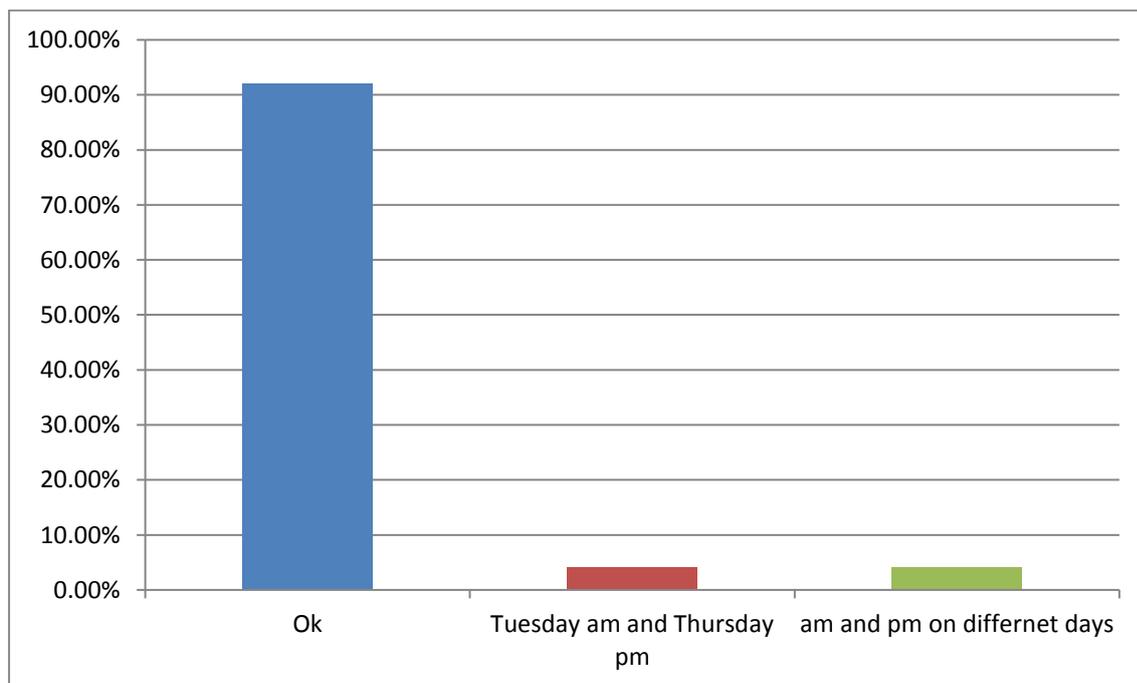
Figure 32 Materials delivered



### 7.4 Opening hours

Of the residents delivering loads on Sunday, the majority (90%) indicated they were satisfied with the current opening hours. Some residents suggested keeping the same days but with an earlier opening and later closing day on alternate weekdays to cater for tradespeople.

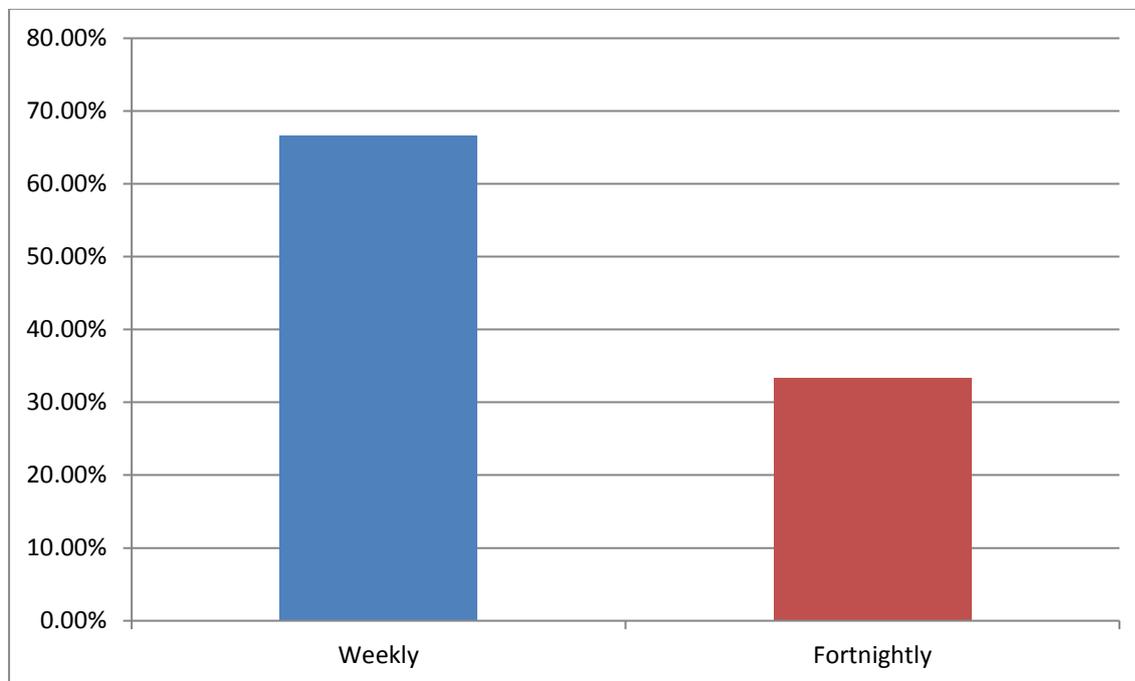
Figure 33 Opening hours



### 7.5 Household waste collection frequency

Of the users interviewed, the majority (68%) were satisfied with weekly waste service whereas 32% would prefer, and only need, a fortnightly service.

Figure 34 Household bin collection frequency



### 7.6 Ideas for consideration

All users were asked for any suggestions on how waste management could be improved on the island. The table below shows the responses, grouped by themes.

Table 19 Ideas for improvement

Charles Street improvements	Other ideas
Tip shop x 5; furniture	Eco bags for firewood
No idea where to park, which way to go	Burner
Glass crusher good idea	Tyre crumb for pots
Allow scavengers	Asbestos too costly – being buried on properties
All OK; well-structured waste sites x 2	Recycle bin at home
Better signage x 2	Incentivise recycling
More recycling. Separate more. No plastics, steel cans, scrap-metal recycling. Stop cardboard going to tip. Recycle more	Increase jetty service in summer (20/11–28/2) due to fish smell
All hour’s drop-off x 2	
Tip hours – longer hours, i.e. 7–9 am, 3–5pm, for tradies. Sunday 10am–5pm, Builders not catered for – all hour’s x 2	
Compost, sell compost, make mulch	
Timber recycling please	

## 8 STAKEHOLDER FORUMS AND MEETINGS

The following are the key points raised in one-on-one meetings or open community forums.

**Table 20 Stakeholder consultation summary**

Tuesday 19 March
<p><b>King Island Natural Resource Management Group (Helen Strickland)</b></p> <ul style="list-style-type: none"> <li>• 25 members, monthly weeding group</li> <li>• Optional bin frequency (weekly or fortnightly)</li> <li>• Prolong Parena landfill space as much as possible</li> <li>• Support tip shop</li> <li>• Roadside litter is increasing – loads not always covered</li> <li>• Education a key and has had good results – more needed. Letterbox drops</li> <li>• NRM can help community outreach by – new website in June, social network, community noticeboard, local buying group</li> <li>• Phoenix garden – community garden, training and workshop, home composting</li> <li>• As a resident – dairy farmer - fertiliser bags are reused, 1 x 240L bin of rubber ware per six 6 mths, cardboard</li> </ul>
<p><b>Robyn Barwick KIC</b></p> <ul style="list-style-type: none"> <li>• Asbestos increasing – port 150 m<sup>3</sup> (sheet and soil), NPWS 25 m<sup>3</sup> contaminated soil</li> <li>• Waste transfer shed approved in 12/7/2006 cost \$220,000, 35 x 15 m</li> </ul>
<p><b>King Island Dairy – Trevor Stones</b></p> <ul style="list-style-type: none"> <li>• Production has decreased and farmers have decreased.</li> <li>• Cheese factory owns two of the six farms supplying factory</li> <li>• Waste by-products – some cheese goes to pigs, cheese curd, 10 million litres whey spread on paddocks – feed cattle with EPA approval</li> <li>• Packaged and unpackaged cheese, cardboard, shrink-wrap, blue plastic chemical drums triple-rinsed but 80 x 200 litres is \$2,500 to freight off the island so used on the island or landfilled</li> <li>• Separate cardboard from general waste in 660 litre bins</li> <li>• Scrap metal and plastics exported, and proceeds shared between Bass Line and KI Dairy</li> <li>• Dairy poo pits a source for composting</li> <li>• Biggest cardboard producers – Foodworks, IGA, Post Office, KI Dairy</li> </ul>
<p><b>Workshop – waste management – councillors</b></p> <p>Presentation of the discussion paper findings. General discussion around the following:</p> <ul style="list-style-type: none"> <li>• Plastic bottles – want to recycle; deposit system; backload to Visy; use freight equalisation</li> <li>• Organics – worm farm technology; food and garden organics (FOGO); digester; compost used for rehabilitation at Charles Street and quarry sites – sell (Lancasters may be interested)</li> <li>• Glass sand used in non-loading bearing applications</li> <li>• Keep inert out of Charles Street; stockpile concrete; get crusher</li> <li>• Waste segregation – scrap steel and metals</li> <li>• Freight cost \$900–1,200 empty to return and \$3,000 filled</li> <li>• Break old habits – no more farm dumps</li> <li>• Compacting rubbish at landfill, baler</li> <li>• Fluorescent tubes contain mercury – no recovery on the island</li> <li>• CCWVG – KIC was a member – should reactivate as appropriate</li> <li>• Methane capture at landfill – insufficient amount produced to flare or capture</li> </ul>

- Biochar – forestry; carbon credits apply to new trees only
- TAS water self-manage sludge at wetlands
- Hydro Tassie – biofuel from waste oil
- Abattoir – biofuel from tallow
- Kerbside recycling program like mainland
- Container deposit scheme (CDS) for beverage containers
- Illegal dumping problem if waste fees increased too much

### Wednesday 20 March

#### Ocean Dunes Hotel – John Smith

- Average 70 covers (meals) per night at hotel
- 13 rooms and 35 beds
- Other large accommodation providers – Boomerang (15 rooms), Islander Breakers (8 motel units)
- Other venues serving meals include: Club KI, Boomerang, Oleada, King Island Bakery, TKs
- Suggestions – Mornington Peninsula deliver garden waste, take away mulch
- Households – bigger bin or weekly, pay more, provide recycling bin
- Cooking oil to farmers for biofuel

#### Drop-in session – Currie Post Office

Handed out surveys; lots of people but no time to chat  
Tracey Collier takes a carload of e-waste to Melbourne

#### Meeting – King Island Constructions/Lead Light Investments – Guy Barnes

- 38 allotment subdivision, 30 units and café/restaurant (150 seats).
- Entrance adjacent to the old Charles Street tip
- Involved in the Bioenergy Hub at Nowra, NSW. Proposed biofuel and bio-digester four years ago as an integrated solution to Hydro Tassie but unsuccessful, even though the financials were obvious

#### Chamber of Commerce – Rose Hallett

- 60 members
- Various initiatives by members – Teracycle at pharmacy; post office toner cartridges/mobile phones
- Businesses are on board and want to do more
- Foodworks – separate plastics and cardboard, minimal food wastage, chicken fat from rotisserie

### Thursday 21 March

#### Airport Café

Food to chooks, coffee grounds to garden, takeaway coffee cups are biodegradable

#### Lions Club – Stephen Bishop at Charles Street

- 18–24 tonnes metal raises \$8–12K for club per annum
- Three Lions members actively involved
- Golf Club and KI Club separate can for Lions with different bin colours
- Need a household recycling bin

#### Charles Street staff

- No review of motor oil container that caused serious workplace accident
- 18 bulka bags of aluminium cans ready for export
- 12 x 205 litre drums on pallet but not bundled
- Stopped using glass crusher due to concerns about dust and no exhaust provided

#### Hydro Tasmania – Peter Kempster

- Supporting plastics and film collection on Flinders Island where there is no rubbish collection
- Offer community grants of up to \$4K bi-annual
- For KI, Hydro are being supplied with a \$8K cardboard baler to be installed within a month

<ul style="list-style-type: none"> <li>• Grassy pool takes 10,000 litres of used motor oil per annum and KIC pay 5/c /litre to take it</li> <li>• Hydro donated the trailer to transfer the oil</li> <li>• Potential biodiesel from abattoir tallow – trial with JBS before they shut, which was successful</li> <li>• B5–20 eligible for excise rebate of 49c/litre but B21 biodiesel and no excise claimable</li> <li>• B20 optimum for equipment</li> </ul>
<p><b>Cape Wickham Links – Jane Bell</b></p> <ul style="list-style-type: none"> <li>• Clubhouse produces food, glass, plastics, cardboard but maintenance shed waste is unknown</li> <li>• New development is in 3 stages with stage 1 (89 units) proposing to start construction by end 2019</li> <li>• New 18-hole championship course</li> <li>• Current course shut July–August with around 8,000 rounds played and aiming or 20,000</li> </ul>
<p><b>King Island Tourism Inc. – Adam Healy</b></p> <ul style="list-style-type: none"> <li>• Tourism seasonal</li> <li>• Favours departure tax after holiday, not bed tax or enviro levy</li> <li>• Create a break wall and artificial reef with dead cars for diving</li> <li>• Interested in accommodation waste profile</li> </ul>
<p><b>Drop-in session – King Island Club</b></p> <ul style="list-style-type: none"> <li>• Need to recap landfill, leachate ponds leaking and overflows with low pH</li> <li>• Need education, behaviour change and promote community garden</li> <li>• Fortnightly household waste bin collection adequate for most but all paying for weekly</li> <li>• Need to offer big and smaller bins to suit families of different sizes – no one size fits all</li> <li>• Compost is \$10 a bag to buy; should produce our own</li> <li>• Illegal dumping on island</li> <li>• Need 24-hour access to recycling at Charles Street</li> <li>• Provide drop-off bins at new carpark</li> <li>• Farm dumps still happen</li> </ul>
<p><b>Ordinary meeting of Chamber of Commerce</b></p> <ul style="list-style-type: none"> <li>• Depot needs to be open convenient times for all the community</li> <li>• Needs to be open when advertised</li> <li>• Sunday: need 12pm–4pm. Four hours not two. Open early and late midweek for businesses</li> <li>• Need differential rates based on material type – waste more expensive than cardboard</li> <li>• Recycling bins in main township not just litter bins</li> <li>• Litter bins full of coffee cups – need a ‘keep cup’ promo</li> <li>• Refill water station for Cloud Juice water</li> <li>• Teracycle – take coffee pods, shampoo bottles via pharmacy</li> </ul>
<p><b>Hospital</b></p> <ul style="list-style-type: none"> <li>• Emergency beds (3), hospital beds (6) and aged-care beds (14); staff 50</li> <li>• All infectious waste medical waste exported – sharps sent to Adelaide; expired medications to Veolia</li> <li>• Cardboard to Charles Street, no cooking oil, no glass, any paper shredding used as animal bedding</li> <li>• EPS an issue, all food prepared by PHG Foods</li> <li>• Bin collection good. When truck breaks down there is good customer service and free tipping</li> <li>• Redevelopment proposed September 19–21</li> </ul>
<p><b>Friday 22 March</b></p>
<p><b>Council Acting General Manager – Kate Mauric</b></p> <ul style="list-style-type: none"> <li>• Exit interview from King Island on consultation and key identified issues</li> <li>• Glen Walker (ex Lake Macquarie engineer) appointed and will be commencing shortly</li> </ul>
<p><b>Meeting and site visit – Acting Senior Manager Operations – Neil Strickland and Ranger Nick Cooper</b></p> <ul style="list-style-type: none"> <li>• Site assessment at landfill – no approval for cells 1–3</li> </ul>

- Discussed alternatives to daily cover using tip tarps to stop birds, litter and conserve space

**6. Appendix A Householder survey questions**

**13. Any other comments about current or improved services and facilities, or opportunities we should be considering?**

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 .....

No stamp required if posted in Australia



**14. Each residence on the Island is currently charged \$408.50 a year for waste management. Given that most improvements to waste management will incur additional cost to Council, would you accept a higher waste charge to help cover those costs?**

- Yes, if less than \$50 a year
- Yes, if between \$50 and \$100 a year
- Yes, if fee for service at point of use
- No, not at all

**15. About your household**

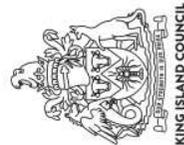
Number, ages and gender of occupants:

	Male	Female
<18yrs	.....	.....
18-34yrs	.....	.....
35-54yrs	.....	.....
55yrs +	.....	.....

Which part of King Island do you live in?

.....

Please email us at [admin@kingisland.tas.gov.au](mailto:admin@kingisland.tas.gov.au) if you have any other comments you would like to make about this survey.



King Island Council  
 Reply Paid 147  
 Currie TAS 7256



# Re-Thinking Waste on King Island

King Island Council is developing a new Waste Strategy to guide the next 10 years. We are seeking your views and opinions to help us understand how you manage waste now and what would be your preferences for the future. There are many challenges living on an island, but also some unique opportunities.

Please take a moment to complete the survey as your opinion is important to us.

Residential Garbage Collection

1. How often do you put your home garbage bin out for collection?

- Weekly, Fortnightly, Monthly, Less frequently

2. On average, how full is your garbage bin each time you place it out for collection?

- Less than 50% full, 50% full, 75% full, 100% full, Overflowing

Level of Satisfaction

3. Overall, how happy are you with Council's current residential garbage collection service?

- Dissatisfied, Neither dissatisfied nor satisfied, Satisfied, Very satisfied

4. If dissatisfied, what could Council do to improve its residential garbage collection service?

Dotted lines for text input

Current Use of Charles Street Depot

5. Have you visited Council's Waste Management Centre at Charles St in the last 2 months?

- Yes, No

If no, go to Question 9

6. How often do you visit the facility at Charles St?

- Weekly, Fortnightly, Monthly, Quarterly, Unsure

7. What materials do you normally take to the Charles St depot?

Tick as many boxes as you need to

- Garden waste, Timber waste, Used motor oil, Pallets, Scrap metal, Used chemical containers, Concrete, Building materials, Household goods, Tyres, Glass, Cardboard, Computers / TVs, Used lead acid batteries, Plastic containers, Polystyrene boxes, Other (please describe below)

8. In the last 12 months, have you removed items from the facility that you found for reuse?

- Yes, No

If yes, please detail this item(s) below

Dotted lines for text input

Re-Thinking Waste Management Services

9. The current opening hours at Charles St Depot are Tuesday and Thursday, 8am - 12pm, and Sunday, 10am - 2pm.

Are these hours adequate for your needs?

- Yes, No

Comments section with dotted lines

10. In many parts of Tasmania and Australia, waste facilities operate "Tip Shops" where items can be separated for future reuse. Would you be supportive of this concept on King Island?

- Yes, No

Comments section with dotted lines

11. Typically household garbage bins contain large amounts of food waste - up to 50%. What does your household currently do with the majority of its food waste?

- Garbage bin, Compost, Chickens / pet food, Worm farm, Other

12. What do you consider the biggest challenges for the Island regarding future waste management?

Dotted lines for text input

7. Appendix B Commercial operator survey questions

14. What do you consider to be the biggest challenges for the Island regarding future waste management?

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15. Any other comments about current or improved services and facilities, or opportunities we should be considering?

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.....  
.....

16. About your business

Number of employees: \_\_\_\_\_

Locality in which your business is based: \_\_\_\_\_

Please add additional pages to this survey if you would like to tell us more or email us at [kicouncil@kingisland.tas.gov.au](mailto:kicouncil@kingisland.tas.gov.au)

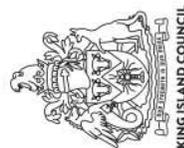
If you would like to talk with our waste consultant, Anne Prince, please call her directly on 0425 251 271.

Thank you for your time.

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printed in Australia  
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King Island Council  
Reply Paid 147  
Currie TAS 7256



# Re-Thinking Waste on King Island Business sector

King Island Council is developing a new Waste Strategy to guide the next 10 years. We are seeking your views and opinions to help us understand how you manage waste now and what would be your preferences for the future. There are many challenges living on an island, but also some unique opportunities.

Please take a moment to complete the survey as your opinion is important to us.

**Commercial waste collection**

1. How many waste bins does your business use?

- 240 L - \_\_\_\_\_
- 660 L - \_\_\_\_\_

2. On average, how full is your garbage bins each time you place it out for collection?

- Less than 50% full
- 50% full
- 75% full
- 100% full
- Overflowing

3. We are keen to understand the type and volumes of waste your business generates so we can plan for potential alternatives to landfill.

Please estimate the percentages of your general waste made up of the following waste types

- Cardboard: \_\_\_\_\_ %
- Glass: \_\_\_\_\_ %
- Plastic containers: \_\_\_\_\_ %
- Aluminum cans: \_\_\_\_\_ %
- Plastic film/ shrink wrap: \_\_\_\_\_ %
- Timber waste: \_\_\_\_\_ %
- Food/meat/coffee grounds: \_\_\_\_\_ %
- Other (please describe below) \_\_\_\_\_

4. Would you support differential charges for different types waste?

- Yes
- No

**Charles Street Waste Management Centre**

5. Have you taken any commercial waste to Council's Waste Management Centre at Charles Street in the last 3 months?

- Yes
- No

6. How often do you visit the facility at Charles St?

- Weekly
- Fortnightly
- Never
- Monthly
- Quarterly
- Unsure

7. The current opening hours at Charles Street are Tuesday and Thursday, 8am- 12pm, and Sunday, 10am – 2pm.

Are these hours adequate for your needs?

.....

.....

.....

8. What materials does your business normally take to the Charles Street Waste Management Centre?

*Tick as many boxes as you need to*

- Garden waste
- Used motor oil
- Scrap metal
- Concrete
- Cardboard
- Glass
- Computers / TVs
- Plastic containers
- Timber waste
- Pallets
- Used chemical containers
- Building materials
- Tyres
- Polystyrene boxes
- Used lead acid batteries
- Other (please describe below) \_\_\_\_\_

.....

**Food Waste**

9. Does your business generate any food waste?

- Yes
- No

10. How do you currently manage your food waste?

- Garbage bin
- Chickens / pet food
- Other .....
- Compost
- Worm farm

11. Would your business be interested in separating food waste from other types of waste to facilitate Council using it in compost?

- Yes
- No

**Level of Satisfaction**

12. Overall, how happy are you with Council's current commercial waste services?

- Dissatisfied
- Neither dissatisfied nor satisfied
- Satisfied
- Very satisfied

13. If dissatisfied, what could Council do to improve its commercial garbage services?

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## **8. Appendix C Submissions**

[Note: Three submissions were received during the course of this consultation period. To protect the commercial information of these parties, their submissions are not included in the public Waste Management Consultation Report.]