

Kangaroo Island Waste Collection & Management – *Why the changes?*

Background

Kangaroo Island Council, through our involvement with Fleurieu Regional Waste Authority (FRWA), manages kerbside collections and waste management, and disposal off-shore of virtually all of the Island's municipal waste. The decision to dispose of waste off-Island was made some years ago and stems from the fact that Council is unable to run a compliant land-fill cost effectively on the Island. We have similar regulations to abide by as the mainland landfills and for our volume of waste it is simply too expensive to contemplate, particularly when we also consider the finite land area we have, and our desire not to impact our environment. We do maintain a single EPA-approved landfill "cell" for emergency use.

Kangaroo Island has one of the longest collection routes in South Australia, with the truck driving over 1700km each week to collect general waste and recyclables from every inhabited property. In townships the collection is kerbside and in rural areas it may be farm-gate (equivalent of kerbside) or rural bin bank. The bin banks are at logical "nodes" around the Island and require property owners to carry their waste to the bin bank to dispose of it.

Service and Cost

There are some property owners that have to carry their rubbish 9km or more to the nearest bank. There is a mandated approach for dealing with the discrepancy in service between kerbside/farm-gate/travel to bin bank, the result being anyone with over 5km to travel to a bin bank does not pay a collection charge. (See footnote 1 for the formula).

Every inhabited property gets two bins lifted weekly (one red and one yellow) and anyone requiring additional bins can buy an additional bin and pays FRWA for the additional pick-up. Commercial premises and public waste bins (generally all red bins) may be collected more than once in a week depending on requirements.

Our costs to manage waste collection Island-wide have been as follows:

Year	Annual Cost	Annual uplift
2010-11	\$ 1,382,887	
2011-12	\$ 1,419,129	103%
2012-13	\$ 1,402,345	99%
2013-14	\$ 1,464,252	104%
2014-15	\$ 1,491,756	102%
2015-16*	\$1,440,226	97%
actual over 6 years		104.1%
annual average		100.9%
* - budget		

As can be seen the overall cost of managing waste has been well controlled with an average annual uplift over the last 6 years of only 0.9%. This tracks well against the CPI increases across the same period of time. To put this in perspective the 2015-16 Service Charges / property assessment assuming a kerbside collection are:

2015-16	Management	Collection	Gross
Service Charge	\$ 218.00	\$ 113.00	\$ 331.00
weeks	52	52	52
\$/week	\$ 4.19	\$ 2.17	\$ 6.37
\$/bin/week	\$ 2.10	\$ 1.09	\$ 3.18

Waste management/collection charges are a service charge levied by Council to recover the costs associated with the service. They are not included in your general rates. The Waste Service Charge has two elements – Waste Management and Collection. (See footnote 2 for the cost calculation).

Issues

Over the past three years we have experienced several issues that have impacted on our ability to keep costs well-controlled and these are:

- 1) Increasing contamination of recyclables with general waste requiring diversion to landfill and therefore uplifting waste to landfill tonnage;
- 2) Increasing costs to cart our waste off Island to landfill on the mainland – this represents 26% of the total costs of managing waste;
- 3) An increasing landfill solid waste levy to offset environmental rehabilitation requirements, increasing compliance pressure, and sheer bulk to waste requiring management;
- 4) Higher maintenance costs of specialist equipment - we use a split-body truck and the operational impacts of vehicle breakdown lead to increased contamination of recyclables.

All of the above have to be strategically addressed to ensure that waste management costs for the Island are contained – as a minimum – or reduced where possible.

One of the major operational challenges is the length of route. To reduce costs of collection the answer is easy – stop weekly collections of all rubbish types and move to a fortnightly collection across the island. Whilst this might solve the cost issues (halving kms, driver-time, and wear and tear etc), it doesn't solve the problem of waste separation.

A further issue is the split body truck we use. This truck has a compactor body with two chambers and a diverting flap at the top which allows the driver to put recyclables into one and general waste in the other. The compactor then compacts them together but keeps the waste physically separate. This allows the truck to operate a one-pass operation collecting both waste streams. These trucks require more maintenance generally, but when combined with the 1700km on our roads, significant additional maintenance is required to keep it both on road and productive when compared with single-chambered body vehicles. In addition to the extra cost there are operational constraints in having only one dual chamber vehicle on the Island (it is too expensive to have two). When it is out of operation the old stand-by single chamber vehicle is required. A one-pass operation still has to be achieved but all waste is consolidated – the recyclables are contaminated and the whole lot goes to landfill.

Behaviour

There has been a drop off in the quality and quantity of recycling across the Island. We believe there are two reasons for this – the lack of continuing education and positive reinforcement of the need and financial benefit for all if we divert greater quantities of waste to recyclables, and the fact that the public has seen their separated waste getting consolidated into one truck – so why bother if Council is going to put it all together anyway? Currently our level of recycling is far lower than our counter-parts on the mainland and a lot lower than we were achieving in the past. We have to improve this and get back to where we were before.

The waste audits prove that we can reduce our quantity of general waste and increase our quantity of recyclables – the answer lies in everyone doing their part in sorting the waste prior to it getting into the bin to make this happen.

Proposed Changes

The proposed changes to the collection method will still see a weekly collection –there will be no great saving to Council as the truck will still do 1700+km per week, visiting each property assessment over the 5 day period. Moreover, the total volume of waste collected will remain the same so in effect, there will be no change in service. The reality is that collection costs will remain as they are – so why the change?

Aim

The aim of these changes is to strategically address the significantly additional costs of transport and landfill associated with general waste. With the new system we change the mix of wastes. People will be encouraged to increase the amount of recycling that they do – and we collect. To enable this we will increase the size of the recycling bin (from 140L to 240L) and maintain the size of the general waste bin. In addition, because we have now separated out the collection into one week general waste and the next recyclables, we can use a single chamber truck. This enhances the value of the recyclables. It also means that we can move to two unspecialised trucks to maintain the service irrespective of whether one of the trucks is unserviceable.

By capturing more recyclables from the general waste stream, we reduce the volume of general waste going to landfill. This reduces costs of transport off island and minimises the tax/surcharges and costs of physically disposing of our waste on the mainland. We still need to ship our recyclables off Island but these can be compressed and made more transport efficient. Ultimately we can get a revenue stream from sales to mainland recyclers that will go towards covering the costs of the freight. The combination of these changes means that the overall costs of waste management will fall, and that will enable us to pass those savings through to you in terms of reduced service charges.

Special circumstances

We do recognise that there are businesses and residents (such as large families, households producing nappies, or those with special medical needs) that will not be able to work with a single general waste bin collection every fortnight – and our consultation process will assess these needs. In commercial terms we have good data on frequency and number of bins that are required to be collected from premises, public spaces etc (remembering that these additional lifts are paid for separately and are not included in the standard charge) and we have a spare truck that can do targeted additional collections within the “off” week to maintain this level of service.

For the majority of the population who do manage/improve their waste separation, the new system will be manageable and will ultimately make a difference in both environmental and personal cost terms. There will be those that are disadvantaged and FRWA has been able to identify a number of strategies to address these needs. We recognise that our heavy visitation peak in late December/January means that we will need to revert to a weekly service for general waste during the period. There is extra cost involved in having two trucks on the road but, being for a limited time, it is manageable within the overall costs of the operation.

In the short term – 2016-17 and maybe 2018-19 – we will not see waste charges decrease significantly but we would expect to maintain the charges at their current levels due to savings in transport and landfill costs, removal of vehicle inefficiencies, and the recyclable revenue stream enhancement.

All of this and no mention of the proposed Green Waste Service for townships and coastal settlements...

The strategy to introduce large 240L green bins to our “urban” Community is designed to address compliance and cost issues around the management of bulky waste. There will be no introduction of Green Bins for rural property owners. Why? FRWA currently runs bulky waste collection service days in Penneshaw/ American River and Parndana/Vivonne Bay – and the vast majority of what is collected is green waste. The smaller “urban” properties do not have the land area to dispose of it within their boundaries. The cost of this bulky waste service is significant and there are also potential EPA compliance and WHS compliance issues associated with it however, we believe that introducing a green bin service to the townships will remove the need for the weekend bulky waste services. It will also allow the green waste to be effectively captured and transported to the Kangaroo Island Waste Resource Recovery Centre (KIWRRC) for mulching and then availability to the Community as a quality product (for which demand exceeds supply).

Current bulky waste sites are not licensed disposal premises and the costs associated with making them licence-compliant, and servicing them, are too expensive to consider. We do not charge for domestic hard waste to be received at the KIWRRC, and we plan to continue this in recognition of the fact that for some this is a significant journey.

However, we cannot continue running the other sites due to the compliance issues and operational challenges associated with them, and the limited demand.

There is further opportunity for the green bins to assist with reducing general waste in that food scraps etc may be disposed of in these bins.

Council has resolved that FRWA prepare for the implementation of these changes in March 2017 after extensive public consultation has been undertaken. No-one likes change and we recognise that what may have worked on the mainland, might not suit the Island however the changes proposed have not been rushed into or determined without prior experience. As the above figures demonstrate FRWA has managed overall costs of waste management with less than 1% annual increase over the past 6 years – this is a significant achievement given CPI pressures and the need for ever increasing compliance.

There will be many opportunities for you to engage with FRWA about the changes and what they might mean for you which we may not have fully considered, and we look forward to your constructive feedback throughout this process.

Please take the time to read the report and FAQ on the Council's website and keep an eye in the Islander, online and on the Council's Facebook page for further information. If you have specific questions then please send them to kicouncil@kicouncil.sa.gov.au and someone will make contact with you.

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Footnotes

1. Cost of Collection Formula

To cover the discrepancy in service between doorstep/farm-gate/travel to bin bank, the cost of collection for those people disadvantaged by the inability to have doorstep collection is discounted by a mandated formula (75%/50%/25%/0%) based on distance travelled to bin bank.

2. Calculation of Collection Costs and Waste Management Costs

The costs of Collection, less any direct revenue from operations (additional lifts etc), are then divided by the number of property assessment collection units (allowing for some being discounted for the lack of doorstep service) and a service charge / property assessment is then produced.

The costs of Waste Management is calculated in a similar way – total budget costs of receipt at KIRRC, handling, transport and disposal, less any sundry revenue (sales of recyclables, KIRRC fees and charges etc) divided by number of inhabited property assessments.